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ABSTRACT

Recent theoretical advances in the social psychology of procedural justice have facilitated the development of a process-based approach to policing. This approach emphasizes the fairness of the manner in which the police exercise their discretion during encounters with citizens. However, little is known about the effects of procedural justice on citizen behavior during encounters. Applying the theories of procedural justice and social interactionist theory of coercion, this dissertation uses data from systematic social observations of police-citizen encounters to examine how procedurally fair behavior of the police affects two types of citizen behavior, citizen disrespect and noncompliance with police requests.

A series of logistic regression models show that, as suggested by process-based policing, procedurally fair behavior of the police has substantive influence on citizen behavior. However, some procedural justice factors differentially affect citizen disrespect and noncompliance, suggesting that these two types of citizen behavior are distinct forms of behavior and should be examined separately. Further analyses reveal that some procedural justice factors interact with other independent variables and influence citizen disrespect and noncompliance. These findings demonstrate the importance of understanding the effects of various factors, especially police procedurally fair behavior, on citizen cooperative interactions. The implications of these findings, for both policy and future research, are considered.
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CHAPTER ONE

INTRODUCTION

Recent theoretical advances in the social psychology of procedural justice have facilitated the development of a process-based model of regulation in general and process-based policing in particular (Tyler, 2003; Tyler and Huo, 2002; Tyler, 2004; Sunshine and Tyler, 2003). Along with restorative justice and community policing, this process-based perspective is suggested as one of three major conceptual initiatives in the 1980s and 1990s that have influenced the thinking of the criminal justice system (Tyler, 2003). Unlike community policing and restorative policing which focus on police substance, process-based policing focuses on police style. It emphasizes the importance of the fairness of the manner in which the police exercise their discretion during police-citizen interactions and recognizes one function of policing, that is, the function of legitimacy building (Tyler and Huo, 2002). Because of its focus on police style, process-based policing is also suggested as compatible with most of the strategies implemented in community policing and restorative policing (Tyler, 2004; Tyler, 2003).

Process-based policing, however, has not been fully evaluated. Prior research is heavily based on a psychological approach to procedural justice which usually focused on the importance of one’s perceptions about the fairness of the procedure in comparison with perceptions of the fairness of the outcome and favorableness of the outcome (Tyler,
1990; Tyler and Huo, 2002; Sunshine and Tyler, 2003; Hickman and Simpson, 2003; Engel, 2005). Though this body of research provides strong evidence about the psychological effects of perceptions of procedural justice, it provides less information about the effects of the fair procedures to be implemented in process-based policing. It has been noted that people’s subjective judgments about police fairness during police-citizen encounters may not reflect objective police behavior (Tyler, 2003; Sunshine and Tyler, 2003). In addition, prior policing studies on citizen behavior during encounters often partially addressed the dimensions of procedural justice with a focus on certain aspects of the quality of interpersonal treatment and the quality of police decision-making (Reisig et al., 2004; Mastrofski et al., 1996; McCluskey et al., 1999) or focused on limited scenarios such as citizen compliance with police requests for self-control and for identification (McCluskey, 2003). This small body of research has provided mixed findings about the effects of procedural-justice tactics. For example, McCluskey (2003) explicitly measured procedural justice with systematic observational data and found that procedural justice tactics influenced the willingness to comply with police requests for self-control only at the early stage when the police made the request the first time. Thus, there is a need to comprehensively understand the objective behavioral effects of the fair procedures suggested by process-based policing.

This study attempts to extend the understanding of process-based policing with a more detailed picture. It will use systematic observational data to evaluate the
effectiveness of the procedurally fair behavior by the police during police citizen encounters. Specifically, it will examine the effects of procedurally fair behavior in terms of the quality of interpersonal treatment and the quality of police decision making on two types of encounter outcomes including citizen compliance with police requests and citizen demeanor. It will identify the conditions in which key elements of procedural justice may or may not have an impact on the encounter outcomes. In this way, procedural justice as a principle in policing will be weighed or balanced against other principles such as the principle to control the situation with the use of force. In a word, this study will represent an effort in what Bittner (1974) noted as the skill of policing which consists in finding ways to avoid the use of force. With a comprehensive evaluation of the behavioral effects of procedural justice during the encounters, the police will be better informed of the value of their coercive and non-coercive tactics.

**PROCESS-BASED POLICING AND IMPLICATIONS**

The process-based model as proposed by Tyler and his colleagues is explicitly psychological and attempts to answer the social science question of why people do or do not comply with legal authorities including the police (Tyler, 2003). It has been found that procedural-justice judgments shape one’s willingness to accept the decision made by the officer (Tyler and Huo, 2002), one’s general views about the legitimacy of the police, the law (Tyler, 1990, Tyler and Huo, 2002), and specific views about profiling (Tyler and
Wakslak, 2004), and one's willingness to comply with the law and cooperate with the police (Sunshine and Tyler, 2003). It has also been found that the effects of procedural-justice judgments are generally stronger than those of effectiveness judgments or judgments about the favorability or fairness of the outcomes (Lind and Tyler, 1988; Tyler, 2003). According to Tyler and his colleagues, these findings suggest that the procedural justice that the public experience during their personal encounters with police has both immediate and long-term behavior effects. In other words, people's deference results from perceptions of procedural justice, continues over time and shapes their law-related behavior in the future.

Process-based policing, according to Tyler and his colleagues, is a type of proactive strategy of regulation in which the police are supposed to follow fair procedures during encounters. In this way, the police will increase their effectiveness and, at the same time, build and maintain their legitimacy. It is further suggested that there is a spiraling effect during regulation because legitimacy makes process-based policing more effective in the future. Process-based policing, therefore, has implications for establishing a law-abiding society (Tyler, 2004). Moreover, it has been found that whites, African Americans, and Hispanics have similar concerns with procedural justice when evaluating and reacting to their personal experiences with legal authorities (Tyler and Huo, 2002). Minority group members are less willing to accept the decisions of legal authorities because they feel unfairly treated. Tyler (2004) argues that the importance of procedural
justice is even maintained across ethnicity, gender, income, education, age, ideology, and political party. Thus, process-based approach to policing could be an ideal way to bridge ethnic and other social divisions in society.

THEORETICAL EXPLANATIONS AND MIXED FINDINGS

There are various theoretical explanations for the effects of procedural justice. For instance, earlier theories take an instrumental approach and argue that fair procedures are important because they are viewed as mechanisms leading to fair outcomes (Thibaut and Walker, 1975; Leventhal, 1980). It is argued that evaluations about the fairness of a procedure affect the perceived fairness of the final decision outcome, and if the procedure is perceived as fair, the final decision outcome is more likely to be accepted as fair. Group-value, relational, and social identity-based models, on the contrary, emphasize that fair procedures have psychological implications for one’s social identities including one's membership in a social group or relationship with the group authorities (Lind and Tyler, 1988; Tyler 1989; Tyler and Smith, 1999). It is argued that fairness of procedures is important because of relational reasons, independent of the favorableness or fairness of outcomes. Fairness heuristic and uncertainty models focus on the role of fair procedures in the development of fairness judgments and the management of interactions with authorities (Lind, 1994; 1995; 2001; Van den Bos and Lind, 2002). In explaining the importance of fair procedures relative to fair outcomes, Lind (1995) described that people
“begin looking for justice-relevant information as soon as they encounter an authority…

Because information about social process and procedure is usually available from the beginning of any interaction with authority, while outcome information is not available until later, people form their original justice judgment on the basis of procedures and then later incorporate outcome information into their overall impressions of the fairness or unfairness of the encounter… Process information anchors the fairness judgment to such an extent that outcome information can only make relatively minor adjustments” (p. 86).

These advances in the social psychology of procedural justice have not only emphasized the importance of procedural justice, but also offered a comprehensive picture about the conditions of procedural justice effects. These studies have suggested that the importance of procedural criteria varies depending upon the situation or procedure’s social context. For example, Thibaut and Walker (1975) identify four factors that affect preferences for dispute resolution procedures, and these factors are nature of the conflict, time available, existence of a standard, and outcome correspondence. Lind (1995) suggests that ambiguity and conflict about outcome justice may increase the importance of procedural features in evaluating outcome justice because procedural evaluation serves as a shortcut or expedient for making more complex outcome judgments. Tyler and Smith's (1999) social identity-based model suggests that people place more emphasis on the quality of treatment when they identify themselves more strongly with the social group that the authority represents. Van den Bos and Lind's (2002)
uncertainty management model suggests that fairness of the procedures matters more in situations when people have less information about the trustworthiness of the interacting authority. Moreover, in a normative theory of procedural justice, Bayles (1990) argues that decisions of authorities could be distinguished as burden-imposing, benefit-conferring, benefit-terminating, or burden-relieving decisions, and that procedural justice is more important for burden-imposing or benefit-terminating decisions than for benefit-conferring and burden-relieving decisions.

In the studies of process-based policing, however, the implications of different models of procedural justice have not been explored, and the effects of procedural-justice judgments on one’s objective behavior have not been comprehensively examined. Some studies based on citizen surveys of procedural justice have resulted in mixed findings about the behavioral effects of procedural justice. For example, Paternoster et al. (1997) found that spouse abusers were less likely to commit future abuses when they experienced procedural justice with the police during an initial encounter, while Hickman and Simpson (2003) found that receiving procedurally fair treatment from the police did not encourage the victims of domestic violence to report future violent incidents to the police. Hence, procedural justice does not always facilitate favorable reactions to police activities, and more research is clearly needed to identify the circumstances or mechanisms by which process-based policing works.
FROM PERCEIVED PROCEDURAL JUSTICE TO OBJECTIVELY FAIR PROCEDURES

It is also important to be aware of the subjective character of judgments about the fairness of the procedures. As Tyler (2003) pointed out, these findings are linked to the subjective fairness of the procedures people experience. Most of the research that undergirds this perspective focuses on general descriptions of judgments made by the public rather than on specific police actions or failures to act. For example, surveys ask citizens to judge whether the officer treated them politely, whether the citizen understood why the officer made the decision, and so on. However, what is objectively just or unjust may not be subjectively perceived that way. For example, in a study of general views of the police and specific views of the experience with the police, Brandl et al. (1994) found that people stereotyped the police and selectively interpreted their own experiences based on the stereotype.

Legal authorities, however, not only need to be sensitive to people’s judgments about the fairness of a procedure but also need to be concerned with understanding what procedures are generally perceived fair and what are the effects of these fair procedures. The process-based approach to policing does supply a set of directions for its implementation. It is argued that some key elements of a procedure about the quality of interpersonal treatment and the quality of police decision-making lead a procedure to be viewed as fair (Tyler, 2003; 2004). In particular, those elements are that decision making
is viewed as being neutral, consistent, rule-based, and without bias; that people are treated with dignity and respect and their rights are acknowledged; and that they have an opportunity to participate in the situation by explaining their perspective and indicating their views about how problems should be resolved. In fact, by doing so, this process-based perspective is taking fairness as an objective fact about these procedures rather than an individual judgment about them.

When moving from subjective personal judgments to objective fair procedures, the propositions of process-based policing need more support from empirical findings. For implementation purposes, the benefits of process-based policing should derive from the fair procedures to be implemented in this approach rather than from the subjective personal judgments. In fact, as suggested by Mastrofski (2004), focusing instead on the actions taken by the officers would clearly be more useful to police since they are in direct control of their own actions and not the judgments others make about them. Thus, the process-based approach to policing must provide evidence about the desired effects of fair procedures in addition to the psychological effects of personal judgments about the procedures.

EVALUATION OF THE FAIR PROCEDURES

Systematic observational studies have played an important role in the evaluation of fair procedures identified by process-based policing. Using data from systematic field
observation, prior research on citizen behavior during police citizen encounters has provided evidence supporting some of the arguments of process-based policing. For example, Mastrofski, et al. (1996) and McCluskey et al. (1999) found that officer disrespect reduces citizen compliance. This finding about the fairness of police procedures is also noted by Sherman et al. (1997) as one of the most striking, because it reveals the extent to which the police themselves create a risk factor for crime simply by using bad manners. However, Reisig et al. (2004) found that police disrespect and coercive acts did not provoke citizen disrespect. Another recent study by McCluskey (2003) measured five indexes of procedural justice including ethicality, representation, information seeking, decision-making quality, and morality. He found that certain factors about ethicality, representation, information seeking, and decision-making quality influenced the willingness to comply with police requests for self-control at the early stage when the police made the request the first time. On the contrary, when the police made a second request for self-control, no factors of procedural justice were significant. In addition, McClusky (2003) did not find that procedural justice mattered when people were stopped by the police on the street and asked for identification.

This small body of research, however, only partially examined the effects of procedurally fair behavior of police during encounters with a focus on certain aspects of the quality of interpersonal treatment and the quality of police decision-making (Reisig et al., 2004; Mastrofski et al., 1996; McCluskey et al., 1999; Piquero and Bouffard, 2003).
Some research even failed to examine the explanatory power of police behavior on citizen behavior during interactions (Engel, 2003). Though McCluskey (2003) explicitly measured police procedurally fair behavior in terms of five indices, his research only focused on the limited scenarios such as citizen compliance with police requests for self-control and for identification. Furthermore, extant research has suggested that the fair procedures of the process-based model have immediate effects on public behavior only in certain situations, but much is still unknown about the interactions between situational factors and procedurally fair behavior of police. As reviewed, various theories of procedural justice have suggested that different situational factors may interact with procedural justice. In police citizen encounters, these interacting effects may also exist. Thus, to fully evaluate process-based policing, more research is needed to apply the theoretical developments in the study of procedural justice and examine the effects of procedurally fair behavior of police on different outcomes of encounters in different situations.

OVERVIEW OF CURRENT STUDY

This study aims to evaluate the effectiveness of the process-based approach to policing with a focus on the effects of the procedurally fair behavior of police during encounters with citizens. In specific, the study will examine the effects of the key components of process-based policing, such as the quality of interpersonal treatment and
the quality of police decision-making, on two types of encounter outcomes including citizen demeanor and compliance with police requests. As suggested in prior research, these citizen cooperative interactions are essential for the accomplishment of police work (Tyler, 2004; Sherman, 1993; Mastrofski et al., 1996; Reisig et al., 2004). Applying different models of procedural justice, the situations in which procedurally fair behavior matters will also be examined.

Specifically, the next chapter will review the literature on the interactive nature of police citizen encounters and explanations for citizen behavior during interactions. In this chapter, moreover, theories of procedural justice will be examined and applied to the policing contexts. Chapter Three will describe the methods used in this study including data collection, samples, measurement, and the descriptive statistics of the variables in the following statistical analyses. Chapter Four will present the statistical analyses in the examination of the effects of procedural justice factors and other theoretically relevant factors on citizen behavior. Finally, Chapter Five will discuss the findings of this study and also implications for policy and future research on process-based policing.
CHAPTER TWO
LITERATURE REVIEW

According to the process-based approach to policing, the fairness of police procedures that the public experience during encounters has both immediate and long-term effects on their perceptions and behavior (Tyler, 2003; 2004). In specific, it suggests that the fairness of police procedures regarding the quality of interpersonal treatment and the quality of decision-making affects citizens' evaluations about the legitimacy of the police. When they believe that the police are legitimate, citizens have more feelings of obligation and responsibility to support and cooperate with the police during encounters. In addition, people's voluntary deference resulted from the perceptions of procedural justice and legitimacy continues over time and results in their everyday compliance with the law. To date, however, little research has explored the immediate effects of police use of fair procedures on citizens' behavior during encounters.

According to Manning and Van Mannen (1978), policing research on the street-level interactions between the police and citizens started in the 1960s, and the studies since then have been of several types including modified case studies, ethnographic studies, and statistical analyses of coded systematic observations. However, as noted by Engel (2003), most of the research focused on explaining police behavior during encounters, while little empirical work examined citizen behavior explicitly.
Based on the previous research, this chapter will at first focus on the interactive nature of police-citizen encounters. Though police citizen encounters may represent many situations including service, law enforcement, and order maintenance, only those encounters involving conflicts or potential conflicts between the police and citizens are examined. This is because in these conflict situations, interactions between the police and citizens play an important role in determining encounter outcomes. After examining the interactive nature of police citizen encounter, this chapter will review the empirical research that focused on explaining citizen behavior during interactions. 

This chapter will also review the theories that can be applied to explain citizen behavior during interactions. Tedeschi and Felson's (1994) social interactionist theory is an integrative theory of coercion and can be applied not only to explain police coercive behavior but also to explain citizens' coercive behavior such as disrespect and noncompliance during interactions. The rest of this chapter will review the theories of procedural justice including social psychological and normative perspectives. Implications of these theories for understanding the effects of police procedurally fair behavior will also be discussed.

THE INTERACTIVE NATURE OF POLICE CITIZEN ENCOUNTERS

Studying the interactions between the police and citizens is of critical importance. About three decades ago, Manning and Van Mannen (1978) emphasized three reasons for
studying the interpersonal encounters. First, the interactions with the public affect officers’ perceptions of their role, especially during their socialization process. Second, police interactions with citizens represent the operating policy of the bureaucracy. Lipsky (1980) also argues that police officers as street-level bureaucrats are not only policy deliverers but also policy makers who interpret policies in their everyday contacts with the public. Third, citizen perceptions of and attitudes toward the police are formed during these interpersonal encounters. Empirical research, for example, has found that the quality of the interaction with the police during encounters is correlated with citizen satisfaction with the general performance of the police (Reisig and Parks, 2000; Brandl et al., 1994) and judgments about police legitimacy (Tyler, 2004; Ren et al., 2005).

The interactive nature of a police-citizen encounter has long been recognized in the literature, especially in the studies of police behavior. How citizens interact with the police is an important factor in what Bittner (1970) called situational exigencies of police discretion. For example, Van Maanen (1978) created a typology of citizens from the perspective of police officers. He argued that officers generally viewed citizens as belonging in one of three groups: suspicious persons, know-nothings, and assholes. Specifically, officers determined two things through interactions with citizens: 1) if they could have acted differently under the circumstances, and 2) if they could have acted differently, were they not aware of the consequences that might follow their actions. Van Maanen argued that officers reacted in different ways (e.g., castigate, teach, ignore,
isolate) based on their assessment of the citizen.

Early research usually focused on encounters that may result in arrests (Manning and Van Mannen, 1978). Manning and Van Mannen (1978) suggested that each police-citizen interaction contained five key elements that shaped the behavior of the officer and the citizen and, in turn, helped determine the outcome of the encounter. Specifically, the five key elements were questions of police authority, the context of the encounter such as time and place, the components of the interaction such as control of the process and tactics and skills involved in it, the expected outcomes held by the police and the citizens, and the demeanor of both the citizens and the police. Manning and Van Mannen suggested that these factors, separately or in combination, had a significant impact on the outcomes of police-citizen interactions.

The interactive and developmental nature of an encounter is also emphasized in the research on police use of force. This body of research usually took an instrumental view of police use of coercion in achieving citizen compliance and suggested that officers most frequently relied on verbal (i.e., questioning, commands and threats) and low-level physical forms of force to assert their authority or control the situation, and that arrest was often the last resort to be used when less coercive tactics had failed (Muir, 1977; Reiss, 1984; Rubinstein, 1973; Sykes and Brent, 1980; Bayley, 1986; Klinger, 1995). Just as officers use various types of force, research also found that suspects resort to various levels of resistance ranging from psychological to aggressive tactics (Garner et al., 1995).
The development of police citizen interactions has been examined, too. Toch (1969) suggested that the typical violent encounter began with a verbal request by an officer, followed by a citizen’s failure to abide by the request. The officer escalated to a command or threat which the citizen disobeyed, and then the escalation continued to the use of physical force. Similarly, Sykes and Brent (1980) distinguished three stages of regulation during police-citizen interactions. Specifically, the first stage was definitional regulation which was achieved when citizens answered the officer’s questions. When definitional regulation failed, officers moved to the next stage, imperative regulation, by issuing orders. If neither definitional nor imperative regulation succeeded in allowing the officer to control the interaction, the officer would employ what Sykes and Brent called coercive regulation. Threats of physical or legal harm or the actual use of physical force or arrest were means of coercive regulation. Sykes and Brent suggested that the type of regulation was consistent with the type of disturbance, and that the changes of regulatory responses of the officer were related to the reactions of citizens during the interactions.

Based on the developmental nature of police-citizen interactions, some researchers suggested that an encounter could be divided into several stages (Fyfe, 1988; Bayley, 1986). Bayley (1986) suggested that police-citizen encounters moved through three stages: contact, processing, and exit. Contact referred to the initial intervention by the police, while exit referred to the concluding actions that terminated police involvement. Processing, according to Bayley, encompassed all the interactions between
contact and exit. Moreover, Bayley found that in domestic disputes and traffic stop situations, tactical choices of officers varied during the course of an encounter and that decisions made early in an encounter could affect subsequent decisions to use force. Beginning encounters with tactics such as listening, questioning, or seeking information in domestic dispute situations usually led to a less coercive outcome such as a verbal warning or offering advice. On the contrary, taking a more coercive approach at the start (e.g., verbal or physical restraint) would normally lead to a more coercive outcome.

Based on the dynamics between citizen resistance and police use of force, a number of researchers developed force factor scores or resistance-force comparative schemes to assess the relative degrees of force in relation to suspect resistance (Alpert and Dunham, 1997; Terrill, 2001; Terrill, 2003; Terrill, 2005). For example, Terrill (2005) used a comparative scheme of resistance and force to determine the proportionality and incrementalism of police use of force. Using the observational data of the Project on Policing Neighborhoods (POPN), he found that officers escalated the level of force in about one of five encounters involving nonresistant suspects, and de-escalated the level of force in three of four encounters involving resistant suspects. In specific, officers were more likely to escalate the level of force in encounters involving nonresistant suspects who were male, young, poor, and intoxicated. In contrast, when officers encountered resistant suspects, none of these citizen characteristics had an effect on officers’ discretion to use less or more force. The findings suggested that officers were more likely
to use comparable force in response to citizen physical resistance. If citizen resistance was verbal or passive, officers’ use of force was more likely to deviate from the resistance-force comparative scheme in either direction. In addition, it was found that officers were more likely to use more force when citizens who were physical resistant had a heightened state of emotion (e.g., fear or anger).

Other research studied the effects of the citizens’ interactions on police demeanor, especially police disrespect during encounters. Police disrespect can be considered as a form of coercion communicated to citizens during police-citizen interactions (Tedeschi and Felson, 1994; Mastrofski et al., 2002) or as an indicator of the relationship between the citizen and the police as suggested in the group-value and relational models of procedural justice (Lind and Tyler, 1988; Tyler and Lind, 1992). Mastrofski et al. (2002) viewed police disrespect as a penal style and found that it was most strongly correlated with how citizens represented themselves during interactions. Specifically, it was found that citizen disrespect during interactions was the most influential factor explaining police disrespect, though other factors such as intoxication, citizen race, age, gender, income, and neighborhood context were also significant contributors to police disrespect.

A very limited number of empirical studies have examined police-citizen interactions with respect to noncoercive aspects of police behavior in response to citizen behavior. Mastrofski et al. (2000), for example, examined how police officers responded to citizens’ request to control another citizen during encounters. They found that legal
considerations were the strongest factor affecting police fulfillment of the citizen’s request to control another. But they also found that the likelihood of police fulfillment was reduced when the requester was disrespectful or intoxicated. In other words, how a citizen interacts with the police was correlated with a police decision to grant or deny his/her request. Unfortunately, other noncoercive aspects of police behavior such as providing opportunity for citizens to participate in decision making, offering explanations for the decisions to be made, and other behavior that may be important in police-citizen interactions as suggested by process-based policing have not been studied empirically.

EMPIRICAL RESEARCH ON CITIZEN BEHAVIOR DURING INTERACTIONS

As suggested by the literature on police citizen interactions and police behavior, the police are highly sensitive to citizens’ interactions with them, especially citizen reactions that undermine their authority and legitimacy. To understand citizen behavior during interactions, several studies have examined citizen reactions to the police such as compliance with police commands and requests (McCluskey, 2003; McCluskey et al., 1999; Mastrofski et al., 1996), disrespect toward the police (Reisig et al., 2004), and defiance during encounters (Piquero and Bouffard, 2003).

Reisig et al. (2004) viewed citizen disrespect as instrumental and suggested that citizens behaved disrespectfully to protect their social identity and/or punish officers during the interactions with police. Using systematic observational data, they found that
elevated levels of police force could induce suspect disrespect because in such a situation the suspect may conclude that there was nothing left to lose. On the other hand, subtle forms of force, such as police disrespect and low levels of coercive acts, did not provoke suspect disrespect because the anticipated costs for the suspect appeared too great. Similar findings were also suggested by ethnographic research conducted more than 25 years earlier by Muir (1977).

Empirical research also studied citizens’ specific compliance with police requests and commands during police-citizen interactions. Citizen compliance may be voluntary or result from police coercive tactics. Mastrofski et al. (1996) examined 346 police-citizen encounters involving police requests for citizen self-control in Richmond, Virginia and found that force at the beginning of the interactions, the threat of force represented by more officers present at the scene, and police disrespect during the interactions reduced the likelihood of citizen compliance with police requests to cease disorderly or illegal behavior or leave other citizens alone. McCluskey et al. (1999) replicated the model with observations of 989 encounters in Indianapolis, Indiana, and St. Petersburg, Florida. They found a variety of factors during the interactions influenced citizen compliance with police requests for self-control. With regard to the effects of police behavior, police disrespect, a mention of illegality of citizen behavior, and repeating requests reduced the likelihood of citizen compliance.

It is important to note that in these two studies of citizen compliance, legitimacy
of the police intervention is included to predict citizen compliance with police requests for self-control. According to this model, legitimacy is inferred from both police behavior (e.g., offering explanations, comforting citizens, and demeanor) during the interactions and conditions of the intervention such as evidence of wrongdoing, invocation of the encounter, location of the encounter, and role of the citizen (e.g., victim or suspect). In general, legitimating factors in these two studies showed particularly strong effects on citizen compliance. It is also important to note that the overall capacity of the replicated model to predict citizen compliance in Indianapolis and St. Petersburg was weak, as less than 10 percent of the variation in citizen compliance was explained. In contrast, the original model explained about 30 percent of the variation in compliance in Richmond. McCluskey et al. (1999) suggested that there was a need to refine police legitimacy measures under the guidance of related theories.

Drawing on the procedural justice research, McCluskey (2003) later introduced factors of procedural justice into the model to predict citizen compliance. His model suggested that along with factors such as invocation of the encounter and police demeanor during the encounter, variables including citizens’ participation in the police decision-making, police information-seeking during the interactions, and the quality of police decision making might have an impact on citizens’ perceptions about the fairness of the procedures during police-citizen interactions. Citizen perceptions about procedural fairness would in turn affect citizens’ reactions to police behavior including their
compliance with specific police requests. Using data from encounter observations in Indianapolis and St. Petersburg, McCluskey examined citizen compliance with two types of police requests: requests for identification and for self-control. He found that police coercive acts and procedurally just acts during the interactions had little impact on citizens’ compliance with police requests for identification. However, procedural justice factors during the interactions had stronger effects on citizens’ compliance with police requests for self-control. In specific, seeking more information, being respectful, and explaining police decisions would increase the likelihood of citizen compliance with initial requests made by the police during interactions. Furthermore, the effects of procedural-justice factors became stronger in less distressed neighborhoods. Contrary to the instrumental view of police coercion, McCluskey did not find a strong impact of police coercive acts on citizen compliance. In effect, only mentioning possible arrests increased the likelihood of compliance.

McCluskey (2003) also examined the development of police-citizen interactions with a focus on citizen compliance with repeated requests made by the police for self-control. He found that police coercive acts were negatively associated with citizen compliance. In other words, increases in the level of coercion would decrease the likelihood of complying with repeated self-control requests. In addition, McCluskey did not find significant effects of procedural-justice factors (including quality of police decision making, information seeking, police demeanor, citizen voice, and citizen
perceptions about police entry) on compliant behavior of the citizens who had failed to comply at the first time.

In an attempt to test Sherman’s (1993) defiance theory, Piquero and Bouffard (2003) used observational data from the Police Services Study (PSS) and evaluated the effects of citizens’ individual characteristics, situational characteristics, and police actions on citizens’ negative or hostile reactions including using weapons against police officers, fighting with and cursing at officers, and not answering officers’ questions or cooperating with officers. They found that all three police action variables (e.g., nonthreatening verbal, threatening verbal, and physical) had significant impacts on citizens’ defiance behavior during interactions. In specific, nonthreatening verbal actions, such as questioning and lecturing, reduced citizen defiance, while threatening verbal and physical attempts to control citizens induced defiant reactions. Applying the defiance theory, the authors suggested that officers’ threats and physical force were perceived as unfair and stigmatizing and thus likely to result in specific defiance of citizens.

Taken together, the limited research on citizen behavior during police-citizen encounters has represented an attempt to better understand the dynamics of police-citizen interactions. At the same time, it has also brought attention to the noncoercive behavior of the police which, as suggested by this body of research, may significantly affect citizens’ perceptions about the fairness or legitimacy of police officers’ interventions and citizens’ reactions during interactions. However, this small body of research has only provided
limited information on the behavioral effects of officers’ noncoercive behavior during interactions. In addition, as reviewed in the first section, the correlates of noncoercive police behavior are largely unknown. Some of the noncoercive acts of the police during the interactions such as considering citizens' opinions in solving problems, offering explanations for police decisions, and seeking information to improve the quality of police decision-making have not been studied by prior empirical research, and other behavior such as police demeanor as a dependent variable has only received limited attention.

THEORETICAL FRAMEWORKS

Various explanations including sociological, psychological, and organizational theories have been applied in explaining the behavior of the actors during police-citizen encounters (see Worden, 1996, National Research Council, 2004). In explaining police behavior during encounters, prior research has focused on various factors including individual level factors of the police (for example, Muir, 1977; Terrill et al., 2003), situational and legal factors (for example, Wilson, 1968; Terrill, 2005), organizational factors (for example, Wilson, 1968; Smith, 1984; Klinger, 1997), and community level factors (for example, Smith, et al., 1984; Klinger, 1997; Mastrofski et al., 2000; Mastrofski et al., 2002). Similarly, in explaining citizen behavior during police-citizen encounters, empirical research has also focused on various factors including individual
factors, situational factors, and community level factors.

Explanations of the interactive process have incorporated two types of theories: social psychology of coercion (Tedeschi and Felson, 1994) and social psychology of procedural justice (for example, Leventhal, 1980; Lind and Tyler, 1988; Tyler and Lind, 1992). The social psychology of coercion has been applied to explain police use of force (Terrill, 2005) and citizen behavior such as demeanor (Reisig et al., 2004) and compliance with police requests (McCluskey, 2003) during interactions. The social psychology of procedural justice has also been applied to explain citizen compliance with police requests (McCluskey, 2003). These theories are receiving more attention in policing research because they address the psychological link between what one receives during the interaction and one’s behavioral responses. The importance of procedural justice theories is also demonstrated in its emphasis on noncercive behavior of the police that may lead to citizens’ perceptions and judgments about the fairness of the interactive process. With recent advances, these theories, especially theories of procedural justice (Tyler and Smith, 1999; Van den Bos and Lind, 2002), have the potential to provide a better understanding of police-citizen interactions. Thus, these theoretical approaches will be discussed in detail in the following sections.

Social Interactionist Theory of Coercive Behavior

Overview of Tedeschi and Felson’s (1994) social interactionist theory of coercion
In an effort to explain coercive actions including aggression and violence, Tedeschi and Felson (1994) integrate theories in a variety of research areas including Averill’s (1982) theory of anger, Bandura’s (1983) social learning theory, theories of justice behavior and equity (e.g., Donnerstein and Hatfield, 1982; Mikula, 1993), theories of self-presentation and symbolic interactionism (e.g., Goffman, 1959; Scott and Lyman, 1968; Tedeschi, 1981), and many criminological and sociological ideals on violence and crime (Baumgartner, 1988; Black, 1983; Goode, 1971; Felson, 1978, 1982, 1984; Cohen and Felson, 1979; Hirschi, 1969). According to Tedeschi and Felson, these theories are consistent in their underlying assumption that coercion is goal-oriented and that the processes underlying coercion are social psychological.

According to the theory, a coercive action is an action taken with the intention of imposing harm on another person or forcing compliance. There are three types of coercive actions: threats, punishments, and bodily force. A threat is a communication of an intention to harm the target person or compel compliance. For example, a contingent threat is used to achieve compliance, and a noncontingent threat is intended to inspire fear in the target person. Punishment refers to an act performed with the intention of imposing harm on another person. Punishment includes physical harm, social harm, and deprivation of resources. Bodily force is the use of physical contact to compel or constrain behaviors of another person.

Tedeschi and Felson consider their theory of coercion as a social interactionist
theory for two reasons. First, coercive actions are interpreted as social influence behavior intended to produce some change in the target person. Second, the theory emphasizes the social interaction between the parties in explaining the use of coercion. The use of coercion is viewed as the result of a decision-making process by the actors. Their definition of the situation, their perceptions about terminal values, the interpersonal power relations between the parties, and the dynamics of the exchanges are important in how they evaluate the costs of decision alternatives and respond to each other.

There are three terminal values that motivate the actor to use coercion: retributive justice, favorable social identities, and other benefits (such as safety, commodities, and service) that might result from another person’s compliance. Among the three terminal values or social motives, Tedeschi and Felson (1994) are most concerned with justice and social identities. They argue that many coercive actions are motivated by the value of justice and involve retribution. According to Tedeschi and Felson (1994), norm violations or injustice can be classified into three basic types: distributive, procedural, and interactional. Distributive justice refers to fair allocation of benefits, fair distribution of responsibilities, and recognition of performance or efforts. Procedural justice refers to the fair means used by individuals to resolve conflicts of interest. Interaction justice involves conformity to norms about demeanor, respect, and politeness toward other people. When actors are blamed for harmful or anti-normative behavior, the offended party is more likely to form a grievance against the offending party and become angry. However,
grievances are not usually communicated to the offending party when the expected costs of doing so exceed expected gains.

In addition to concerns about justice, Tedeschi and Felson (1994) argue that both parties are likely to use coercion to establish or protect desired identities. People value particular social identities that gain the approval and affection of others or serve as bases of power to influence others. Thus, people are motivated to assert and defend them during social interactions, especially when third parties are present as audience. There are two types of self-presentation: assertive and protective. Assertive self-presentations are attempts to establish particular social identities, and coercion is used for two forms of assertive self-presentation: intimidation and self-promotion as a tough, strong, or courageous person. Therefore, coercion exercised for assertive self-presentation tends to be predatory in nature. While assertive self-presentation is more concerned with appearing powerful, protective self-presentation is more concerned with avoiding the appearance of weakness and used to restore respect and status. Coercion involving protective self-presentation is typically a reaction to a perceived attack on a valued identity.

*Implications for understanding police-citizen interactions*

As an integrative theory, Tedeschi and Felson’s (1994) social interactionist theory of coercion has provided a comprehensive framework for understanding the coercive
interactions between officers and citizens. In effect, their theory has been applied to explain police coercive behavior (Terrill, 2005) and citizen reactions such as citizen demeanor (Reisig et al., 2004) and compliance with police requests (McCluskey, 2003).

In explaining police coercion during encounters, the three terminal values (e.g., retributive justice, favorable social identities, and other benefits resulting from citizen compliance) that motivate the police to use force have been emphasized in early ethnographic studies in policing. Bittner (1970) emphasizes citizen compliance and argues that control of the situation is the primary concern for police officers in order maintenance situations. Doing justice and maintaining the edge during interactions are also well noted in the literature on police culture (Van Maanen, 1978; Wilson, 1968; Muir, 1977; Rubinstein, 1973; Brown, 1988). In a test of the relationship of police culture and coercion, Terrill et al. (2003) found that officers who embraced the traditional police culture were more likely to use coercion compared with officers with nontraditional cultural values. Applying Tedeschi and Felson’s (1994) theory to the study of police-citizen encounters and police use of force, Terrill (2005) found that officers matched citizens’ physical resistance with physical force to maintain control of the situation. Terrill (2005) also found that officers were more likely to use higher form of force with nonresistant citizens when issues of justice and social identity were involved. Specifically, officers are more likely to use higher forms of force against nonresistant drunk citizens because of the blameworthiness of their state of intoxication. In addition,
for the purpose of reinforcement of social identity, officers are more likely to use threats after initial control of citizens and are more likely to use higher forms of force in encounters with an increased number of backup officers.

On the other side, citizens often interpret police actions in a different way. Because police-citizen encounters often involve social control, citizens sometimes view police control behaviors as disrespectful or as attacks on their freedom of action (Brent and Sykes, 1979). Especially in situations in which citizens’ disorderly behavior is not illegal, the basis for police intervention is controversial (Kelling, 1987). In other words, the nature of police work in order maintenance situations makes some degree of conflict inevitable, regardless of the demeanor of police. However, according to Tedeschi and Felson’s (1994) theory, the power relations between police and citizens suggest that citizens are less likely than police officers to resort to coercion during encounters because the anticipated costs associated with defiant behavior are great. Though it should not be assumed that all citizens comply with police requests and command, in a large majority of encounters citizens do comply (Mastrofski et al., 1996; McCluskey et al., 1999; McCluskey, 2003). In fact, as reviewed above, empirical studies have shown that the police are more likely to behave disrespectfully in response to citizens’ disrespect (Mastrofski et al., 2002), while police disrespect has no significant impacts on citizens’ demeanor (Reisig et al., 2004). Only when officers use elevated levels of force, citizens are more likely to show disrespect because in such a situation citizens may conclude that
they have nothing left to lose (Reisig et al., 2004). Therefore, compared with police use of coercion which is often assertive self-presentation in Tedeschi and Felson’s (1994) terminology, citizen coercion usually involves protective self-presentation.

The social interactionist theory argues that use of coercion is the result of a decision making process, but it also suggests that decisions to use coercion are often made quickly, under the influence of emotion or alcohol, resulting in limited rationality in considering costs or alternative choices. This finding about the effects of emotions and alcohol also has implications for understanding citizen coercion during encounters. Studies on citizen behavior have found that citizens with heightened emotion or intoxication are more likely to show disrespect to the police (Reisig et al., 2004) and less likely to comply with police requests and commands (McCluskey et al., 1999; Mastrofski et al., 1996; McCluskey, 2003).

It is important to note that procedural justice as one of the issues of justice is not comprehensively discussed by Tedeschi and Felson in their social interactionist theory of coercion. Advances in social psychology of procedural justice suggest that factors related to procedural justice can play a very important role in resolving the conflicts between legal authorities and the public. In policing, a process-based approach to policing is developed based on the research on procedural justice (Tyler, 2004; Tyler and Huo, 2002). In the next section, theories of procedural justice that can be applied to police citizen encounters will be reviewed and their implications for policing will be discussed.
Theories of Procedural Justice

Theories of procedural justice recognize that people are concerned with the fairness of the procedures through which outcomes are determined in addition to the fairness and favorability of outcomes. Such fairness judgments about the procedures are labeled “judgments of procedural justice” in social psychological models of procedural justice. Over the past several decades, different models have been proposed to understand the effects of procedural justice and the criteria that people use to evaluate the procedures. In the following section, these models of procedural justice will be reviewed. Implications of these theories for understanding the effects of police procedurally fair behavior during encounters will be discussed in the end. For information about psychological experiments in these areas, please see the reviews by Lind and Tyler (1988), Tyler and Lind (1992), Lind (2001), Tyler and Smith (1999), and Van den Bos and Lind (2002).

Earlier theories of procedural justice

Earlier theories take an instrumental approach to procedural justice and argue that procedures are evaluated in terms of their implications for the outcomes and other concerns external to the procedures rather than their own qualities. In their work on adversary and nonadversary legal procedures, Thibaut and Walker (1975) found that
distribution of control between disputants and the legal authority in the decision-making process is the strongest predictor of fairness judgments about and preference for the legal procedures. They, therefore, argue that people view fair procedures as a mechanism through which to obtain equitable outcomes.

Leventhal (1980) emphasizes the importance of procedural justice in nonlegal settings and develops six rules for evaluating procedural justice in outcome allocation contexts. The rules are consistency, bias-suppression, accuracy, correctability, representativeness, and ethicality. Consistency rule requires a procedure to be applied consistently across persons and across time. Bias-suppression rule requires that the decision maker not have a self-interest in the decision and that the decision is not influenced by prior beliefs. Accuracy rule requires that decision is made based on accurate information or informed opinion. Correctability rule requires a procedure to contain some provision for correcting decisions at various points. Representativeness rule requires necessary representation of different groups at all phases of a process such as selection of decision maker and sharing information and power, and which is similar to the process control and decision control criteria in Thibaut and Walker’s model. Ethicality rule requires a procedure to conform to personal standards of ethics and morality. According to Leventhal, perceived fairness will be reduced when any of these rules are violated. In explaining the effects of procedural justice, Leventhal also takes an instrumental approach and argues that if the procedures are perceived as fair, then the
outcome decision is likely to be accepted as fair.

**Group-value and relational models**

Lind and Tyler (1988) argue that instrumental models underestimate the importance of procedural justice and propose a group-value model of procedural justice based on the assumption that group membership is a basis for one’s self-identity and, thus, a powerful aspect of social life. Instead of viewing procedures as instrumental to one’s self-interest, the model argues that procedures are evaluated in terms of their psychological implications for one’s relationship with the group or group authority using the procedure. Because of the importance of group membership, when a procedure indicates a positive, full status relationship with the group, it will be perceived as a fair procedure. On the contrary, a procedure is perceived to be unfair when it appears to imply a negative or low-status position within the group. The group value model, therefore, argues that one’s attitudes toward the group or group authorities will be strongly affected by his or her judgments about the procedure because of its implication of the social status in the group as viewed by the group or group authority (Lind and Tyler, 1988).

Tyler (1989) further elaborated the group-value model and identified three factors – standing, neutrality, and trust - that are important to judgments of procedural fairness. Standing refers to status recognition, and its information is often communicated to people by the interpersonal quality of their treatment by the authorities. Neutrality of decision
making involves honesty and lack of bias. In other words, decisions are made based on facts not prior opinions. The third factor is the extent to which the authority is seen as trustworthy. Trust involves beliefs about the intentions of the authority and can be inferred from authority’s ethical behavior. Because these three factors are critical judgments concerning the quality of one’s relationship with the authority, this model is regarded as a relational model and is intended to explain people’s acceptance of authority (Tyler and Lind, 1992). This relational model suggests that judgments of procedural justice are based on inferences about one’s relationship with the authority and that treating people fairly communicates favorable status and social importance to the social group and eventually leads to voluntary compliance with the authority.

Based on the group-value and relational models process-based policing was developed. With regard to police citizen encounters, according to Tyler (2003, 2003), this model suggests that citizens are more likely to feel that they are valued members of society when they are treated in a procedurally fair manner. Judgments of procedural justice facilitate the development of perceptions that the police are both legitimate and moral. Once the perception of police legitimacy has been shaped and the police are viewed as having a good relationship with the public, obligation to comply is formed and cooperation with the police is enhanced. This model also suggests that the effects of procedural justice occur even when the police decision conflicts with one's immediate self-interest. In the long term, deference to the police and the criminal justice system
continues over time and influence citizens' law-related behavior. Utilizing the group-value model and Leventhal's (1980) criteria of procedural justice, Paternoster et al. (1997) examined the effects of procedural justice that suspects experienced with police officers in spouse assault cases. They found that, consistent with the group-value model, procedural justice inhibits subsequent violence among arrestees, and that arrestees who perceived that they were treated in a procedurally fair manner had subsequent assault rates that were as low as those suspects given a more favorable outcome (i.e., warning). Applying the group-value model to their study of domestic violence victim reporting, Hickman and Simpson (2003) found that judgments of procedural justice and preference of the outcomes both affected victims' satisfaction with the encounters. However, they also found that utilization of police for the subsequent domestic violence was conditioned by the preference of the outcome received during the previous encounter.

Procedural justice and Sherman's (1993) defiance theory

the relationship between perception of unfairness of punishment and actual defiant behavior. According to Sherman (1993), besides perceiving a sanction as unfair, there are also three conditions necessary for an offender to behave defiantly: the offender must also be poorly bonded to or alienated from the sanctioning agent or the community the agent represents, must define the sanction as stigmatizing, and deny or refuse to acknowledge the shame that the sanction produces. In other words, defiance theory identifies three intervening variables linking the perception of unfair punishment and actual defiant behavior of the offender.

Sherman’s (1993) defiance theory, in particular, predicts three reactions to punishment defined as unfair. For well-bonded offenders, an unfair sanction is unlikely to produce defiant reactions. However, the unfairness may weaken the deterrent effect of the sanction for future behavior. For poorly bonded offenders who accept the shame that an unfair stigmatizing sanction provokes, the sanction is more likely to have a deterrent effect, if it is not irrelevant, on future offending. On the contrary, when poorly bonded offenders deny the shame that they feel, they are likely to respond defiantly and engage in future criminal behavior. Sherman’s theory has been applied to study police-citizen encounters and explain citizens’ defiant and noncompliance behavior as a form of specific and direct defiance (Piquero, and Bouffard, 2003). However, the test conducted by Piquero and Bouffard (2003) did not examine the intervening effects due to the limitations of their data.
**Social identity-based model**

There are new approaches to comprehensively understand the effects of procedural justice. Based on the group-value and relational models, Tyler and Smith (1999) further develop a social identity-based model to explain why judgments of procedural justice are related to self-esteem and general attitudes and behavior toward the group. This model identifies two key identity-relevant judgments: pride (e.g., judgment about the position of one’s group in the larger society) which affects conforming behavior such as following group rules, and respect (e.g., assessment of ones status in the group) which shapes assertive behavior such as voluntary activities to help the group. It is found that neutral, trustworthy, and respectful treatment by authorities of the same social group leads to feelings of pride and respect which, in turn, shape one’s feelings of self-esteem and group-oriented behavior such as voluntary acceptance of decisions, obligation to obey rules, and organizational commitment. By offering a deeper explanation for the effects of procedural justice on one's behavior, this model thus provides a theoretical foundation for the behavioral effects of process-based regulation in general and process-based policing in particular.

It is important to note that this model is concerned with the influence of group boundaries on the effects of relational treatment. According to Tyler and Smith (1999), identification with particular groups or social categories is a subjective psychological
experience and sometimes may be related to race, ethnicity, and nationality. Relational concerns are more important when people identify more strongly with the group that the authority represents. On the contrary, people place less emphasis on the quality of their treatment when they do not share a social category with the authority. In police citizen encounters, therefore, this model suggests that the procedurally fair behavior of the police may have more impacts in achieving citizens' compliance and support in situations where citizens share the same social groups (in terms of race, age, and social class, for example) with the police than in situations where they don't.

*Fairness heuristic and uncertainty management models*

In another effort to explain the importance of procedural justice judgments in determining people’s behavior in a variety of social contexts including legal experiences, Lind (1994; 1995; 2001) proposes a fairness heuristic theory. This theory focuses on how justice judgments are developed and argues that people make a rough fairness judgment early in the course of an interaction and use the impressions of justice, especially procedural fairness as a heuristic or shortcut to guide their reaction to the authority during the interaction. Specifically, this theory argues that when they first encounter authority, people are especially sensitive to any information on which they can build a justice judgment. Because procedural information is usually available earlier than outcome information, the overall impression of fairness is more strongly influenced by procedural
factors than by outcomes.

Van den Bos and Lind (2002) extend fairness heuristic theory and propose a cognitive-based uncertainty management model of the psychology of fairness to explain the effects of fairness judgments including both procedural and distributive justice judgments. They argue that people have a greater interest in fairness information in uncertain situations than in certain situations and that they use fairness information to manage uncertainty. In the construction of fairness judgments, information about either type of fairness – outcome or procedural – can act as a substitute for missing information about the other, and under the conditions of uncertainty, as suggested by fairness heuristic theory, the fairness information used early has the primary effects on the overall judgment of fairness. Van den Bos and Lind argue that their uncertainty management model has the capacity to integrate other theories of procedural justice because Thibaut and Walker’s (1975) instrumental model, Lind and Tyler (1988) group-value model, and Tyler and Lind (1992) relational model all implicitly assume fairness serves to reduce uncertainty, either in the decision outcomes or one’s position and inclusion in social groups.

One type of uncertainty during encounters with a social authority, as mentioned in the uncertainty management model, is the uncertainty about the trustworthiness of the interacting authority. This model suggests that information about the authority's trustworthiness affects the importance of procedural justice in determining one's reactions
to the authority. Specifically, when people are uncertain about a social authority's trustworthiness, decisions about how to react are made through references to judgments about the fairness of procedures. In other words, fairness of procedures matters more in situations where people have less information about trustworthiness of the authority, while less strong procedural justice effects occur when people are certain about the authority's trustworthiness. Therefore, this model suggests that, during police-citizen encounters, citizens' reactions may be more affected by the procedurally fair behavior of the police in situations where citizens do not know whether to trust the officers than in situations where they do.

**Normative theory of procedural justice**

In addition to the social psychological perspectives of procedural justice which focus on subjective judgments of procedural fairness, some research explores the legal philosophical and ethical basis of procedural justice. For example, Bayles (1990) proposes a moral theory of procedural justice to justify normative principles for objective procedures in making burden and/or benefit decisions.

There are four moral principles, including legal and ethical, of procedural justice, in this theory. The first principle is impartiality. Procedural justice requires an independent and impartial decision maker without personal bias, preexisting preference, or self interest in the decision to be made. The second principle is an opportunity to be
heard, that is, people affected by the decision should have an opportunity to present information and rebut adverse evidence. The third principle is grounds for decisions. People should be informed of the basis on which action will be taken. Fourth, procedural justice requires formal justice, that is, consistency, adherence to precedents, and conformity to rules. Bayles (1990) argues that these moral principles are justified in terms of their direct cost, economic and moral costs of incorrect decisions, and the inherent process values such as autonomy, human dignity, and natural rights.

Bayles (1990) also discusses the importance of procedural justice in different decisions of authorities regarding burden-imposing, benefit-conferring, benefit-terminating, and burden-relieving. According to Bayles, procedural justice is more important for burden-imposing and benefit-terminating decisions than for benefit-conferring and burden-relieving decisions, because burden-imposing and benefit-terminating decisions often involve stigma, disutility, and involuntariness. In order maintenance situations, police officers may make decisions to request one's control of his or her disorderly behavior. This type of requests may be viewed by the interacting citizen as stigmatizing, especially when audience is present. In these situations, according to Bayles' framework, citizens are more concerned with whether or not the officers has bias against them or their cases, provide opportunity for them to have their say, provide explanations for the requests, and consistently follow the legal rules.
Procedural justice in police-citizen encounters

The theories of procedural justice, especially the social psychological models by Tyler and his colleagues have drawn attention to the procedural factors that are usually excluded from coercive models of police-citizen interactions (Terrill et al., 2003) but may have significant impacts on citizens’ behavior during interactions. Tyler and Lind (2001) suggested that there may be a procedural consensus, even though judgments of procedural fairness studied by social psychological models are subjective judgments of procedures. In other words, judgments of what procedure is fair or unfair may be socially shared. For example, Tyler (2004), in his analysis of process-based policing, argued that four key procedural factors, including citizen participation in decision-making, neutrality of decisions, respectful treatment by the police, and care about citizens’ needs and concerns, affect citizens’ judgments of procedural fairness, and that these judgments of procedural fairness affect citizens’ voluntary support for and compliance with the police through their judgments of legitimacy of police actions and their feelings of obligation to obey the rules.

Procedural consensus has been used to measure procedural justice in the tests of process-based policing with citizen surveys. In the studies by Tyler and his colleagues (Tyler, 2001; Sunshine and Tyler, 2003; Tyler and Wakschlag, 2004; Tyler, 2005), the survey items measuring procedural justice focus on two dimensions of policing procedure: quality of decision-making and quality of treatment. Quality of decision-making has been
measured with items about whether police officers accurately understand and apply the law, make their decisions based upon facts, not their personal biases or opinions, try to get the facts in a situation before deciding how to act, give honest explanations for their actions to the people they deal with, apply the rules consistently to different people, and treat people the same as anyone else would be in the same situation. Quality of treatment has been measured with such items as whether the police officers consider people’s opinions when deciding what to do, take account of people’s needs and concerns, treat people with dignity and respect, treat people politely, respect people’s rights, and show concern for people’s rights.

The shared judgments about what is fair or unfair as suggested by procedural consensus can be contrasted with objective principles of fairness and justice that are studied by philosophers (Van den Bos and Lind, 2002). In fact, the measures used by Tyler and his colleagues are comparable to the four procedural principles (e.g., impartiality, opportunity to be heard, grounds for decisions, and formal justice) in Bayles’ (1990) normative model of procedural justice, except the items about police respect which are not included in Bayles’ model. In other words, the criteria used by Tyler and his colleagues in the tests of process-based policing stick to those normative principles which, according to Bayles, are morally justified and accepted by rational people. Taken together, procedural consensus and the moral principles of procedural justice have made it feasible to implement process-based policing, that is, to enhance the quality of police
decision-making by following the moral principles and, at the same time, enhance the quality of police interpersonal treatment.

There remain several issues in process-based policing, however. First, though judgments of procedural justice have been found to have strong psychological effects on people’s perceptions about the legitimacy of the police (Tyler, 1990; Tyler and Huo, 2002), specific views about profiling (Tyler and Wakslak, 2004), and their willingness to comply with the law, cooperate with the police (Sunshine and Tyler, 2003), and accept decisions made by the police officers (Tyler and Huo, 2002), some studies have yielded mixed findings about the effects of procedural justice judgments on actual behavior. As reviewed above, Paternoster et al. (1997) found that spouse abusers were less likely to commit future abuses if they experienced procedural justice (measured in two ways and analyzed separately: one with process-based factors including representation, consistency, and impartiality; and the other with additional identity-based factors including police demeanor and use of physical force) during their initial encounters with the police. In contrast, Hickman and Simpson (2003) found that whether the victims of domestic violence reported future violent incidents to the police were not affected by their judgments of procedural justice (including police demeanor, concern for needs, and consideration of views).

Furthermore, the causes of police use of fair procedures and its effects on actual behavior of citizens during police-citizen encounters are largely unknown. A very limited
number of empirical studies have explored the correlates of police use of fair procedures suggested by process-based policing. Mastrofski et al. (2002) took police disrespect as a coercive means and found that it was correlated with suspects’ behavior, especially their disrespect during the encounter as well as their characteristics and the neighborhood conditions where encounters took place. In a study of citizen compliance with police-citizen encounters, Mastrofski et al (1996) found that officers oriented to community policing were more likely to use a friendly, non-threatening approach at entry, and that officers with greater police experience are less likely to make requests in the form of suggestions. Mastrofski et al. suggested that in general there were no strong patterns in the tactical approaches of officers when they are compared by community policing orientation and experience. However, Mastrofski et al. did not report the relationships between other factors included in the models and police choices of tactics.

Findings on the effects of police use of fair procedures on citizens’ behavior are also mixed in prior policing research. Table 2.1 summarizes recent empirical studies on citizen behavior. Police disrespect had significant effects on citizens’ compliance with police requests for self-control (Mastrofski et al., 1996; McCluskey et al., 1999; McCluskey, 2003), but no effects on citizens’ demeanor during encounters (Reisig et al., 2004). Mastrofski et al. (1996) found that a friendly approach at entry was significantly more likely to produce a compliant response for self-control requests. However, they did not find significant effects of police mentioning of illegality, which was found by
McCluskey et al. (1999). Moreover, McCluskey (2003) found that among various procedural factors (including ethicality, police information seeking and decision making, and citizen voice), whether police showed respect or disrespect, whether police asked citizens for information about the situation, whether police terminated citizens’ voice, and whether police mentioned legal basis and leniency of their decisions were correlated with citizens’ compliance with police requests for self-control. He also found that if these procedural factors failed to produce citizen compliance at the first time, they would fail again later. When focusing on citizen compliance with police requests for identification, McCluskey did not find any significant effects of procedural factors including police showing disrespect or respect, seeking information, listening to citizen about situation, and indicating legal guidelines of police action.

Taken together, the mixed findings about the behavioral effects of police use or perceptions of police use of fair procedures proposed by process-based policing about quality of treatment and quality of decision-making have suggested a complicated role of procedural justice in police-citizen encounters. As suggested by the social identity-based model and uncertainty management models, the effects of police use of fair procedures may be conditioned by the other situational factors such as the social groups that citizens identify themselves with in relation to police officers and the trustworthiness of police officers as perceived by citizens. However, no empirical research has incorporated these models to examine the context of procedural justice in police-citizen encounters.
Table 2.1: Summary of Recent Empirical Research on Citizen Behavior During Police Citizen Encounters

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Dependent Variable</th>
<th>Procedural justice related police behavior</th>
<th>Other independent variables</th>
<th>Statistical model</th>
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</thead>
<tbody>
<tr>
<td>Engel (2003)</td>
<td>Noncompliant (i.e., refusing to answer questions or cooperate with officers' requests); Verbal resistance (i.e., arguing with or cursing at an officer); Physically resistant (i.e., physically fighting with an officer, using or attempting to use a weapon against the officer); Disrespectful (i.e., sarcastic, disrespectful, or hostile)</td>
<td>None</td>
<td>Citizen and officer characteristics: Suspect race, age, and gender Officer race and age, Officer and citizen racial pairings, Suspect intoxication Citizen behavior: Suspect fights with other citizen Other encounter characteristics: Location, Encounter initiation, citizen and police audience, Offense seriousness;</td>
<td>Logistic regression</td>
</tr>
<tr>
<td>Piquero and Boulfard (2003)</td>
<td>Citizen defiance (including used a weapon against the officer, fought with the officer, cursed at the officer, refused to answer questions, refused to cooperate with the officer)</td>
<td>Nonthreatening verbal*; Threats*; Physical force*</td>
<td>Citizen and officer characteristics: Citizen gender, Citizen and officer racial pairings Citizen behavior: Demeanor at beginning Other situational factors: Citizen known to the officer Number of citizens involved Citizen audience Location Encounter initiation Danger perceived by the officer</td>
<td>Logistic regression; OLS regression</td>
</tr>
<tr>
<td>Mastrofski et al. (1996)</td>
<td>Noncompliance with requests for self-control</td>
<td>Officer disrespect*; Officer respect; Officer mentions illegality; Officer observes</td>
<td>Citizen and officer characteristics: Citizen age, social status, gender, and ties to neighborhood, Officer and citizen racial</td>
<td>Logistic regression</td>
</tr>
</tbody>
</table>
### McCluskey et al. (1999)

<table>
<thead>
<tr>
<th>The POPN data</th>
<th>Noncompliance with requests for self-control</th>
<th>Logistic regression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer respect and disrespect*;</td>
<td>Citizen and officer characteristics:</td>
<td>citizen age, social status, gender, ties to neighborhood;</td>
</tr>
<tr>
<td>Officer mentions illegality*;</td>
<td>Officer and citizen racial pairings;</td>
<td>Officer gender, years of experiences, COP orientation, and trust in citizen;</td>
</tr>
<tr>
<td>Officer observes evidence;</td>
<td>Irrationality</td>
<td>Citizen behavior:</td>
</tr>
<tr>
<td>Manner of police requests</td>
<td></td>
<td>Citizen has weapon;</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td>Citizen in conflict with intimate present;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Citizen role (i.e., suspect or victim);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other situational factors:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Location;</td>
</tr>
<tr>
<td>Reisig et al. (2004)</td>
<td>The POPN data</td>
<td>Suspect disrespect: passive form (i.e., ignoring an officer's request) and active form (i.e., derogatory statements, slurs, and insulting gestures)</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McCluskey (2003)**</td>
<td>The POPN data</td>
<td>Citizen compliance with requests for self control; Citizen compliance with request for identification</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* indicates that the police behavior measures were found significant in affecting the dependent variable(s).

** indicates that the summary of independent variables is for citizen compliance with initial requests for self control.
SUMMARY

This chapter first discussed the interactive nature of police-citizen encounters and citizen behavior during interactions. Prior research on police-citizen interactions suggests that citizen behavior and police behavior are correlated with each other after invocation of encounters. Most of the empirical research focuses on coercive aspects of police behavior such as arrests, use of force, and police disrespect. Citizen behavior, as a major situational factor during encounters, is used to explain police behavior with other factors such as individual factors, organizational factors, and community factors. In contrast, only a limited number of empirical studies have examined the correlates of citizen compliance and demeanor during police-citizen encounters. Tedeschi and Felson's (1994) social interactionist theory of coercion is also reviewed, because it provides a general framework for understanding the coercive interactions between the police and citizens.

The rest of the chapter focused on the theories of procedural justice and their implications for policing. The developments of the procedural justice theories and process-based policing have emphasized the importance of two types of police behavior related to the quality of police decision making and quality of treatment. Such process-based factors as neutrality of police decision making, citizen participation in police decision making, and respectful and careful treatment by police are central component of process-based policing. However, there is only limited knowledge about the effects of police procedurally fair behavior on citizen reactions. Because the advances
in the social psychology of procedural justice have provided a complicated picture about
the contexts of procedural justice effects, there is clearly a need for more research on the
effects of process-based policing. Especially, the relative power of police use of fair
procedures compared to the use of coercion needs further exploration.
CHAPTER THREE
DATA AND METHODS

This chapter outlines research hypotheses and describes the nature of the data to be utilized in the examination of the effects of police use of fair procedures during interactions with citizens. The first section of this chapter focuses on the data-collecting process. The observational data to be used in this dissertation were collected from April 1997 to April 1998 as part of a larger policing project conducted in Cincinnati, Ohio (Frank, 1996). The major purpose of the larger study was to document and compare the workloads and routines of community policing officers and traditional beat officers in the city, and the data available from the larger study captured a wide-range of aspects of police-citizen encounters including procedural justice issues and citizen reactions to police behavior. This section describes in detail the research site, sampling procedure, and data recording process.

The second section of this chapter then presents the research hypotheses and descriptive statistics of the variables in the following statistical analyses. It is hypothesized that police use of fair procedures has a significant impact on encounter outcomes in terms of citizen behavior. Specifically, police use of fair procedures promotes citizens’ cooperative behavior by reducing citizen disrespect and noncompliance. Thus, citizen disrespect and citizen noncompliance as the dependent
variables are described at the beginning of the second section. The independent variables capture a wide range of characteristics of a police citizen encounter. Based on the theories of procedural justice as reviewed in the previous chapter, procedural justice factors are conceptualized as being comprised of two major components: quality of interpersonal treatment and quality of police decision making. Each component consists of a series of variables capturing various aspects of police behavior that may affect citizens’ perception about the fairness of police behavior. Besides procedural justice factors, the independent variables include individual characteristics indicating the social groups that the citizen and the police officer belong to, and situational factors that may affect citizens’ behavior. These factors may not only have direct effects on the dependent variables but also interact with procedural justice factors. Applying various models of procedural justice, the second section theoretically explores these possible interaction effects. In this section, furthermore, the strengths and limitations of the data are discussed, and analysis plan is described.

DATA

Research Site and Organizational Arrangements

The Cincinnati Police Division (CPD) is the largest police agency within Hamilton County Ohio, with 996 sworn officers in 1997 (Cincinnati Police Division Annual Report, 1997). The Patrol Bureau of the CPD performed all primary street-level
police functions, and all officers who participated in this observational 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. The CPD’s organizational approach to practicing community policing was that certain officers within the organization were assigned the task of spearheading community policing efforts. Beat officers typically performed 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, completing crime reports, conducting security checks in places of business, conducting inspections of public and licensed places within the area of responsibility, and enforcing laws, ordinances, and regulations concerning its operation (Cincinnati Police Division Patrol Officer Position Classification, 1998).

In contrast, COP officers were assigned to a specific community or in some cases several communities to perform community policing functions. Beyond their assignment to the general duties common to all officers in the Patrol Bureau of the CPD, 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).

Another difference between beat and COP officers was the working time. 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.). Beat officers typically switched shifts on an annual basis. In contrast, COP officers worked flexible 8-hour schedules and began their shift between 7:00 a.m. and 1:00 p.m. In addition, COP officers only worked from Monday through Friday or from Tuesday through Saturday.

Beat and COP officers performed their above outlined duties within assigned beats or neighborhoods and reported directly to sergeants located in their respective district. In 1994, the CPD redefined all five police district boundaries and beat boundaries within the five districts to conform to existing natural neighborhood boundaries. As a result, all officer assignments conformed to neighborhood boundaries, and parameters for crime reporting areas also conformed to neighborhood boundaries. In total, there were five police districts, twenty-two different police beats, and fifty-two different communities in the City of Cincinnati.
Observation Selection Criteria and Sampling

The Cincinnati systematic observational study follows a long tradition of field observation studies in policing whose purpose is to quantify police-citizen interactions. According to Reiss (1971), systematic social observations have four characteristics. First, they occur in a natural in the natural working environment of the police during the course of their daily work. Second, notes are taken in a deliberate and methodological fashion to ensure the process of data collection is systematic. As such, data collection can be done by multiple 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 the objects being observed (e.g., the police officers). In short, systematic social observations of police officers allow researchers to quantify activities that occur across numerous observation periods.

The strength of systematic observational study lies in the scientific methods of selecting observation periods including selecting whom to observe, where to observe them, when to conduct observations, and what should be observed and recorded (Mastrofski et al., 1998). According to Reiss (1971), all the methods should be guided by the research purpose. The primary purpose of the Cincinnati study was to document and compare various aspects of the police work by COP and beat officers, and thus the
selection of observation periods were guided by this purpose.

First, the Cincinnati observational study established a specific criterion regarding whom and where to observe. 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 the COP officers worked in pairs (2-person units). These 33 COP officers were responsible for 29 of Cincinnati’s 52 communities (55.8%), and the observations were conducted in 18 (81.2%) of the Division’s 22 different beats in the City of Cincinnati.

Because the 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), attempts were made to observe COP and beat officers in similar environmental contexts. If the researchers observed a COP officer assigned to a certain neighborhood, the researchers also randomly selected a beat officer for observation in the same neighborhood. This method provided better control of neighborhood characteristics in the comparison of behaviors of officers based on assignments and work orientations. Because each
neighborhood typically had one COP officer and more than one beat officer assigned to
the neighborhood at any given time, the number of individual beat officers observed was
greater than the number of COP officers observed in the study. As a result, in addition to
33 different individual COP officers, 161 different individual beat officers were observed.
Increasing the sample size of beat officers resulted in a decrease in the number of
observation periods for each individual beat officer. In effect, 206 ride observations were
conducted with the 33 COP officers and 236 with the 161 beat officers. However, a larger
sample of beat officers increased confidence in suggesting that observed behavior was
representative of the activities of beat officers working in a given community.

Second, there was a specific criterion about 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. However, as the
organizational arrangements of the CPD, COP officers and beat officers had different
work schedules. COP officers never worked during 3rd or power shifts of beat officers or
on Sundays, and as a result, beat officers were only observed during their 1st and 2nd
shifts on Monday through Saturday. Researchers attempted to observe each officer no
more than one time per month, and a computer was used to randomly select one day per
month in which observations were to be conducted for COP and beat officers in a
complimentary beat. Researchers also attempted to observe ten tours of duty for COP
officers and beat officers in each selected beat over a twelve-month period. In short, all
the observations were conducted over a one-year period from April 1, 1997 through April 30, 1998. Of all the observations, 93.4 percent were completed on the assigned date\textsuperscript{1}.

**Data Recording**

Thirty trained observers including 21 doctoral students, 8 masters’ students, and the principal investigator who has a doctoral degree accompanied officers during the rides. Observers utilized four structured coding instruments to record different police activities during rides and various aspects of interactions with citizens. Following the data collection methodologies of other observational projects (Mastrofski, et al. 1998), the four different coding instruments used to systematically structure data collection were ride instruments, activity instruments, encounter instruments, and citizen instruments.

For each observation period one ride instrument was completed. This instrument contained information regarding the characteristics of the observed officer (e.g., gender,

\textsuperscript{1} 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.
age, race, educational attainment, rank, length of service, marital status, and the type of officer). Other information such as weather and precipitation during the ride and officer’s attitude about having an observer present were also included (see Appendix I). Activity instruments (Appendix II) were used to collect information regarding officer activities when a citizen was not present. 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. By definition, data collected in activity forms do not involve an interaction between the police and the public, and therefore, data collected in these activity forms will not be used in present dissertation.

Encounter instruments collected information about all the interactions officers had with members of the public (see Appendix III). Based on 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 instrument included information on how many other officers, supervisors, non-police service providers, and citizens are present during

\(^2\) 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.
the encounter. It also documented the reason for the encounter and the characteristics of
the problem(s) during the encounter (see Appendix IV for a complete list of problems),
including 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.

Citizen instruments (Appendix V) were completed for each citizen with whom the
observed officer interacted during the ride. Whereas encounter forms were place-specific,
citizen forms were person-specific. There may be multiple citizen forms associated with
one encounter form. If an officer interacts with two citizens during an encounter at one
location, for example, the observer completes one encounter form and two citizen forms.
Citizen instruments contained detailed information about various actions taken by the
officer and the citizen during interactions, such as citizen requests and police response,
police requests and citizen response, and demeanor of the citizen and the police. In
addition, citizen characteristics were recorded, such as gender, race, approximate age,
approximate social class, apparent mental state, and whether they were under the
influence of drugs or alcohol.

In the encounter and citizen instruments, each encounter with the citizen was
further classified as “brief,” “casual,” or “full.” Brief encounters were typically short in
duration and didn’t completely satisfy the rules in the conceptualization 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. 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. Full encounters were all other police-citizen interactions, and therefore are the focus of this dissertation. Overall, 2671 citizen encounters were observed, including 1431 full encounters, 869 brief encounters, and 371 casual encounters. Among the citizens in the full encounters were crime victims, witnesses, a variety of service recipients, and criminal suspects. Contacts ranged from less than a minute to several hours. In less than 1 percent of all encounters with the public, observers detected evidence suggesting that officers or citizens had changed their behavior because of the researcher’s presence.

In short, the combination of data collected through the ride instruments, encounter instruments, and citizen instruments provide systematic information to address various research questions regarding the police-citizen encounters (Novak, 1999; Brown, 2003; Novak, 1999; Brown, 2003).

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3 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.
Brown and Frank, 2005). These data will be used to code the dependent variables and independent variables for the following analyses in the examination of the effects of procedural justice during police-citizen encounters. The following sections will describe the samples for analyses, the research hypotheses, and the measurement of the dependent variables and the independent variables.

SAMPLES AND DEPENDENT VARIABLES

The purpose of this dissertation is to examine the effects of police use of fair procedures during interactions with citizens. Proponents of process based policing argue that the manner in which the police exercise their authority affects public judgments about the legitimacy of the police and police interventions. Such judgments about the fairness of the police, in turn, affect public voluntary support of and cooperation with the police and thus determine the effectiveness of the police in their order-maintenance role (Tyler, 2004). Though available data cannot address the mechanisms related to subjective public judgments, the links and relationships between the manner of exercising police authority and the immediate effects of police intervention on the encounter outcomes can be examined. To evaluate the effects of police use of fair procedures during encounters, this dissertation focuses on two encounter outcomes: citizen compliance with police requests and citizen disrespect towards police.

The samples for analyzing the effects of police behavior on the dependent
variables are drawn from full police-citizen encounters. The selection criteria is similar to previous observational studies on police-citizen encounters, that is, only encounters involving suspected offenders (including peace disturbers, wrongdoers, and persons for whom complaints were received) or disputants (whose role of either suspect or victim is unclear, or may be both) are selected (Terrill, 2003; Terrill et al., 2003; Terrill and Mastrofski, 2002; Mastrofski et al., 2002; Terrill, 2005; Reisig et al., 2004). These police-suspect encounters are potentially violent situations in which the police and the citizens might use coercion and escalate the situations. In other words, these encounters provide contexts for evaluating and contrasting the effectiveness of police coercive and procedurally fair tactics. Of the 1431 full encounters with citizens, 818 were classified as police-suspect encounters. These cases constitute the dataset on which the analysis of citizen disrespect is based. These cases also serve as the pool of cases from which the sample for citizen compliance with police requests is drawn.

Citizen Compliance as a Dependent Variable

A law-abiding society as the ultimate goal of process-based policing is based upon citizens’ willing compliance and cooperation which, according to process-based policing, is not linked to the risks of apprehension or punishment but linked to citizens’ evaluation about the fairness or legitimacy of the police (Tyler, 2004; Tyler, 2001). Thus, one of the research questions to test process-based policing is the effectiveness of different attempts,
Table 3.1: Police Requests During Police-Citizen Encounters

<table>
<thead>
<tr>
<th>Request</th>
<th>Suggestion or request</th>
<th>Persuasion or negotiation</th>
<th>Command or threat</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign formal compliant</td>
<td>31</td>
<td>1</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Use legal process</td>
<td>95</td>
<td>3</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Seek help from service agency</td>
<td>37</td>
<td>1</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Help another person</td>
<td>38</td>
<td>2.5%</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Seek help from family or friends</td>
<td>86</td>
<td>1</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Leave another person alone</td>
<td>60</td>
<td>1.1%</td>
<td>158</td>
<td></td>
</tr>
<tr>
<td>Cease disorderly behavior</td>
<td>60</td>
<td>7.6%</td>
<td>193</td>
<td></td>
</tr>
<tr>
<td>Discontinue illegal behavior</td>
<td>38</td>
<td>31.1%</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>Provide information about ID or location</td>
<td>59</td>
<td>5.6%</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Not sign formal compliant</td>
<td>6</td>
<td>8.6%</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Control animal</td>
<td>85.7%</td>
<td>14.3%</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50.0%</td>
<td>50.0%</td>
<td>894</td>
<td></td>
</tr>
</tbody>
</table>

fair and respectful tactics or coercive and hostile tactics, in achieving citizens’ specific compliance, that is, conformance to police requests during face-to-face encounters. During encounters with members of the public, police can make various requests including asking for information, support for police actions, and control of one’s or other citizen’s behavior. The Cincinnati systematic observational study recorded 11 types of police requests. Table 3.1 presents the number of observations for each type of police request. Following Mastrofski et al. (1996), the style by which officers expressed their preferences were coded into one of three categories: (1) suggestion or request, (2)
persuasion or negotiation, or (3) command or threat.

It is shown that officers seldom used commands or threats to communicate their requests with citizens except in situations in which citizens’ self-control was desired. When they made explicit requests for citizen self-control behavior, such as, to leave another person alone, cease disorderly behavior, or discontinue illegal behavior, officers chose to use either suggestions or coercive tactics such as commands and threats. Less than 10 percent of the requests for self-control were made through negotiation or persuasion. Because of the variation in police requesting manners, this study will focus on three types of police requests in which the citizens’ own behavior is the object of control: (a) requests to leave another person alone, stop bothering them, or leave the premises, (b) requests to cease disorderly behavior, and (c) requests discontinue illegal behavior. Further, these cases represent order maintaining situations in which citizens may be less willing to comply and the conflicts between the police and citizens may be escalated. These three types of police requests constituted approximately 36% of all police requests, and in many encounters multiple requests were made to the same citizens.

For each police request, trained observers recorded the citizen’s response into one of four categories: (1) no indication one way or the other, (2) refused, (3) said he/she would do it, but didn’t do it in police presence, and (4) did it in police presence. If the citizens complied or indicated a willingness to do so in the future, their responses were
coded as compliance. For those who explicitly refused or who gave no indication that they would comply in the future, their responses were coded as noncompliance. Table 3.2 presents the distribution of citizen responses to police requests for self-control. In some cases, the citizens were asked to control their behavior in more than one way. When different requests were made, citizens were considered noncompliant if they failed to comply with any of the requests. Overall, approximately 23 percent of citizens were noncompliant with police requests, a rate similar to those found in the observational studies in Richmond, Virginia (22%) (Mastrofski et al., 1996) and in Indianapolis, Indiana, and St. Petersburg, Florida (20%) (McCluskey et al., 1999).

Table 3.2: Citizen Responses to Police Requests for Compliance

<table>
<thead>
<tr>
<th>Request</th>
<th>Compliance</th>
<th>Noncompliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave another person alone</td>
<td>122</td>
<td>37</td>
</tr>
<tr>
<td>(N = 159)</td>
<td>76.7%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Cease disorderly behavior</td>
<td>137</td>
<td>56</td>
</tr>
<tr>
<td>(N = 190)</td>
<td>72.1%</td>
<td>27.9%</td>
</tr>
<tr>
<td>Discontinue illegal behavior</td>
<td>120</td>
<td>36</td>
</tr>
<tr>
<td>(N = 156)</td>
<td>76.9%</td>
<td>23.1%</td>
</tr>
<tr>
<td>Overall response</td>
<td>253</td>
<td>79</td>
</tr>
<tr>
<td>(N = 332)</td>
<td>76.2%</td>
<td>23.8%</td>
</tr>
</tbody>
</table>

Citizen Disrespect as a Dependent Variable

Another indicator of public support and cooperation is whether citizens show disrespect during interactions with the police. Reisig et al. (2004) argue that citizen disrespect undermines the legitimacy and authority of the police and can be viewed as a form of coercion against the police. This dependent variable captures instances in which
citizens were disrespectful to the police before an arrest was made or the encounter was otherwise terminated. Forms of citizen disrespect included passive aggressive (i.e., citizen did what officer wanted, but body language or verbal cues hinted that the citizen was upset), moderately hostile (i.e., citizen verbally expressed that the citizen was upset with the officer), and highly hostile (i.e., blatant disrespect, swearing, expressing extreme personal insults about officer). It should be noted that the conceptualization of citizen disrespect in this study is different from Reisig et al.’s (2004) study of citizen disrespect. Reisig et al. defined two forms of citizen disrespect: passive form of disrespect which was largely ignoring police requests or commands, and active forms of disrespect such as insults or derogatory statements. In contrast, the conceptualization of citizen disrespect in the present dissertation is based on observers’ interpretation of citizens’ presentation during interactions. This measure, as argued by Engel (2003) in her study of citizen resistance, can be viewed as observers’ global assessment of citizens’ negative demeanor during encounters. In contrast to citizen noncompliance which focuses on citizens’ specific responses to police control of particular behavior, this measure of citizen disrespect focuses on citizens’ general responses to police control of situation. Though citizen noncompliance may contribute to observers’ evaluation of citizen disrespect, it is more likely that observers’ global evaluation of disrespect measures a different phenomenon or a broader range of citizen responses to police behavior during interactions. As noted by Engel (2003), citizens may refuse to comply with police
requests in a respectful manner. Thus, the present study will separately analyze citizen
disrespect and citizen compliance with different samples. Overall, citizens were
disrespectful in 286 (35%) encounters.

Table 3.3: Description of Dependent Variables

<table>
<thead>
<tr>
<th>D.V.</th>
<th>Description</th>
<th>Measurement and Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizen compliance</td>
<td>Whether the citizen complied with police request(s) during the encounter</td>
<td>0 = compliant (76.2%); 1 = noncompliant (23.8%)</td>
</tr>
<tr>
<td>(N = 332)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizen disrespect</td>
<td>Whether the citizen showed disrespect during the encounter</td>
<td>0 = no disrespect (65.0%); 1 = disrespect (35.0%)</td>
</tr>
<tr>
<td>(N = 818)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.3 presents a summary of the dependent variables. In sum, these variables represent two ultimate outcomes of an encounter, that is, whether it was an encounter with a noncompliant citizen and whether it was an encounter with a disrespectful citizen. This conceptual construction is due to the available observational data which did not record detailed information about the sequencing of events during an encounter. Observers simply recorded whether the citizen complied with a specific request or showed disrespect before an arrest was made or the interactions were otherwise terminated. Thus, the measures of citizen noncompliance and disrespect overlook the micro processes during interactions, such as how many times the citizen showed disrespect, how many times the citizen failed to comply with a particular police request, and the temporal order of multiple occurrences of noncompliance and disrespect. The path to the measured outcome of an encounter, as noted by Mastrofski et al. (1996), could
be long or short, twisting or straight. Nonetheless, these dependent variables provide basic information about the outcomes of an encounter, based on which the effects of procedural justice can be examined. Moreover, conceptualizing these dependent variables as outcomes of an encounter avoids the issue of temporal order and enables the multivariate analyses to include police interactions before the termination of encounters.

INDEPENDENT VARIABLES

As reviewed in the previous chapter, extant research in process-based policing demonstrates that quality of interpersonal treatment and quality of police decision making are two major components affecting citizens’ perceptions about the fairness of policing, their trust and confidence in the police, and their willingness to accept and support police authority. The purpose of this dissertation is to further explore the implications of procedural justice concepts in policing by examining the extent to which the procedurally fair behavior of the police effectively maintain the social order during encounters with citizens. In specific, based on previous research on process based policing, this dissertation focuses on the effects of two types of police behavior, quality of interpersonal treatment and quality of police decision making, that members of the public use to form their perceptions about procedural justice in police citizen encounters. The main research hypothesis is that quality of interpersonal treatment and quality of police decision making are related to the outcomes of an encounter: high quality of interpersonal treatment and
high quality of police decision making are more likely to produce an encounter that involves neither citizen noncompliance nor disrespect; while low quality of interpersonal treatment and low quality of police decision making are more likely to result in an encounter that involves citizen noncompliance and disrespect. Below are descriptions of the two major components of procedural justice in police citizen encounters, followed by descriptions of other independent variables that prior research has identified being related to the dependent variables or having interactions with the procedural justice factors. Table 3.4 presents the descriptive statistics of the independent variables.

**Quality of Interpersonal Treatment: Police Care, Disrespect, and Use of Force**

Police care, disrespect, and use of force, are three indicators of quality of interpersonal treatment. Studies utilizing citizen survey data to examine process based policing have measured quality of interpersonal treatment with such survey items as whether the police “took account of people’s needs and concerns”, “really wanted to help”, “took situation seriously”, “treated people with dignity and respect”, and “respected people’s rights” (Tyler, 2005; Sunshine and Tyler, 2003; Tyler and Wakslak; 2004; Hickman and Simpson, 2003). These survey measures capture citizens’ subjective perceptions about police behavior during interactions. In this study, quality of interpersonal treatment is measured with objective observations during an encounter.
Table 3.4: Measurement and Distribution of Independent Variables

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Measurement</th>
<th>Citizen compliance (n = 332)</th>
<th>Citizen disrespect (n = 818)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of police interpersonal treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police care</td>
<td>Dummy, 0-1</td>
<td>.38</td>
<td>.32</td>
</tr>
<tr>
<td>Police disrespect</td>
<td>Dummy, 0-1</td>
<td>.11</td>
<td>.09</td>
</tr>
<tr>
<td>Physical force</td>
<td>Dummy, 0-1</td>
<td>.18</td>
<td>.20</td>
</tr>
<tr>
<td>Verbal force</td>
<td>Dummy, 0-1</td>
<td>.75</td>
<td>.52</td>
</tr>
<tr>
<td>Quality of police decision making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>Additive scale, range 1-3</td>
<td>1.05</td>
<td>.90</td>
</tr>
<tr>
<td>Voice consideration</td>
<td>Dummy, 0-1</td>
<td>.26</td>
<td>.28</td>
</tr>
<tr>
<td>Voice rejection</td>
<td>Dummy, 0-1</td>
<td>.07</td>
<td>.05</td>
</tr>
<tr>
<td>Consistency</td>
<td>Dummy, 0-1</td>
<td>.35</td>
<td>.32</td>
</tr>
<tr>
<td>Inconsistency</td>
<td>Dummy, 0-1</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>Audience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of police audience</td>
<td>Square root transformation</td>
<td>.34</td>
<td>.33</td>
</tr>
<tr>
<td>Size of citizen audience</td>
<td>Square root transformation</td>
<td>1.29</td>
<td>1.16</td>
</tr>
<tr>
<td>Audience encouragement to cooperate</td>
<td>Dummy, 0-1</td>
<td>.17</td>
<td>.11</td>
</tr>
<tr>
<td>Citizen irrationality</td>
<td>Dummy, 0-1</td>
<td>.70</td>
<td>.57</td>
</tr>
<tr>
<td>Social group indicators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite citizen</td>
<td>Dummy, 0-1</td>
<td>.67</td>
<td>.64</td>
</tr>
<tr>
<td>Female citizen</td>
<td>Dummy, 0-1</td>
<td>.29</td>
<td>.32</td>
</tr>
<tr>
<td>Juvenile citizen</td>
<td>Dummy, 0-1</td>
<td>.32</td>
<td>.25</td>
</tr>
<tr>
<td>Lower social class</td>
<td>Dummy, 0-1</td>
<td>.77</td>
<td>.67</td>
</tr>
<tr>
<td>Black officer</td>
<td>Dummy, 0-1</td>
<td>.44</td>
<td>.42</td>
</tr>
<tr>
<td>Female officer</td>
<td>Dummy, 0-1</td>
<td>.16</td>
<td>.16</td>
</tr>
<tr>
<td>Citizen trust in police</td>
<td>Dummy, 0-1</td>
<td>.09</td>
<td>.11</td>
</tr>
<tr>
<td>COP assignment</td>
<td>Dummy, 0-1</td>
<td>.31</td>
<td>.27</td>
</tr>
</tbody>
</table>
The first variable is police care which is a dummy variable measuring whether the police (1) contacted a government agency or private organization on the citizen’s behalf, (2) provided physical assistance to this citizen, (3) provided information on how to deal with the problem, or (4) comforted and reassured the citizen. These police initiated activities are taken as indicators of whether the police wanted to help, took the situation seriously, and respected others’ rights. In 261 (31.9%) police-citizen encounters, police initiated these activities on their own.

Police disrespect is measured separately because demonstration of disrespect and anger during interactions is multifunctional (Mastrofski et al., 2002; Tedeschi and Felson, 1994). As an indicator of low quality of interpersonal treatment, police disrespect may be viewed as a form of coercion which attacks the citizen’s identity, expresses disapproval, and threatens the citizen for compliance. In 76 (9.3%) police-citizen encounters, observers noted various forms of police disrespect before an arrest was made or the encounter was otherwise terminated. Among these encounters, 11 encounters ended with arrests. The forms of police disrespect included unnecessary remarks, racial or lifestyle slurs, swearing, and shouting at the citizen. A dummy variable is used to measure police disrespect with 1 = police disrespectful and 0 = otherwise.

Police use of force against the citizen may be interpreted by the citizen as excessive, illegitimate, or an attack on one’s social identity. During encounters with citizens, police often use two forms of force, verbal and physical, which are measured
with two dummy variables. Verbal force is whether the police used commands and threats during interactions including when making a specific request to the citizen. It is believed that one threat used by the police has continuous deterrent effects on the subsequent requests. Thus, the threats used by the police when making requests for self-control are not measured separately. Physical force could be use of any of the following: firm grip, handcuff, pain compliance, flashlight, impact, and weapon. The police used only verbal force in 301 (36.8%) police-citizen encounters, used only physical force in 43 (5.3%) encounters, and used both forms of force in 121 (14.8%) encounters. Only in about 43% of the police-citizen encounters, the police did not use either forms of force.

**Quality of Police Decision-Making: Accuracy, Citizen Voice, and Consistency**

As reviewed in the previous chapter, theories of procedural justice suggest various criteria people may use to evaluate the fairness of police decision making, such as accuracy or rectitude of the decision, representation or voice in the decision making, and neutrality, consistency, or rule-conforming nature of the decision. In the previous studies of procedural justice in police-citizen encounters, survey questions usually encompassed these concepts by asking citizens whether the police “made their decisions based on facts, not their personal biases or opinion”, “tried to get the facts in a situation before deciding how to act”, “gave honest explanations for their actions to the people they deal with”, “accurately understood and applied the law”, “consistently apply the rules to different
people”, “gave people a chance to express their views before making decisions”, and “considered people’s opinions when deciding what to do” (Tyler, 2005; Sunshine and Tyler, 2003; Tyler and Wakslak; 2004; Hickman and Simpson, 2003). This study will capture these concepts with objective observations during encounters.

Accuracy of police decisions is measured with an index of whether police observed or sought evidence of wrongdoing. The police actions that comprise this index include (1) police observed the citizen engage in an illegal act or observed circumstantial evidence of an illegal act, (2) police observed physical evidence that implicated the citizen in a legal offense, and (3) police heard claims from others that implicated this citizen in a legal offense. These police actions in the seeking of facts and evidence provide grounds for further police actions. Furthermore, these police actions can be observed by the interacting citizen and thus may have an impact on the citizen’s perceptions and interaction behavior. Each police action is binary coded (no/yes) and then summed into a scale with higher values representing greater accuracy of subsequent police order maintenance decisions. In 474 (57.9%) police-citizen encounters, the police observed facts indicating the citizen may be involved in an illegal act.

Citizen voice or participation in the police decision making is also a factor affecting citizens’ evaluation of the quality of police decision making. The normative model of procedural justice (Bayles, 1990) suggests that citizens are more likely to perceive police decisions as fair if their requests are considered by the police or if the
Police offer explanations for not complying with citizen requests. In contrast, if the police ignore citizen requests or refuse them without explanations, the citizen will be more likely to view police decisions as unfair. In 262 (32.0%) police-citizen encounters, observers noted various requests made by citizens including asking the police to, or not to, arrest another citizen, to advise or persuade another citizen, to warn or threaten another citizen, to make another citizen leave the scene, to file a report, to act on the citizen’s behalf with a government agency or private organization, to provide physical assistance for self or others, and to provide information on how to deal with a problem. Thus, two variables are used to capture citizens’ participation in police decision making. Voice consideration is a dummy variable which captures instances where the police gave full consideration of the citizen’s requests. This variable is coded as 1 when for each request made by the citizen during a certain encounter, police either complied with or rejected with explanations the citizen’s request. Otherwise, it is coded as 0. The other dummy variable is voice rejection which is coded as 1 when any of the requests made by the citizen were ignored or rejected without any explanation. Otherwise, voice rejection is coded as 0. In 37 (4.5%) police-citizen encounters, the police ignored or rejected without explanations one or more citizen’s requests. In 225 (27.5%) encounters, the police fully considered the requests made by citizens by granting what they requested or offering explanations for not doing it.

Consistency in police treatments across citizens is another indicator of the quality
of police decision making. In the multiple-citizen encounters, police may treat all citizens in the same fashion or differentiate them in favor of certain citizens. To examine the effects of consistency of police behavior in these encounters, two dummy variables are created, and encounters with only one citizen serves as the reference category. Police behavior is considered inconsistent when the citizens involved in the same encounter received different treatment with regard to police demeanor, police verbal threats and commands, and police compliance with citizen requests. For example, the police behavior is coded as inconsistent when the police showed disrespect to one citizen and did not show disrespect to the other. Similarly when the police considered one citizen’s voice but ignored the other’s, the police behavior is coded as inconsistent. Only when all the citizens were treated in the similar fashion in terms of the three types of police behavior, is the police behavior coded as consistent. Among all the police-citizen encounters, 374 (45.7%) encounters were dealing with two or more citizens, and in 111 (13.6%) encounters the police treated citizens inconsistently.

**Audience Effects During Interactions**

According to the social interactionist theory (Tedeschi and Felson, 1994), the presence of an audience during a police-citizen encounter may have strong effects on the citizen behavior, because the presence of an audience increases citizens’ concern for desired social identities during interactions. The social interactionist theory also argues
that the direction of the audience effects is partly dependent on the attitudes of the audience. In other words, the assumed values of the audience affect citizen use of coercive actions such as disrespect and noncompliance. If it is believed that the audience approves of and gives higher status to people who are not cooperative with the police, then the citizen is more likely to be disrespectful or noncompliant. When the audience is believed to be in agreement with the police on the control of situation, their presence will inhibit defiant behavior of the citizen. Thus, audience effects are examined with variables measuring the size of police audience, the size of citizen audience, and the attitudinal preference of citizen audience.

It is hypothesized that the number of additional police officers (including nonsworn service personnel) present at the scene will have a direct and negative effect on the likelihood that the citizen will be noncompliant and disrespectful. An alternative explanation for the effects of police audience size is offered by Mastrofski et al. (1996) that additional officers present at the scene strengthen police authority and increase the capacity for coercion and thus increase the potential costs for not being cooperative with the police. However, some research has found an opposite effect and suggested that in police-citizen encounters involving social control, citizens will feel the need to protect offended social identities with the presence of audience regardless the orientation of the audience (Reisig et al., 2004).

Because a few cases had very large audiences, following previous research, the
square-root transformation is used to reduce the skewing effect. In specific, to explore the
effects of police audience, a square-root transformation is made to the number of
additional police officers present at the beginning of the encounter. Similarly, the effects
of the size of citizen audience are examined with a square-root transformation of the
number of the citizens (excluding the interacting citizen) present at the beginning of the
encounter. No citizen audience was present in 145 (18.3%) police citizen encounters, and
no police audience was present in 296 (37.3%) encounters.

To measure the attitudinal orientation of citizen audience, two dummy variables
are used: one captures the instances in which the citizen was encouraged to cooperate
with the officer by another citizen present during the encounter, and the other captures the
instances in which the citizen was encouraged not to cooperate with police by the
audience. In 88 (11%) police citizen encounters, the interacting citizens were encouraged
by the citizen audience to cooperate with the police, while only in 9 (1%) encounters, the
interacting citizens were encouraged not to cooperate. Because of the very limited
number of the latter instances, only one variable, citizen encouragement to cooperate,
will be included in the future analyses.

**Citizen Capacity for Rational Judgments During Interactions**

Applying decision theories, Tedeschi and Felson’s (1994) social interactionist
theory proposes that coercive actions may be the result of irrational judgments which are
usually quick and careless. Research on citizen behavior during encounters usually focus on three factors that may impede citizens’ rational judgment of the situation, and these factors include intoxication, heightened emotions such as anger and fear, and mental impairment (Reisig et al., 2004; Mastrofski et al., 1996; McCluskey et al., 1999; McCluskey, 2003). These factors are more likely to produce cognitive deficits of the citizens who will, as a result, make incorrect attributions of police intentions during interactions. Intoxication, for example, also increases a feeling of power and aggressive behavior, makes people less concerned with social norms, and the costs of disobeying the police are underestimated or ignored by citizens (Tedeschi and Felson, 1994). Thus, factors of irrationality are hypothesized to have a direct effect on citizen coercive behaviors including disrespect and noncompliance. Citizen irrationality is measured with a dummy variable coded as 1 for citizens who were intoxicated, suffered from a mental impairment or elevated emotions (fear or anger) at the beginning of the encounter. In 470 (57.5%) police citizen encounters, the citizens were observed to have impaired capacity for rational judgment.

Social Group Indicators and Interaction with Procedural Justice: Citizen and Officer Characteristics

Prior research has indicated that citizens in different social groups in terms of race/ethnicity, gender, age, and social class, may have different attitudes toward the
police including confidence in police legitimacy and satisfaction with police performance (Frank et al., 2005; Cao et al., 1996; Reisig and Parks, 2000; Weitzer and Tuch, 2005; Brandl et al., 1994; Browning et al., 1994; Cullen et al., 1996; Henderson et al., 1997; Cao and Dai, 2006). According to the social interactionist theory (Tedeschi and Felson, 1994), these preexisting attitudes and values may have an impact on citizens’ decision-making process to use coercive response toward the police during encounters. For example, the subculture of violence hypothesis argues that violent values are widespread among black, young, males and among people from the lower and working classes (Wolfgang and Ferracuti, 1967). Similarly, Mastrofski et al. (1996) argue that citizens with certain characteristics (such as the poor, the unemployed, racial minorities, youths, and males) are predisposed to noncompliant behavior during encounters. Cao et al. (1997), however, found that white males were more likely than blacks to express violent tendencies in defensive situations and that there was no significant difference between white and black males in offensive situations. Thus, socio-demographic measures about the citizens are included in the following statistical analyses to examine their effects on citizen disrespect and noncompliance during encounters.

These measures include citizen race, gender, age, and apparent social class. Citizen race is coded as a dummy variable where 0 = white and 1 = nonwhite. In 523 encounters, citizens were nonwhites, and among all the nonwhite citizens, about 98% were blacks. Citizen gender is measured with a dummy variable where 0 = male and 1 =
female. There were 261 (31.9%) encounters involving female citizens. Citizen age is measured with a dummy variable where 0 = 18 years or older and 1 = juvenile. In 203 (24.8%) encounters, the police interacted with juveniles. Citizen apparent social class is measured with a dummy variable where 1 = low income and 0 = middle class and above. In 545 (66.6%) encounters, the police interacted with citizens of lower class.

Officer characteristics such as gender and race may also have impacts on citizens’ cooperative behavior during interactions. Mastrosfski et al. (1996), for example, suggest that officer gender is a measure of police coercive capacity. Being noncompliant or disrespectful toward male officers may be associated with higher costs, because males are perceived to be more aggressive and comfortable with the use of force. However, as suggested by Reisig et al. (2004), the police tactics that impose costs on citizens are available to every police officer regardless of the gender of the officer. Thus, officer gender may not have an impact on citizen behavior during interactions. To explore the effects of officer gender, therefore, a dichotomous male/female variable is included in the following analyses. In 128 (15.6%) police citizen encounters, the interacting officers were female.

Of particular interest is whether citizen characteristics have impacts on the effects of procedural fair behavior of the police. The social identity model of procedural justice suggests that identification with the particular group or social category that the authority represents enhances the importance of fair treatment (Tyler and Smith, 1999). In other
words, the importance of procedural justice is related to attitudes toward the authority and the larger group. This model of procedural justice further suggests that those high in identification with the authority or with the group that the authority represents are primarily interested in how they are treated, while those low in identification are primarily concerned with whether they receive desired outcomes. Thus, citizen belonging to different social groups may not only have direct impacts on citizen behavior during encounters but also have modifying impacts on the effects of police procedurally fair behaviors. It is hypothesized here that procedurally fair behavior of the police is more important when citizen are in the social groups who are more likely to cooperate with the police. In other words, procedurally fair behavior by the police has less impact on citizen behavior during encounters when citizens are in the social groups who are more likely to be noncompliance or disrespectful.

One might argue that neighborhood context has an important impact on citizens’ identification with certain social groups. Sampson and Bartusch (1998), for example, found that social and ecological structure of neighborhoods explained the variations in citizens’ satisfaction with police, attitudes about the legitimacy of law, and tolerance of deviance. Similarly, Reisig and Parks (1996) found that citizens in the neighborhoods characterized by concentrated disadvantage expressed significantly less satisfaction with police. Thus, it is possible that residents within a certain geological area may identify them having the same relationship with the police. Accordingly, it should be appropriate
to examine neighborhood context on the effects of procedural justice factors at the aggregate level. In addition, neighborhood context may also have impacts on citizen behavior during encounters. Reisig et al. (2004) found that citizens in disadvantaged neighborhoods were less likely to show respect to police during encounters. However, Reisig et al. excluded all traffic and administrative related encounters in their study and assumed the remaining encounters occur within the citizens’ residential neighborhoods. In this dissertation, the effects of neighborhood context will not be examined due to the lack of information about the citizens’ residential neighborhood.

**Citizen Trust and Interaction with Procedural Justice**

Whether the encounter with police is initiated by the interacting citizen may also be an important factor correlated with citizen behavior during the encounter. Prior research suggests that in citizen initiated encounters, the police are perceived more legitimate to intervene (Engel, 2003; Mastrofski et al., 1996; Piquero and Bouffard, 2003). In other words, citizens who summoned the police to solve problems for themselves have more trust in the police or in the outcomes they would receive from the police. In such situations, therefore, citizens are more likely to cooperate with the police by showing deference and complying with police requests. A dummy variable is used in the present study to capture whether the interacting citizens summoned the police. In 88 (10.8%) police-citizen encounters, the interacting citizens had summoned the police to the scene.
Whether the interacting citizen has summoned the police may also have an impact on his/her perception about the procedures used by the police and his/her response to the procedures. According to the uncertainty management model of procedural justice (Van den Bos and Lind, 2002), the effects of procedural justice factors on citizen behavior are conditioned by citizen perception of the trustworthiness of police. This model of procedural justice argues that when people are uncertain about a social authority’s trustworthiness, decisions about how to react to outcomes are made through reference to judgments about the fairness of authority’s procedures. In other words, fairness of procedures matters more in situations where people have less information about the trustworthiness of authority, while less strong procedural justice effects occur when people are certain about authority’s trustworthiness. Thus, it is hypothesized that procedural justice factors have less impacts on citizens’ behavior and encounter duration in the situations in which citizens summon the police than in those situation in which citizens do not summon the police.

**COP Assignment**

Because one of the research questions of the larger study is to examine the differences between COP officers and beat officers, COP assignment as a control variable is also included in the future analyses. In 223 (27.3%) police-citizen encounters, the interacting officers were COP officers. These COP officers may be more sensitive to
citizen needs during encounters because improving police community relations is one of the goals to be achieved in community policing. In addition, COP officers were given an additional 40 hours of academy training geared toward community policing and problem solving, while other officers in the Cincinnati Police Division only received 8 hours of community policing and problem solving training through in-service training. As a result, COP officers may be more likely to solve the problems of citizens and achieve their cooperation during encounters.

**DISCUSSION OF DATA AND OUTLINE OF ANALYSES**

The strength of current observational data lies in the ability to reveal how police behavior, especially the behavior related to procedural justice, affects citizen behavior during encounters. Prior research on process-based policing usually focuses on the relationships between citizen perceptions about the fairness of police behavior and citizen willingness to cooperate with the police (Sunshine and Tyler, 2003; Tyler and Huo, 2002; Tyler, 2005). Though this body of research provides valuable information about the psychological effects of procedural justice evaluations, it offers no insights on the effects of what to be implemented in process-based policing because of the subjective nature of citizens’ procedural justice judgments. Policy makers need to know how police procedures affects citizen behavior during interactions in addition to the attitudes citizens may have based on their experiences with the police. Using social observational data, this
dissertation can address the link between procedurally fair behavior by the police and citizen cooperative behavior during interactions.

As discussed above, however, current data do not contain detailed information about the micro processes of an encounter. Research shows that police-citizen encounters are dynamic events, and that citizen behavior such as demeanor and resistance may be significant factors affecting police behavior (Klinger, 1994, 1996; Worden and Shepard, 1996; Mastrofski et al., 1995; Mastrofski et al., 2000). Because there is no detailed information about the sequencing of police actions and the corresponding citizen responses, this dissertation can only focus on the outcomes of an encounter, that is, whether the encounter is with a disrespectful or noncompliant citizen. Furthermore, generalization of the findings based on current data is limited because the data were collected from only one site. In fact, as argued by Brown (2003), the observations in the data only represent a snapshot of the routine work of CPD officers on the streets. Despite these limitations, current data do provide enough information making it possible to build a comprehensive framework to examine not only the effects of police behavior on citizen behavior but also the effects of other theoretically relevant factors such as social group indicators, audience factors, and citizen irrationality on citizen cooperative behavior.

Specifically, based on the measurement of the two dependent variables (i.e., citizen compliance and disrespect) which are dummy coded, logistic regression technique will be used to analyze the data in the next chapter. Model diagnostics will be conducted
to check violations of the model assumptions including multicollinearity, and remedies will be made if model violations are detected.

For each dependent variable, the base model will include all the independent variables described above including quality of interpersonal treatment (i.e., police care, police disrespect, physical force, and verbal force), quality of decision making (i.e., accuracy, voice consideration, voice rejection, consistency, and inconsistency), audience factors (i.e., size of police audience, size of citizen audience, encouragement to cooperate), citizen irrationality, social group indicators (i.e., nonwhite citizen, female citizen, juvenile citizen, lower social class, female officer, and black officer), citizen trust in police, and COP assignment. In addition, block-entry analysis will be performed in which different blocks of theoretically relevant variables are entered sequentially into the model to examine the relative effects of each block of independent variables.

To address the hypothesized interaction effects, a series of product terms will be created and entered the model for further analyses. Specifically, analyses will examine whether social group indicators are interacted with each other. In addition, because previous research suggests that racial dyads between the officer and the citizen may have effects on citizen behavior during interactions (Mastrofski et al., 1996; Engel, 2003), the effect of officer race will be examined in interaction with citizen race. Finally, as discussed above, the interactions between procedural justice factors and other independent variables such as social group indicators and citizen trust will be examined.
SUMMARY

This chapter focuses on the data collecting process and the measurement of variables to be used in the following statistical analyses. The first part of this chapter describes the research site and the systematic observational data collected as part of a larger policing project by Frank and his colleagues (2001). The second part of this chapter first describes the two dependent variables, including citizen disrespect and noncompliance, on which the effects of procedural justice will be examined. Then, based on the previous research on procedural justice and process based policing, this chapter conceptualizes procedural justice during police citizen encounters as having two major components: quality of police interpersonal treatment and quality of police decision making. Each component consists of various police actions during interaction with citizens, and these actions can be observed by interacting citizens and thus have impacts on citizens’ perceptions about the fairness of police actions and their behavioral responses. Besides police actions reflecting procedural justice or injustice, the independent variables described in this chapter include police and citizen audience, social group indicators for citizens and officers, citizen trust in police, citizen capacity for rational judgment, and officer assignment. According the procedural justice theories and the social interactionist theory, these variables may have direct effects or indirect effects through interaction with procedural justice factors on the two outcome variables.

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CHAPTER FOUR

STATISTICAL ANALYSES AND FINDINGS

Based on the theoretical frameworks and data described in the previous chapters, this chapter explores the effects of procedural justice factors and other theoretically relevant factors on citizen compliance and demeanor during encounters. Particularly, this chapter attempts to address the following research questions:

1. Do procedural justice factors, including the quality of police decision-making and the quality of interpersonal treatment, have an impact on citizen compliance and demeanor during encounters, as suggested by process-based policing?

2. Do citizens in different social groups behave differently during encounters in terms of their demeanor and compliance with police requests, and if they do, are the effects of procedural justice contingent upon citizens’ membership in their respective social groups, as suggested by the social identity-based model of procedural justice?

3. Are the effects of procedural justice factors on citizen compliance and demeanor contingent upon citizen trust in the police (i.e., whether the citizens summon the police) as suggested by the uncertainty management model of procedural justice?

The multivariate analysis begins with logistic regression models estimating the main effects of the independent variables described in the previous chapter on the two
dichotomous dependent variables, citizen disrespect and noncompliance. According to the correlation matrixes, the correlation coefficients for each pair of independent variables range from .00 to .47, suggesting that there is not a problem of multicollinearity. Table 4.1 displays the logistic regression models of citizen disrespect and citizen noncompliance with the main effects of procedural justice factors, audience factors, citizen irrationality, social group indicators, citizen trust, and COP assignment. Overall, the two base models are significant and can explain approximately 38% and 25% of the variance, respectively. Block-entry analyses in which the independent variables are entered one group at a time are presented in Appendix V and VI.

EXPLAINING CITIZEN DISRESPECT

Among the indicators of quality of interpersonal treatments, police disrespect and police use of verbal force have significant impacts on citizen disrespect, controlling for other variables. Specifically, the odds of encountering a disrespectful citizen are 3.00 and 2.12 times more likely when the officer displays disrespect and uses verbal force, respectively. This finding is consistent with the proposition of process-based policing that

1 Police care is measured as a dummy variable in the base models, but the findings of the logistic regression analyses do not change when police care is measured as an additive scale of police initiated activities including (1) contacting a government agency or private organization on the citizen’s behalf, (2) providing physical assistance to this citizen, (3) providing information on how to deal with problem, and (4) comforting and reassuring the citizen. The similar results are mainly due to the similar distribution of the two variables. About 90% cases score 0 and 1 when the additive scale of police care is used. However, because the reliability of the scale is low (alpha = .38), the dichotomous measure of police care is used in further analysis.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 Citizen Disrespect</th>
<th>Model 2 Citizen Noncompliance</th>
</tr>
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<td>.20 (.23)</td>
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<td>Police disrespect</td>
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<td>.22 (.23)</td>
</tr>
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</tr>
<tr>
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<td>.56 (.20)</td>
</tr>
<tr>
<td>Quality of police decision making</td>
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<td></td>
</tr>
<tr>
<td>Accuracy</td>
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<td>.39 (.28)</td>
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<tr>
<td>Voice consideration</td>
<td>.73 (.26)</td>
<td>.57 (.23)</td>
</tr>
<tr>
<td>Voice rejection</td>
<td>.14 (.42)</td>
<td>.58 (.20)</td>
</tr>
<tr>
<td>Consistency</td>
<td>.28 (.21)</td>
<td>.63 (.21)</td>
</tr>
<tr>
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<td>.39 (.28)</td>
<td>.85 (.28)</td>
</tr>
<tr>
<td>Audience</td>
<td></td>
<td></td>
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<tr>
<td>Size of police audience</td>
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<td>.09 (.16)</td>
</tr>
<tr>
<td>Size of citizen audience</td>
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<td>.17 (.10)</td>
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<td>Encouragement to cooperate</td>
<td>.06 (.28)</td>
<td>.04 (.28)</td>
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<td>1.40 (.21)</td>
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<td>Nonwhite citizen</td>
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<td>Lower social class</td>
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<td>Female officer</td>
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<td>COP assignment</td>
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<td>-.98 (.21)</td>
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<tr>
<td>Nagelkerke R-Square</td>
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<td>.25 (.38)</td>
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</table>

Standard errors are reported in parentheses.

* Significant at the level of .05 or less; ** Significant at the level of .01 or less.
police disrespect and verbal threats have negative implications for citizens’ social identities and thus provoke disrespect among citizens to protect their offended social identities. Further, block-entry analysis shows that quality of interpersonal treatment is the most powerful group of variables correlated with citizen demeanor, which explains the greatest portion of variation in comparison with other groups of variables.

Accuracy of decisions and voice consideration are the two indicators of the construct, quality of police decision-making, which have significant impacts on citizen disrespect, controlling for other independent variables. Specifically, each additional increase in the accuracy score increases the odds of encountering a disrespectful citizen by 1.33 times. In other words, when police observe more evidence indicating that the interacting citizen may be involved in an illegal act, the citizen is more likely to show disrespect to the officer. This finding may be attributable to the measure of citizen disrespect which captures not only the verbal expressions of disrespect but also body languages and verbal cues that the citizen is upset with the officer’s behavior. As hypothesized with the effects of voice consideration, the odds that the citizen will behavior disrespectfully decrease by approximately 52% when the officer considers the citizen’s opinion in dealing with the situation by granting what the citizen wants or explaining why the citizen’s requests cannot be fulfilled. However, rejection of citizen’s voice in the decision-making is not a significant factor affecting citizen disrespect when compared with the reference category in which citizens make no requests.
As hypothesized based on the interactionist theory of coercive action, the size of the citizen audience increases the odds of citizen disrespect. However, the size of police audience has no significant effect on citizen disrespect. Moreover, consistent with prior research, citizen irrationality is found to be a powerful factor affecting citizen demeanor during encounters. Intoxication, mental impairment, or elevated emotions increase the odds of being disrespectful toward the police by about six times.

Citizens in different social groups do appear to behave differently when interacting with the police. Model 1 shows that female citizens are less likely to show disrespect toward the police, while nonwhite citizens are more likely to show disrespect. In addition, when interacting with black officers, citizens are more likely to show disrespect, controlling for other variables. However, officer gender does not have a significant impact on citizen demeanor. Following previous research, the effects of these variables are further explored.

FURTHER UNDERSTANDING CITIZEN DISRESPECT: INTERACTIONS OF SOCIAL GROUPS INDICATORS

Of particular interest is the research question whether all males or all blacks are more likely to show disrespect during encounters. In other words, are nonwhite males more likely to show disrespect than other subgroups of citizens, controlling for other factors? Moreover, are there interactions between citizen race and officer race on citizen
disrespect? To further understand citizen disrespect, a number of interaction effects between the social group indicators are examined.

Table 4.2 presents the models with interaction terms between social group indicators. In particular, Model 3 is the base model with interaction terms of citizen race and officer race, and Model 4 is the base model with the interaction terms of citizen race and gender. The frequencies of interactions terms are as follows: black officer/nonwhite citizen as the reference category (259, 31.7%), black officer/white citizen (82, 10.0%), white officer/white citizen (213, 26.0%), white officer/nonwhite citizen (264, 32.3%); nonwhite male as the reference category (359, 43.9%), nonwhite female (164, 20.0%), white male (198, 24.2%), white female (97, 11.9%).

Results of both models show that when adding interaction terms to the base model, the main effects of other independent variables remain stable. In addition, the significant variables in the base model remain significant. Model 3 reveals the interactions between officer race and citizen race. The odds of citizen disrespect in encounters involving black officers and nonwhite citizens are 1.73 times and 2.65 times greater than those in encounters involving white officers and nonwhite citizens and those in encounters involving white officers and white citizens, respectively. The odds of citizen disrespect in black officer-nonwhite citizen encounters are also greater than those in black officer-white citizen encounters, but the difference is not significant. Additional tests show that white officer-white citizen, white officer-nonwhite citizen, and black officer-white citizen
<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 3 Officer race–Citizen race</th>
<th>Model 4 Citizen gender–Citizen race</th>
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<td>-.10**</td>
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<td></td>
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<td>(.33)</td>
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<td>Police care</td>
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<td>1.22</td>
</tr>
<tr>
<td></td>
<td>(.22)</td>
<td>(.22)</td>
</tr>
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<td>3.01**</td>
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<td>(.29)</td>
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<td>1.25</td>
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<td>(.23)</td>
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<td>Verbal force</td>
<td>.75</td>
<td>2.11**</td>
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<td>(.20)</td>
</tr>
<tr>
<td>Quality of police decision making</td>
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<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>.28</td>
<td>1.33**</td>
</tr>
<tr>
<td></td>
<td>(.10)</td>
<td>(.10)</td>
</tr>
<tr>
<td>Voice consideration</td>
<td>-.73</td>
<td>.48**</td>
</tr>
<tr>
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<td>(.26)</td>
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<td>(.42)</td>
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<td>(.21)</td>
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<td>Audience</td>
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<td>Size of police audience</td>
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<td></td>
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<td>(.15)</td>
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<tr>
<td>Size of citizen audience</td>
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<td>1.24*</td>
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<td>(.10)</td>
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<td>Encouragement to cooperate</td>
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<td>1.06</td>
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<td></td>
<td>(.28)</td>
<td>(.28)</td>
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<td>5.92**</td>
</tr>
<tr>
<td></td>
<td>(.21)</td>
<td>(.22)</td>
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</table>

Social group indicators
Nonwhite citizen
Female citizen
- .43  .65*
(.21)
encounters are not significantly different from each other in terms of the odds of citizen disrespect.

Model 4 reveals that nonwhite males are significantly different from nonwhite females and white males and are more likely to show disrespect. In fact, the odds of being disrespectful for nonwhite males are two times as likely as those for the other three groups of citizens. The variable, white female, does not achieve statistical significance (p
= .054), however. Additional tests (not shown) find that the other three groups of citizens are not significantly different from each other.

EXPLAINING CITIZEN NONCOMPLIANCE

The same base model is used to estimate the main effects of independent variables on citizen noncompliance, as shown in Table 4.1. Among the indicators of quality of interpersonal treatment, only one variable, police use of physical force, is significant. Police use of physical force increase the odds of citizen noncompliance by 3.74 times. Contrary to what we find about the effects of police disrespect and use of verbal force on citizen disrespect, these two variables have no impact on citizen noncompliance, suggesting that police coercion tends to be reciprocated with similar forms of reactions by citizens. In other words, citizens are more likely to show disrespect as a reaction to police disrespect and verbal threats, and when police use more coercive actions such as physical force, citizens are more likely to have behavioral reactions without compliance.

Voice consideration, as an indicator of quality of police decision-making, is significantly correlated with citizen noncompliance. Citizens are less likely to be noncompliant if officers consider their opinions in handling the situation by granting what they request or offering explanations if their requests are not fulfilled. In fact, the odds of citizen noncompliance decrease by approximately 74% when officers take citizen opinion into consideration. Similar to what is found for citizen disrespect, voice rejection
does not have significant impact when compared with the reference category.

Just as in the model of citizen disrespect, citizen irrationality has substantial explanatory power in the model of citizen noncompliance. The odds of being noncompliant increase by four times when the citizen is intoxicated, has a mental impairment, or elevated emotions. In contrast to the findings for citizen disrespect, size of police audience has a significant effect on citizen noncompliance, while size of citizen audience has no significant effect. Generally speaking, citizens are less likely to be noncompliant when there are additional officers as backups at the scene. Though citizen audience may increase citizens’ concern for social identities, the associated costs of being noncompliant may deter them from being noncompliant.

The results of Model 2 also reveal the different effects of social group indicators on citizen noncompliance. Contrary to the findings of race and gender effects on citizen disrespect, in the model of citizen noncompliance, being a juvenile is the only significant variable among the social group indicators. Particularly, the odds that police will encounter a noncompliant citizen increase by 2.68 times if the encounter involves a citizen under the age of 18. Moreover, officer characteristics have no effects on citizen noncompliance. A final interesting finding is the significant effect of COP assignment. Other things being equal, citizens are less likely to be noncompliant when they interact with COP officers. In fact, COP officers decrease the odds of noncompliance by 62%.

Because only one variable in the social group indicators is significant on citizen
noncompliance, interactions between these indicators are not of interest. Moreover, the analysis (not shown) with interaction terms between officer race and citizen race shows that the interactions are not significant.

**INTERACTIONS WITH PROCEDURAL JUSTICE FACTORS**

Another research question involves interactions between procedural justice factors and social group indicators. As suggested by the social identity-based model of procedural justice, citizens are less concerned with procedural justice when they do not identity themselves with the police or, in other words, have a negative relationship with the police. Thus, based on the findings on citizen disrespect from the base model, the analysis first focuses on the interactions between procedural justice and citizen race, and then focuses on the interactions between procedural justice and citizen gender. For citizen noncompliance, the analysis focuses on the interactions between procedural justice and being a juvenile citizen, as juvenile citizen was the only significant variable on citizen noncompliance. The interaction models, Model 5-7, are presented in Table 4.3 and Table 4.4.

Model 5 is the procedural justice-citizen race interaction model of citizen disrespect in which the product terms of procedural justice factors and citizen race are entered into the base model. Results show that only two product terms, verbal force-race and voice consideration-race, are significant. As expected, in encounters involving white
### Table 4.3: Logistic Regression Models of Citizen Disrespect: Interactions Between Procedural Justice and Social Group Indicators

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 5 (P. J. – Citizen race)</th>
<th>Model 6 (P. J. – Citizen gender)</th>
</tr>
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<td>1.07</td>
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<td>(.21)</td>
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<td>(.26)</td>
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<td>(.19)</td>
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<td>(.47)</td>
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<td>(.53)</td>
<td>(.62)</td>
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<td>(.47)</td>
<td>(.45)</td>
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<td>(.24)</td>
<td>(.23)</td>
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<td>With voice consideration</td>
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<td>(53)</td>
<td>(.53)</td>
<td>(.52)</td>
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<td>(.48)</td>
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<td>With inconsistency</td>
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<td>(.65)</td>
<td>(.61)</td>
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</tbody>
</table>

Nagelkerke R. Square 40 40

Standard errors are reported in parentheses.
*Significant at the level of .05 or less; **Significant at the level of .01 or less.
citizens, the odds that police encounter citizen disrespect increase by 4.96 times when they use verbal force, while in encounters involving nonwhite citizens, the odds that police encounter citizen disrespect increase by 1.54 times when they use verbal force, controlling for other factors. This finding is consistent with the hypothesis that quality of interpersonal treatment is less important for nonwhites, because nonwhites have less positive relationships with the police. Contrary to expectation, however, nonwhite citizens are more concerned with their input in police decision-making. In encounters involving white citizens, the odds that police encounter citizen disrespect increase by 14% ($p = .76$) when they consider citizens’ opinion in handling the situation. However, in encounters involving nonwhite citizens, the odds that police encounter citizen disrespect decrease by 67% when they consider citizens’ opinion by granting what they want or offering explanations why their requests cannot be fulfilled.

Model 6 is the procedural justice-citizen gender interaction model of citizen disrespect in which the product terms of procedural justice factors and citizen gender are entered into the base model. Two interactions are found significant including police care-citizen gender and verbal force-citizen gender when other factors are controlled. In encounters involving male citizens, the odds that police encounter citizen disrespect decrease by 10% ($p = .70$) when police care is provided for citizens. In contrast, when dealing with female citizens, the odds that police encounter citizen disrespect increase by 2.41 times when police care is provided. This finding should be interpreted with caution.
Table 4.4: Logistic Regression Model of Citizen Noncompliance: Interaction Between Procedural Justice and Juvenile Citizen

<table>
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<tr>
<th>Variable</th>
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</thead>
<tbody>
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<td></td>
<td>-2.69</td>
<td>.07**</td>
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<td>Police disrespect</td>
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<td>1.16</td>
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<td></td>
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<td>(.56)</td>
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</tr>
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<td>.81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.51)</td>
<td></td>
</tr>
<tr>
<td>Quality of police decision making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td></td>
<td>.24</td>
<td>1.27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.23)</td>
<td></td>
</tr>
<tr>
<td>Voice consideration</td>
<td></td>
<td>-1.07</td>
<td>.34</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.55)</td>
<td></td>
</tr>
<tr>
<td>Voice rejection</td>
<td></td>
<td>.08</td>
<td>1.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.85)</td>
<td></td>
</tr>
<tr>
<td>Consistency</td>
<td></td>
<td>-.59</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.47)</td>
<td></td>
</tr>
<tr>
<td>Inconsistency</td>
<td></td>
<td>-.19</td>
<td>.83</td>
</tr>
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<td></td>
<td></td>
<td>(.56)</td>
<td></td>
</tr>
<tr>
<td>Audience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of police audience</td>
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<td>.70</td>
<td>.50*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.32)</td>
<td></td>
</tr>
<tr>
<td>Size of citizen audience</td>
<td></td>
<td>.20</td>
<td>1.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.18)</td>
<td></td>
</tr>
<tr>
<td>Encouragement to cooperate</td>
<td></td>
<td>-.30</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.46)</td>
<td></td>
</tr>
<tr>
<td>Citizen irrationality</td>
<td></td>
<td>1.71</td>
<td>5.52**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.49)</td>
<td></td>
</tr>
<tr>
<td>Social group indicators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite citizen</td>
<td></td>
<td>-.56</td>
<td>.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.34)</td>
<td></td>
</tr>
<tr>
<td>Female citizen</td>
<td></td>
<td>.10</td>
<td>1.11</td>
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106
<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
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<tbody>
<tr>
<td>Juvenile citizen</td>
<td>2.91</td>
<td>(1.15)</td>
</tr>
<tr>
<td>Lower social class</td>
<td>.22</td>
<td>(.40)</td>
</tr>
<tr>
<td>Female officer</td>
<td>-.44</td>
<td>(.49)</td>
</tr>
<tr>
<td>Black officer</td>
<td>.37</td>
<td>(.32)</td>
</tr>
<tr>
<td>Citizen trust in police</td>
<td>-.53</td>
<td>(.68)</td>
</tr>
<tr>
<td>COP assignment</td>
<td>-.98</td>
<td>(.38)</td>
</tr>
<tr>
<td>Interaction with procedural justice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With police care</td>
<td>-.31</td>
<td>(.88)</td>
</tr>
<tr>
<td>With police disrespect</td>
<td>1.57</td>
<td>(.98)</td>
</tr>
<tr>
<td>With physical force</td>
<td>.99</td>
<td>(.95)</td>
</tr>
<tr>
<td>With verbal force</td>
<td>-1.06</td>
<td>(.87)</td>
</tr>
<tr>
<td>With accuracy</td>
<td>-.89</td>
<td>(.45)</td>
</tr>
<tr>
<td>With voice consideration</td>
<td>-.74</td>
<td>(1.19)</td>
</tr>
<tr>
<td>With voice rejection</td>
<td>-1.63</td>
<td>(1.66)</td>
</tr>
<tr>
<td>With consistency</td>
<td>-.05</td>
<td>(.90)</td>
</tr>
<tr>
<td>With inconsistency</td>
<td>-.39</td>
<td>(1.02)</td>
</tr>
</tbody>
</table>

Nagelkerke R Square 29

Standard errors are reported in parentheses.

*Significant at the level of .05 or less; **Significant at the level of .01 or less.
because police care is not a significant variable in the base model. In fact, when police care is not provided, the odds of female citizens being disrespectful are about 26% of those for male citizens. When police care is provided the odds of being disrespectful for female citizens are about 89% of those for male citizens. Thus, contrary to expectations, police care has opposite effects on male and female citizens.

Another significant interaction in this model is between police use of verbal force and citizen gender. Particularly, when dealing with male citizens, use of verbal force increase the odds of citizen disrespect by 51% (p = .08). On the contrary, use of verbal force increases the odds of citizen disrespect by 5.22 times when dealing with female citizens. The finding is consistent with the hypothesis in the social identity-based model that females are more concerned with quality of interpersonal treatment because they have more positive relationships with the police.

Model 7 in Table 4.4 is the procedural justice-juvenile citizen interaction model of citizen noncompliance. The analysis shows that only the product term of juvenile citizen and accuracy of police decisions is significant. Particularly, for adult citizens each additional increase on the accuracy scale increases the odds of being noncompliant by 27% (p = .31). For juvenile citizens, in contrast, each additional increase on the accuracy scale decreases the odds of being noncompliant by 48%. Thus, accuracy has opposite effects on compliance of adult citizens and juvenile citizens. Because accuracy is also an indicator of problem seriousness, as suggested by Mastrofski et al. (1996), in less serious
Table 4.5: Logistic Regression Model of Citizen Disrespect: Interaction Between Procedural Justice and Citizen Trust

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 8</th>
<th>P. J. – Citizen trust</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>3.33</td>
<td>0.44**</td>
</tr>
<tr>
<td><strong>Quality of police interpersonal treatment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police care</td>
<td>0.18</td>
<td>1.19</td>
</tr>
<tr>
<td>Police disrespect</td>
<td>1.18</td>
<td>3.26**</td>
</tr>
<tr>
<td>Physical force</td>
<td>0.16</td>
<td>1.18</td>
</tr>
<tr>
<td>Verbal force</td>
<td>0.71</td>
<td>2.02**</td>
</tr>
<tr>
<td><strong>Quality of police decision making</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>0.28</td>
<td>1.33**</td>
</tr>
<tr>
<td>Voice consideration</td>
<td>-0.69</td>
<td>0.50*</td>
</tr>
<tr>
<td>Voice rejection</td>
<td>0.54</td>
<td>1.71</td>
</tr>
<tr>
<td>Consistency</td>
<td>0.19</td>
<td>1.20</td>
</tr>
<tr>
<td>Inconsistency</td>
<td>0.42</td>
<td>1.52</td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of police audience</td>
<td>0.08</td>
<td>1.08</td>
</tr>
<tr>
<td>Size of citizen audience</td>
<td>0.23</td>
<td>1.26*</td>
</tr>
<tr>
<td>Encouragement to cooperate</td>
<td>0.04</td>
<td>1.04</td>
</tr>
<tr>
<td>Citizen irrationality</td>
<td>1.81</td>
<td>6.12**</td>
</tr>
<tr>
<td><strong>Social group indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite citizen</td>
<td>0.43</td>
<td>1.54*</td>
</tr>
<tr>
<td>Female citizen</td>
<td>-0.44</td>
<td>0.65*</td>
</tr>
<tr>
<td>Variable</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>Juvenile citizen</td>
<td>.31</td>
<td>1.36</td>
</tr>
<tr>
<td>Lower social class</td>
<td>-.11</td>
<td>.90</td>
</tr>
<tr>
<td>Female officer</td>
<td>.08</td>
<td>1.08</td>
</tr>
<tr>
<td>Black officer</td>
<td>.56</td>
<td>1.76**</td>
</tr>
<tr>
<td>Citizen trust in police</td>
<td>-.05</td>
<td>.95</td>
</tr>
<tr>
<td>COP assignment</td>
<td>-.22</td>
<td>.80</td>
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</table>

**Interaction with procedural justice**

<table>
<thead>
<tr>
<th>Interaction</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>With police care</td>
<td>-.09</td>
<td>.92</td>
</tr>
<tr>
<td>With police disrespect</td>
<td>-.91</td>
<td>.40</td>
</tr>
<tr>
<td>With physical force</td>
<td>1.26</td>
<td>3.53</td>
</tr>
<tr>
<td>With verbal force</td>
<td>1.15</td>
<td>3.17</td>
</tr>
<tr>
<td>With accuracy</td>
<td>-.38</td>
<td>.69</td>
</tr>
<tr>
<td>With voice consideration</td>
<td>-1.26</td>
<td>.28</td>
</tr>
<tr>
<td>With voice rejection</td>
<td>-2.67</td>
<td>.07*</td>
</tr>
<tr>
<td>With consistency</td>
<td>1.51</td>
<td>4.51</td>
</tr>
<tr>
<td>With inconsistency</td>
<td>.75</td>
<td>2.11</td>
</tr>
</tbody>
</table>

Nagelkerke R Square 39

Standard errors are reported in parentheses.

*Significant at the level of .05 or less; **Significant at the level of .01 or less.
situations, adults are less likely to increase the costs by not complying, while juveniles, compared with adults, are less likely to consider the associated costs of being noncompliant in their decision-making in less serious situations.

The last question to be addressed is the interaction between procedural justice factors and citizen trust in police (as measure by whether the citizen summoned the police to the scene). Analysis of the interactions between procedural justice and citizen trust is presented in Table 4.5. Because no significant interactions are found for citizen noncompliance, only the model of citizen disrespect is reported. Model 8 shows that among all the 9 interaction terms, only the interaction between voice rejection and citizen trust is significant. Particularly, in police initiated encounters, voice rejection increases the odds of encountering citizen disrespect by 71% (p = .29), compared with the police initiated encounters where citizens do not make any requests. In contrast, in citizen initiated encounters, voice rejection decreases the odds of encountering citizen disrespect by 88% compared with the citizen initiated encounters where citizens do not make any requests. Because voice rejection is not a significant variable, this finding should be interpreted with caution. The uncertainty management model of procedural justice suggests that citizens are more concerned with the quality of police decision-making in police initiated encounters in which citizens have less information about the trustworthiness of the police. The finding supports this model of procedural justice because it shows voice rejection only has a positive effect, though not significant, on
citizen disrespect in police initiated encounters.

SUMMARY

To sum up, different patterns exist when explaining citizen disrespect and noncompliance. In general, the base model with all the independent variables does a better job explaining citizen disrespect, as the pseudo R-square for citizen disrespect is larger than that for citizen noncompliance. Voice consideration is the only procedural justice factor that has significant effects across the models. Citizens are more likely to cooperate with the police when they have input in police decision-making. Contrary to expectation, police care and consistency of policing decisions are not shown having significant effects on either of the dependent variable. Moreover, interactions between procedural justice and other factors are found. However, there is no consistent pattern about the interaction effects. Some of findings are as hypothesized based on the social identity-based model and uncertainty management model of procedural justice, while some are not. The implications of these findings will be discussed in the next chapter.
CHAPTER FIVE

DISCUSSION

Process-based policing argues that quality of police decision-making and quality of interpersonal treatment as indicators of procedural justice are important factors affecting citizen cooperation with the police during encounters. Applying various theories of procedural justice and the interactionist theory of coercion, this dissertation attempts to evaluate process-based policing by examining the effects of the major procedural justice factors on citizen demeanor and compliance with police requests. In this chapter, findings from the statistical analyses and their implications will be discussed. In addition, future research on process-based policing and police-citizen encounters will be suggested.

UNDERSTANDING CITIZEN DISRESPECT AND NONCOMPLIANCE

The preceding statistical analyses presented a complicated picture about the effects of procedural justice factors on citizen disrespect and noncompliance. In general, procedural justice factors, including the quality of interpersonal treatment (i.e., police care, police disrespect, physical force, and verbal force) and the quality of police decision-making (i.e., accuracy, consistency and inconsistency, and citizen voice consideration and rejection), are powerful factors affecting citizen disrespect and noncompliance. Without controlling for other groups of factors, these procedural justice
factors together explained approximately 23% of the variance of citizen disrespect and 11% of citizen noncompliance. The analyses also showed that the effects of procedural justice on citizen behavior are not as simple as suggested by process-based policing, because the effects of some procedural justice factors vary by the type of citizen behavior being considered.

For example, the results showed that net of controls, indicators of the quality of interpersonal treatment have different impacts on citizen disrespect and noncompliance. In particular, police disrespect and verbal threats can provoke citizen disrespect but do not have significant impacts on citizen noncompliance. In contrast, police use of physical force influences noncompliance but not citizen disrespect. In other words, police use of physical force leads to violent escalation in which citizens refuse to control their disorderly behavior but has no impact on citizen demeanor, controlling for other factors. This is consistent with Reisig et al.’s (2004) finding that more coercive forms of force such as impact techniques were positively associated with active forms of citizen resistance.

This finding about the differential effects of the quality of treatment suggests that citizen disrespect and noncompliance are distinct citizen reactions. Indeed, as argued by the social interactionist theory of coercion (Tedeschi and Felson, 1994), citizen disrespect and noncompliance are the result of different decision-making processes in which citizens make judgments about the potential costs and gains of their coercive reactions. When
citizens’ social identities are offended by less coercive actions of the police, such as verbal force and the display of disrespect, citizens are more likely to protect their social identities with disrespectful reactions which is less coercive and not usually considered as illegal resistance. In such situations, however, citizens are not more likely to be noncompliant with police requests because the anticipated costs associated with defiant behavior are substantial. As such, citizens apparently decide that the costs outweigh the gains that may be secured from noncompliance. Only when the police use elevated forms of force to physically constrain citizens, are citizens more likely to resist without controlling their disorderly behavior because citizens may conclude that in such situations they have nothing left to lose. Here, the needs to restore their offended social identifies outweigh the costs.

With regard to the effects of the quality of police decision-making, there is a consistent finding about the significant effects of citizen participation in police decision-making in both models of citizen disrespect and noncompliance. Specifically, consideration of citizen opinions when handling potentially violent situations, generally speaking, reduces the likelihood of citizen disrespect and noncompliance. This finding suggests how police could benefit themselves and reduce the risk of a violent encounter by improving the quality of their decision-making. When citizens make requests during encounters, the police could prevent or at least reduce the likelihood of antagonistic interactions by granting what citizens want or by explaining to them the reasons that their
requests cannot be fulfilled. As argued by Worden (1993), differential police responses to
citizen requests have no adverse effect on citizen cooperation when citizens are told why
officers select certain options and their expectations of police behavior are changed.
Contrary to expectations, however, the likelihood that citizens will be disrespectful and
noncompliant is not significantly increased when the police ignore or reject their requests
with no explanations, when compared with encounters in which citizens do not make any
requests. It is possible that citizens who do not make requests during interactions do not
expect the police to be responsive. Therefore, the odds of being disrespectful and
noncompliant for them are not significantly different from those for the citizens whose
requests are ignored or simply rejected.

As expected, citizens in different social groups were found to behave differently
during interactions with the police. Male citizens and nonwhite citizens are more likely to
show disrespect to the police, and nonwhite males are a particular group who are more
likely to show disrespect to the police than other social groups. Further analyses of the
officer race-citizen race combinations found that nonwhite citizens are more likely to be
disrespectful to black officers than they are when interacting with white officers. It is
possible that nonwhite citizens have higher expectations concerning the treatment they
will receive from black officers, and when their expectations are not met, they are more
likely to express their dissatisfaction through their body languages or verbally. This
finding contradicted those reported by Engel (2003) using the 1977 PSS data that
nonwhite citizens were not significantly more likely to engage in disrespectful reactions compared to white suspects. As noted by Engel, discrepancies in findings concerning disrespect across studies may be attributable to the unique social contexts of the study sites under observation.

When examining the effects of social group indicators on citizen noncompliance, the analysis found that citizen gender and race are not significant factors. Only citizen age affects the odds of citizen noncompliance. In particular, juveniles are more likely to be noncompliant with police requests than adults, controlling for other factors. This finding is supported by McCluskey et al.’s (1999) study of citizen compliance. Using the POPN data collected from 1996 to 1997, McCluskey et al. also found that citizen age was the only social group indicator significantly related to noncompliant behavior. In addition, the null findings about the interactions between citizen race and office race are also consistent with the findings reported by McCluskey et al. Taken together, the findings about the different effects of social group indicators on citizen disrespect and noncompliance again suggest that citizen disrespect and noncompliance are distinct citizen reactions which are the results of different decision-making processes. Noncompliance is a more aggressive form of resistance during interactions with the police, and perhaps only juveniles are more likely to be impulsive and disregard the potential costs of being noncompliant. Alternatively, juveniles may not even be aware of the potential costs of being noncompliant.
Because of the different attitudes and perceptions that people in different social
groups may have towards the police (Frank et al., 2005; Reisig and Parks, 2000; Weitzer
and Tuch, 2005; Brandl et al, 1994; Browning et al., 1994; Cullen et al., 1996; Henderson
et al., 1997; Cao and Dai, 2006), it was hypothesized, according to the social
identity-based model of procedural justice (Tyler and Smith, 1999), that procedural
justice factors may be less important for those who have a less positive relationship with
the police. In particular, based on the findings of the base models (i.e., Model 1 and
Model 2), it was hypothesized that when explaining citizen disrespect, procedural justice
factors are less important for males and nonwhites and that when explaining citizen
noncompliance, procedural justice factors are less important for juveniles. As reported in
the previous chapter, however, with the exception of the effects of verbal force on citizen
disrespect, most of the interactions withstood empirical scrutiny. Overall, only 5 out of 18
interaction terms were significant.

As hypothesized about citizen disrespect, males and nonwhites are less concerned
with police use of verbal force than females and whites, respectively. Use of verbal force
increases the odds of encountering disrespectful citizens by 5.22 times for female citizens
but only by 0.51 times for male citizens. Moreover, use of verbal force increases the odds
of encountering disrespectful citizens by 4.96 times for white citizens but by 1.54 times
for nonwhite citizens. In other words, verbal force is more likely to exacerbate the
interactions by provoking citizen disrespect to protect their offended social identities.
when dealing with white and female citizens. In fact, the analyses showed that coercive tactics such as threats and commands used by the police to assert authority or control the situation do not work as expected, as the odds of citizen disrespect are reduced only when the police use verbal force against male citizens.

Two unexpected relationships were evident in the analyses. One unexpected finding is that police consideration of citizen opinions has more effect on the demeanor of nonwhite citizens than that of white citizens during interactions. Nonwhite citizens are more concerned with their participation in police decision-making than white citizens, and when police grant what they request or explain why their requests cannot be fulfilled, the odds of being disrespectful by nonwhite citizens are significantly reduced by 67%. A second unexpected finding is the interaction between police care and citizen gender. Police care was not a significant factor in the base model, but its effect on citizen disrespect was contingent upon citizen gender. Specifically, police care and assistance reduce male citizens’ disrespect but increase female citizens’ disrespect. Female citizens might not want the police to take actions on their behalf if they do not request such actions, and when the police do so, they are likely to be upset. It should be noted that even when police provide assistance on their initiative, the odds of being disrespectful for females are still slightly lower than the odds for males.

When explaining citizen noncompliance, only one interaction was found between procedural justice factors and citizen age. Specifically, when the police have less
evidence of wrongdoing, adult citizens are less likely to be noncompliant but juvenile citizens are more likely to be noncompliant. This result reinforces the finding that the decision-making of juveniles to be compliant or not is different from that of adults. Juveniles are less likely to consider the costs of being noncompliant especially when the situation is less serious and the police have less evidence of wrongdoing. In contrast, in less serious situations, adults are likely to comply with police requests to avoid to potential costs of confrontations.

Based on the uncertainty management model of procedural justice (Van den Bos and Lind, 2002), an interaction between procedural justice and citizen trust was examined. Similar to the limited findings about the interaction between procedural justice and social group indicators, this analysis found that among 18 interaction terms, only the interaction between voice rejection and citizen trust in the model of citizen disrespect was significant. Consistent with the hypothesized effects, this finding suggests that citizens are concerned with the denial of their voice in police initiated encounters rather than in citizen initiated encounters.

Collectively, the current findings suggest police behavior during interactions, especially behavior related to procedural justice, affects cooperative citizen reactions. One is more likely to observe citizen disrespect when the police offend citizens’ social identity with disrespect or threats, when the police deny citizens’ voice in police decision-making, and when the police have more evidence of a criminal occurrence. At
the same time, police are more likely to encounter citizen noncompliance when the police deny citizens’ voice or use physical force against citizens during the interactions. The current findings also demonstrated that the effects of procedural justice on citizen behavior are not as simple as suggested by process-based policing, because the effects of these factors vary by the type of citizen behavior being considered. In addition, only certain procedural justice factors have the predicted interaction effects with other factors.

Besides the mixed findings about the effects of procedural justice factors, the analyses found support for the interactionist theory of coercion. For example, bystanders increase the odds of citizen disrespect most likely because of the pronounced concern for their preferred social identities. Also additional police officers at the scene decrease the odds of citizen noncompliance because of their deterrent effects. The effect of citizen audience on citizen noncompliance and the effect of police audience on citizen disrespect are not significant, however, suggesting again that the two types of citizen behavior do not share common antecedents. Citizens may believe that the display of disrespect is not illegal and associated with less cost, so they are not deterred by the presence of additional officers. In contrast, they may view that the cost of being noncompliant outweighs the concern for their favored social identities aroused by the surrounding bystanders. In addition, as argued by the interactionist theory of coercion, citizen irrationality was consistently found to have positive effects on citizens’ choice to be disrespectful and noncompliant. This finding is supported by prior research on citizen behavior during
encounters (Mastrofski et al., 1996; McCluskey et al., 1999; Engel, 2003; Piquero and Bouffard, 2003; Reisig et al., 2004; McCluskey, 2003)

Another finding of particular interest is the significant effects of COP assignment on citizen noncompliance. Controlling for other factors, COP officers reduce the odds of encountering noncompliant citizens by 62%, suggesting that beyond the measured police behavior related to decision-making and interpersonal treatment, other problem-solving tactics that the COP officers received in their training might have affected their handling of potentially violent encounters. Also, because of their pronounced concern for community relations, they are probably more sensitive to citizens’ need for fair procedures as well as fair decisions. This finding echoes prior research that found officers who supported community policing were more likely to secure a compliant response (Mastrofski et al., 1996). Though the underlying mechanism between COP assignment and citizen noncompliance needs further exploration, this finding, just as Mastrofski et al.’s study, suggests that community policing could be promising in improving police-citizen relationships. It should be noted, however, that there are no differences between COP officers and beat officers in encountering citizen disrespect.

THEORETICAL AND PRACTICAL IMPLICATIONS

Prior research on process-based policing has usually used citizen surveys to examine the effects of citizen perceptions about procedural justice on citizen willingness
to cooperate with the police. This body of research provided only limited information about the effects of the fair procedures to be implemented in process-based policing on citizen actual behavior during encounters. By using data from systematic observations of police-citizen encounters, the present study depicts a more comprehensive picture of the dynamics of police-citizen interactions and the effects of procedurally fair behavior by the police.

**Implications for Explaining Citizen Interactions with the Police**

In the era of community policing, citizen cooperation with the police is one of the goals of the reform as citizens are co-producers of public order and safety. The first step to accomplish this goal is to understand citizen cooperative behavior during interactions. However, prior research on police-citizen encounters primarily focused on coercive police behavior, and very limited empirical work studied citizen behavior. This dissertation improves our understanding of police-citizen interactions by focusing on citizen disrespect and noncompliance, two types of citizen behavior that are important for the accomplishment of police work at the street level. Understanding what factors may affect citizens’ cooperative behavior during encounters can help the police better maintain social order in potentially violent situations. Ultimately, a cooperative citizen makes officers’ job easier to perform with less risk of physical harm and litigation.

The results show that citizens’ disrespectful and noncompliant reactions toward
the police are influenced by various factors, especially police interactions with citizens. Prior research on police work often emphasized its authoritative and coercive aspect in handling potentially violent encounters. Suspiciousness and maintaining the edge over citizens were described as the key elements of the traditional police subculture (Rubinstein, 1973; Brown, 1988; Skolnick, 1994; Van Maanen, 1974). However, whether police coercion has the hypothesized effects on citizen reactions remains largely unknown, due to the very limited empirical research on citizen behavior. In addition, recent developments in the social psychology of procedural justice in general, and process-based policing in particular, have drawn attention to a number of police actions that are related to the quality of police decision-making and interpersonal treatment. It is argued that procedurally fair actions affect citizen perceptions about police legitimacy and, in turn, lead to citizens feeling obliged to cooperate with the police (Tyler, 2003, 2004). However, whether perceptions of procedural justice outweigh police coercion during interactions also remains an empirical question.

This dissertation addresses this question and evaluates the utility of police coercion by applying procedural justice theories to police-citizen encounters. In other words, it contrasts the deterrent effects of police coercion with the procedural-justice effects. The results suggest that though use of coercion may be a central component of the police role, when controlling for other factors, police coercion may not have the expected deterrent effects. Instead, coercion may arouse citizen disrespect and
noncompliance. Other existing research has found that citizen complaints can be significantly reduced if policing is done with courtesy and respect (Davis et al., 2005). While not measuring the same construct, this finding implies that citizens are at least more likely to be satisfied with police behavior if treated in a respectful and courteous manner. Combined with this study’s finding, the process-based approach to police-citizen interactions appears to be an effective way to promote cooperation and improve satisfaction. Police administrators and commandrs, therefore, may consider how to reformat the police subculture within the department and implement process-based policing with accountability mechanisms.

**Implications for the Implementation of Process-Based Policing**

The findings of this study do provide an empirical foundation for the implementation of process-based policing. Because process-based policing is developed based on the social psychology of procedural justice, its benefits are largely derived from the effects of procedural justice factors on citizens’ subjective attitudes and perceptions (Tyler, 1990, 2005; Sunshine and Tyler, 2003). Citizen willingness to cooperate with the police, however, does not necessarily mean that they will do so during real-life encounters. Thus, the results contribute to our understanding of process-based policing by adding evidence about the potential objective behavioral effects of procedural justice. Furthermore, the benefits of procedural justice are derived from objective observations of
police behavior rather than from citizens’ subjective interpretation or evaluation of what
the police do as in the citizen surveys. In other words, the results demonstrate the effects
of the objective police behavior related to procedural justice that are within the control of
the police and therefore should be implemented in the process-based model of policing.

In fact, the findings about the effects of procedural justice are consistent with
previous studies on citizen behavior. These findings emphasize the importance of police
legitimacy in handling the interactions with citizens. The police could increase their
legitimacy by improving the quality of their decision-making and the quality of
interpersonal treatment. For citizens to become more likely to accept police authority, the
police should respect citizens’ rights, should involve citizens in their decision-making,
and should explain their decisions to citizens. Each of these actions has strong effects on
citizen cooperation and are clearly within the control of police. Further, the results
suggest that all of these noncoercive actions are more effective in accomplishing peace
than the use of coercion in potentially violent situations.

The skill of policing, as argued by Bittner (1974), consists in finding ways to
avoid the use of force. The relative importance of procedurally fair behavior by the police
suggests one way police may avoid reliance on forceful behavior. There are certainly
other ways. Whether citizens cooperate with the police is also affected by various factors
such as their capacity for rational decision-making, their social status and relationship
with the police, and audience at the scene. Moreover, the effects of procedural justice can
vary in different situations. The current analysis is not conclusive but instead is a step toward a complete understanding of police-citizen encounters. Nonetheless, the findings suggest that if officers can be trained to understand and appreciate the dynamics of such encounters, they may enjoy a better relationship with the public with less disrespect and noncompliance.

SUGGESTIONS FOR FUTURE RESEARCH

The snapshots of police-citizen interactions examined in this dissertation present a complex picture about citizen behavior in reaction to police behavior. The complexity of the research object, coupled with the limitations of available data, calls for further exploration of the issues raised by the current study. There are a number of directions for future research.

First, future research should refine the measures of procedural justice to better reflect the characteristics of police citizen encounters. Refined measures can better inform policy makers of the value of process-based policing as well as what to implement to improve police legitimacy. We need to know among all procedural justice factors which element has more implications for citizen perceptions about the fairness of procedures. This could be done by examining how citizens evaluate their interactions with the police. In addition, as discussed in the literature on police behavior (Klinger, 1994, 1996; Worden and Shepard, 1996), future research should have caution in
conceptualizing and measuring the demeanor of police and citizens.

Second, to better understand process-based policing, future research should address the causal links between citizen perceptions about the fairness of police procedures and their corresponding behavior. Citizen behavior is not just a product of their interactions with the police but affected by a number of factors. Therefore, though police behavior may affect citizen judgments about procedural justice, its relative importance on citizens’ objective behavior should be evaluated against other factors. This could be done by supplementing systematic observations with citizen surveys on their experiences with the police.

Third, future research should incorporate other theoretical frameworks to increase the explanatory power of the model in explaining citizen behavior. For example, Reisig et al, (2004) examined neighborhood context on citizen disrespect and found that economic and social disadvantage better accounted for citizen disrespect than race. Future research should further explore the effects of other theoretically relevant factors on citizen behavior, along with the theoretical frameworks used in present study. Also, as discussed, theoretical guidance is needed to understand the interactions between procedural justice and other factors.

Fourth, further research should examine in detail why COP officers are better achieving citizen compliance. In addition to present study, Mastrofski et al (1996) found that officers who embraced community policing enjoyed greater success with citizen
compliance. As an important factor affecting citizen noncompliance, COP should deserve more attention. However, because of the lack of information, current research cannot tease out the actions that COP officers uniquely took in handling the situations. Future research may achieve this goal with detailed observations of officers’ behavior or by examining the effects before and after a particular COP training is delivered.

Fifth, future research should also pay more attention to the temporal order of the interactions between the police and citizens. In this study, the dependent variables are conceptualized as outcomes of an encounter, that is, whether the police encountered a disrespectful and noncompliant citizen. Future research could provide more insights on the effects of procedural justice if a transactional approach is adopted which unfolds the dynamics between police and citizens. With detailed information about the interplay of police and citizens, future research can better inform policy makers of when and to what extent police procedural-justice behavior can have an impact on citizen behavior during the interactions.

Finally, analysis of current data with more police citizen encounters is needed. Generalizing the results of this study to other communities could be questionable, given the great variation in police departments and the communities they police. In the data, for example, citizen race appears to play an important role during the interactions, but a community with a different history of race relations could show a quite different pattern about the effects of race on citizen behavior. Therefore, replications of current study in
other cities and/or at different times will provide the opportunity to fully explore the research questions. Moreover, with large samples of police citizen encounters, future analysis should examine more types of citizen behavior during interactions with the police. This will assist a complete picture about the effects of those factors studied in this dissertation.
REFERENCES


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


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    other
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

In what beat were you assigned to ride director?

Primarily, what neighborhood was the COP officer assigned?

O1's ID number? (Use officer badge number - see code sheets)

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

ENTER TIME--IN MONTHS.

How many years of education of O1?

1. Less than HS
2. HS grad
3. Some college or trade school
4. College graduate
5. Some post graduate education
6. Advanced degree

Officer O1's sex

1. Male
2. Female

Officer O1's race:

1. White
2. Black
3. Hispanic
4. Asian
5. Other or mixed race

Age of O1? (YEARS)

Length of service with CPD? (YEARS)
18. Marital status of 01?

1 Single, never married
2 Married
3 Divorced or separated
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?

1 Less than HS
2 HS grad
3 Some college or trade school
4 College graduate
5 Some post graduate education
6 Advanced degree


25. Length of service with CPD? (YEARS)
25b. Officer O2's sex

1. Male
2. Female

25c. Officer O2's race:

1. White
2. Black
3. Hispanic
4. Asian
5. Other or mixed race

26. Marital status of O2?

1. Single, never married
2. Married
3. Divorced or separate
4. Widowed
5. Refused

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

1. very negative
2. negative
3. neutral
4. positive
5. very positive

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

1. very negative
2. negative
3. neutral
4. positive
5. very positive

29. Was there precipitation during this ride?

1. no
2. light rain
3. heavy rain
4. combination of 2 and 3

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5 light snow/sleet/hail
6 heavy snow/sleet/hail
7 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

ACTIVITY INSTRUMENT

RIDE INFORMATION
1. Ride Number?

ENTER THE FIVE DIGIT NUMBER OF THIS RIDE

2. Observer number?

ENTER YOUR OBSERVER NUMBER HERE

3. Activity/encounter number?

ENTER THE NUMBER FOR THIS ACTIVITY SEQUENTIALLY FOR THIS RIDE. IF THIS IS THE FIRST ACTIVITY FOR THIS RIDE, ENTER 1, ETC...

4. Time activity began (24 hour clock)?

00:00 = midnight 12:00 = noon

5. Time activity ended (24 hour clock)?

00:00 = midnight 12:00 = noon

6. Community where this activity occurred?

ENTER 2 DIGIT COMMUNITY CODE FROM SHEET

7. Exact Geographic location/address?

ENTER ADDRESS, INCLUDE AVE., ST., RD. FOR INTERSECTION, INCLUDE && IN BETWEEN STREETS. IE, MAIN ST. && JACKSON AV.

CHARACTERISTICS OF THE RIDE
8. What information source led directly to this activity 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 activity 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. Who conducted this activity?

1  O1 only
2  O2 only
3  both O1 & O2

11. How many police (including O1 and O2) were engaged in this activity?

ENTER NUMBER OF OFFICERS.

INCLUDE ONLY THOSE OFFICERS WHOM YOU COULD OBSERVE DIRECTLY.

12. Nature of location of activity?

SELECT LOCATION WHERE MOST TIME WAS SPENT.

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)
7  mass private property, outdoors (e.g., sports facility)
8  mass private property, indoors (e.g., shopping mall)
9  other

13. What was the level of illumination when this activity began?

1  Daylight/brightly lit room: could readily distinguish facial features and hands of persons
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

14. For what percentage of elapsed time did this activity occur within the boundaries a assigned beat or neighborhood?

ENTER A NUMBER BETWEEN 0-100.

ENTER 999 IF UNABLE TO TELL

15. Type of activity?

SEE ACTIVITY CODES

IF ACTIVITY = 100, 101, 102, 110, 115, OR 120 [GO TO Q-25]

PROBLEM SOLVING
16. Was this activity part of a long-term plan or project to deal with a problem? [LONG-TERM = LONGER THAN THIS RIDE]

1 no [GO TO Q-18]
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

17. Who created the plan or project of which this activity was a part?

SELECT HIGHEST APPLICABLE NUMBER

1 officer--or officer with others
2 other police officers only
3 supervisors or management
4 other
5 unable to determine who created the plan/project

18. At what problem was this activity directed?

USE PROBLEM CODE.

IF ACTIVITY WAS NOT DIRECTED AT A SPECIFIC PROBLEM, CODE 0.

19. During this activity, did the police try to determine the nature, extent, or causes of the problem?
20. During this activity, were the police trying to PREVENT the occurrence/recurrence of the problem?

[PREVENTION EFFORTS MUST BE FOCUSED ON PERIOD BEYOND THE END OF THE SHIFT]

1 no
2 yes

21. Did this activity involve a meeting with representatives of a citizen organization?

1 no [GO TO Q-23]
2 yes, neighborhood or other area-based group
3 yes, victim advocate group
4 yes, business group
5 yes, church or religious group
6 yes, school group
7 yes, other group: **specify in narrative**

22. How many citizens were present at this meeting?

ENTER YOUR BEST ESTIMATE

23. Did this activity involve communicating with representatives of other organizations that provide services to the public?

1 no [GO TO Q-25]
2 yes, face-to-face meeting
3 yes, telephone discussion

24. What type of organization was involved?

SEE AGENCY CODES.

25. Did the officer request input from the supervisor during this activity?

INCLUDE RADIO/MDT/TELEPHONE COMMUNICATIONS

1 no
2 yes, information, advice, or instruction
3 yes, supervisor presence
4 yes, both 2 and 3
26. At any time during the ride did the officer discuss this activity with a supervisor? [INCLUDE RADIO/MDT/TELEPHONE]

1  no [GO TO Q-28]
2  yes, before activity only
3  yes, during activity only
4  yes, after activity only
5  yes, before and during activity
6  yes, before and after activity
7  yes, during and after activity
8  yes, before, during, and after activity

27. Did the supervisor tell the officer what to do regarding THIS activity?

1  no
2  yes, offered advice/suggestion only
3  yes, ordered/instructed officer
4  yes, could not determine whether 2 or 3

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

1  no
2  yes

29. Was there another officer present to observe the officer?

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

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

ENTER A NUMBER BETWEEN 0-100. "PRESENT" MEANS OBSERVABLE BY THE OFFICER. RADIO/MDT/TELEPHONE CONTACT DOES NOT COUNT AS BEING PRESENT.

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

ENTER PERCENTAGE HERE

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

ENTER PERCENTAGE HERE
33. Did O1 receive advice, guidance, or instructions during this activity from a NONSUPERVISOR police officer?

   CODE YES ONLY IF COMMUNICATION WAS ABOUT THIS ACTIVITY.

   1   no
   2   yes

34. How many times during this activity did the officer request information using the MDT (computer)? (for law enforcement/info gathering purposes)

   ENTER NUMBER

34b At any time 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 and 3
   5   did not observe entire encounter

34c At any time 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, O1 displayed PR-24 or flashlight or other nonlethal weapon
   3   yes, O1 displayed handgun
   4   both 2 and 3
   5   did not observe entire encounter
   6   NA - no O2 present

35. What percentage of this activity did you observe directly?

   ENTER A NUMBER BETWEEN 0-100.

36. Was another project observer present during this activity?

   1   no [GO TO Q-35]
   2   yes

37. What was the identification code of the observer present?
39. Did the police change their behavior because of your or other observer presence?

1  no significant change [GO TO Q-42]
2  yes, a little change
3  yes, a substantial change

40. In what way did the police change their behavior during this activity because of your/other project observer presence?

1  police did more of this activity or did it more intensively than otherwise
2  police did less of this activity or did it less intensively than otherwise
3  police changed manner or style of conducting this activity
4  other

41. What is the basis of your judgment that police changed their behavior because of your/other project observer presence?

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

42. Did you perform any police task during this activity?

1  no
2  yes, offered police information, advice, or an opinion about this activity
3  yes, performed some physical aspect of police work
4  yes, both of the above
APPENDIX III

ENCOUNTER INSTRUMENT

1. Ride number?

2. 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

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?
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. During this encounter, did the police try to PREVENT the occurrence or recurrence of the problem?</td>
<td>1 no</td>
</tr>
<tr>
<td></td>
<td>2 yes</td>
</tr>
<tr>
<td>25. Was this encounter part of a long-term plan or project to deal with this problem?</td>
<td>1 no [GO TO Q-27]</td>
</tr>
<tr>
<td></td>
<td>2 yes, plan focused on specific people or location</td>
</tr>
<tr>
<td></td>
<td>3 yes, plan focused on this kind of problem in general</td>
</tr>
<tr>
<td></td>
<td>4 yes, unable to determine nature of plan</td>
</tr>
<tr>
<td>26. Who created the plan or project of which this encounter was a part?</td>
<td>1 officer--or officer with others</td>
</tr>
<tr>
<td></td>
<td>2 other police officers only</td>
</tr>
<tr>
<td></td>
<td>3 supervisors or management</td>
</tr>
<tr>
<td></td>
<td>4 other</td>
</tr>
<tr>
<td></td>
<td>5 unable to determine</td>
</tr>
<tr>
<td>27. Who took the decision-making lead in this encounter?</td>
<td>1 O1 only</td>
</tr>
<tr>
<td></td>
<td>2 O1 and other police shared equally</td>
</tr>
<tr>
<td></td>
<td>3 other police, but not O1</td>
</tr>
<tr>
<td></td>
<td>4 O1 and O2 (2-officer unit only)</td>
</tr>
<tr>
<td></td>
<td>5 O2 only (2-officer unit only)</td>
</tr>
<tr>
<td></td>
<td>6 O2 and other police shared equally (2-officer unit only)</td>
</tr>
<tr>
<td></td>
<td>7 unable to determine</td>
</tr>
<tr>
<td>28. Did O1 receive advice, guidance, or instructions during this encounter about what to do from a NONSUPERVISOR police officer?</td>
<td>1 no [GO TO Q-31]</td>
</tr>
<tr>
<td></td>
<td>2 yes, take an action</td>
</tr>
<tr>
<td></td>
<td>3 yes, do NOT take an action</td>
</tr>
<tr>
<td></td>
<td>4 yes, other</td>
</tr>
</tbody>
</table>
29. Which 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 this 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?

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No bystanders</td>
</tr>
<tr>
<td>1</td>
<td>Entirely white</td>
</tr>
<tr>
<td>2</td>
<td>Mostly white</td>
</tr>
<tr>
<td>3</td>
<td>Half white, half nonwhite</td>
</tr>
<tr>
<td>4</td>
<td>Mostly nonwhite</td>
</tr>
<tr>
<td>5</td>
<td>Entirely nonwhite</td>
</tr>
</tbody>
</table>

49. Did the police seek information from any source other than citizen participants during this encounter?

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>no [GO TO Q-51]</td>
</tr>
<tr>
<td>2</td>
<td>yes</td>
</tr>
</tbody>
</table>

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?

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>no [GO TO Q-53]</td>
</tr>
<tr>
<td>2</td>
<td>yes, while enroute to the scene [GO TO Q-53]</td>
</tr>
<tr>
<td>3</td>
<td>yes, while at the scene [GO TO Q-53]</td>
</tr>
</tbody>
</table>

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?

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>no, neither filed nor intended to file</td>
</tr>
<tr>
<td>2</td>
<td>yes, filed an official report</td>
</tr>
<tr>
<td>3</td>
<td>yes, intended to file an official report</td>
</tr>
</tbody>
</table>

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

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?
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
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
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 (GO TO Q-59)
2 yes

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)
   7. yes, O2 and other police (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)
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?

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)

81. Did the police handcuff this person?

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)

83. Did the police use pain compliance on this person (hammerlock, wristlock, finger grip, carotid control, bar arm control)?
84. Did the police use impact or incapacitation methods on this person (striking with body or weapon, mace, taser)?

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)

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

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)

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

FIRST APPROACH

1. no [GO TO Q-89]
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

87. What was the last approach police used to get the citizen to sign a formal complaint?

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

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

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

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

1 no [GO TO Q-92]
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

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

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

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

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

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

1 no [GO TO Q-95]
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

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?

2. suggested only
3. requested only
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
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
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
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
4. did it in police presence

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
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<td>yes, tried negotiation</td>
<td>6</td>
<td>yes, commanded citizen</td>
<td>7</td>
<td>yes, threatened citizen explicitly</td>
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118. What was the last approach police used to try to get the citizen to control the person or animal responsible for this problem?

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<td>4</td>
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<td>threatened citizen explicitly</td>
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119. What was the citizen's final response to this request? (Control the person/animal responsible for this problem)

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<td>no indication one way or the other</td>
<td>2</td>
<td>refused</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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120. Did the police tell/ask the citizen to call the police if the problem occurs again?

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

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122. Did the police comfort or reassure the citizen?

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<td>yes, O1 and other police</td>
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<td>5</td>
<td>yes, both O1 and O2 (2-officer unit only)</td>
<td>6</td>
<td>yes, O2 only (2-officer unit only)</td>
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<td>yes, O2 and other police (2-officer unit only)</td>
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123. Was there a dispute between at least 2 citizens on opposite sides of an issue?

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182
2  yes
3  yes, domestic dispute

124. 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]

125. 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

126. 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

127. 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.

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
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]
2  yes [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)
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
# APPENDIX V

## Logistic Regression of Citizen Disrespect During Encounters (Block-Entry Analysis)

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<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
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*Significant at the level of .05 or less; **significant at the level of .01 or less; standard errors are reported in parentheses.
## APPENDIX VI

Logistic Regression of Citizen Noncompliance During Encounters (Block-Entry Analysis)

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