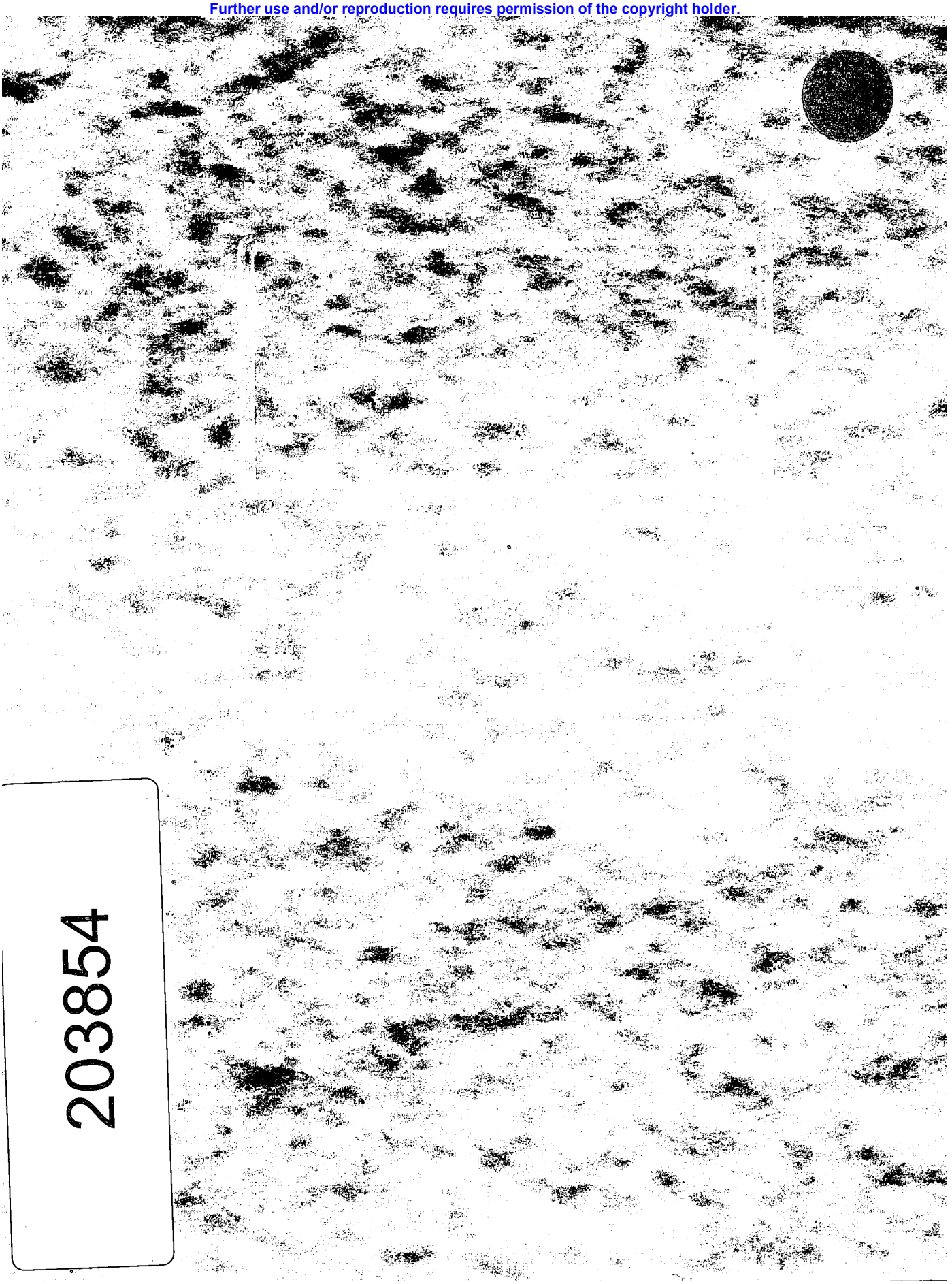

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ASSESSING POLICE-CITIZEN ENCOUNTERS: DO COMMUNITY AND BEAT OFFICERS DIFFER?

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by

Kenneth J. Novak

M.S., University of Cincinnati, 1995
B.S., Bowling Green State University, 1991

Committee Chair: Dr. James Frank

ABSTRACT

Community oriented policing has become the preferred strategy among American police organizations. Despite widespread implementation of community policing, little in known about how this paradigm shift influences the way police officers and citizens interact during encounters. This study poses the following general question: Do the influences of police officer and citizen behavior differ based on the officer's assignment. In other words, do community policing officers and traditional beat officers differ in their interactions with members of the public.

This dissertation examined the correlates of police officer and citizen discretionary decision making. The dependent variables used in this study included decisions to exercise techniques of order maintenance, whether citizens comply with these directives, and decisions to make arrests were explored. Independent variables included three broad levels of analysis: individual level correlates, situational level correlates and community level correlates. Data used in this study included systematic social observations with beat officers and community policing officers in Cincinnati, OH, census data and crime data.

These data were analyzed using two-stage weighted least squares regression. The direct and indirect effects of assignment are estimated, and the comparisons between the regression estimates of beat and COP officers performed. Results indicated that overall individual and community level correlates offered little explanatory value. However some variation was observed between officers on several situational level correlates. The majority of the observed differences in situational correlates are more a matter of degree rather than a matter of kind. The predictive influence of correlates did not differ in substance, but did differ in strength. Nevertheless the analysis indicates community policing officers do act somewhat differently than beat officers across situational level correlates.

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CHAPTER 1: INTRODUCTION

It has been suggested that community oriented policing (COP) is the preferred strategy in modern American policing, and nationally agencies report widespread implementation of COP activities (Office of Community Oriented Policing Services 1997). However, exactly how community policing has affected the day to day activities of police officers, and how officers and citizens interact remains unclear. Additionally, a common definition or understanding of exactly what COP means continues to elude police administrators, policy makers and academics. For example, Trojanowicz and Bucqueroux (1990) suggested COP is a new philosophy of American policing, and should be embraced by all organizational members. Kelling and Moore (1988) stated that COP offers a new source of legitimacy for the police, a renewed emphasis on community input and an emphasis on order maintenance functions. If COP has indeed been successfully implemented, it is reasonable to infer that there has been an increase in the quantity and quality of police-citizen interactions and change what the police do (Cordner 1995; Goldstein 1987; Kelling 1987; Mastrofski 1992; Skolnick and Bayley 1987). In short, how COP has affected policing at the street-level and whether it has changed the way police officers and members of the public interact remains largely unknown.

The present project proposes to examine whether the influences on officer and citizen behavior differ based on the officer's assignment. Using contemporary data collected through systematic social observations of police officers, this study will examine individual, situational and community level correlates of police officer use of coercive authority and officer use of order maintenance techniques. Additionally, this research will examine citizen

responses to the exercise of police authority.

DISCRETION IN POLICE OFFICER-CITIZEN ENCOUNTERS

When police officers and citizens interact there is a considerable amount of discretion exercised by both parties as to the disposition of the interaction. However, for the purposes of the present research, before one can discuss and analyze interactions between the police and the public it is necessary to define what is meant by "encounter" and "discretion". This must be done before one can address either the outcomes of these dyadic interactions, decision making of the actors, or the hypothesized factors which influence the actions of persons involved.

Like others (Mastrofski, Parks, Reiss, Worden, DeJong, Snipes, and Terrill 1998), the definition of an encounter draws heavily from the writings of Goffman (1961). Encounters under examination in the current research are what he called focused interactions, in that they occur "when people effectively agree to sustain for a time a single focus of cognitive and visual attention, as in a conversation...sustained by a close face-to-face circle of contributors" (Goffman 1961:7). In this regard, encounters are those face-to-face interactions between police officers and members of the public which may occur in the course of a given observation period. What occurs during this encounter is largely up to the actors involved, the roles they each enact and the expectations they place upon each other. Further, Goffman remarked:

> "The norms relating to the individual performers of one of the roles in his role-set will have a special and nonconflictal relation to one another - more so than the norms relating the individual to different kinds of role others." Further, "...in performing a role the individual must see to it that the impressions of him that are conveyed in the situation are compatible with role-appropriate personal qualities effectively imputed to him: a judge is supposed to be deliberate and sober." (Goffman 1961: 86-87)

Thus, the role a person has in an encounter influences their actions and expectations. Where police officers may view their role as an authority figure, citizens may see their role as clients of street-level bureaucrats (Lipsky 1980). When actions or expectations in an interaction are not met, this may lead to differential dispositions by both parties involved in the encounter. Stated differently, when officers and citizens interact in encounters both have certain expectations as to their own and the other party's actions. These actions shape the encounter and the disposition of the interaction, and the actors involved have discretion as to how to act in the company of others (Manning and Van Maanen 1978).

Some time ago academics and police administrators recognized that officers exercise a considerable amount of discretion in the activities they perform, the manner in which they interact with citizens, and the process of invoking the law (Bittner 1967; Davis 1969, 1975; Goldstein 1960; Klockars 1985; Rumbault and Bittner 1979). Police officers have discretion when they are free to choose among different courses of action or inaction (Davis 1969) and have autonomy in their decision making capacity (Black 1980). This can be demonstrated by the relatively infrequent use of arrest powers during encounters. For example, in an early field observation of police officers, Reiss (1971a) reported that officers only rarely made arrests of citizens, even when there were legal grounds to do so. By choosing not to arrest a citizen in encounters, the officers were exercising their discretion to not invoke the law.

Furthermore, the amount of discretion an officer can exercise may vary from place to place and situation to situation. During the 1960s through the 1980s, police administrators and policy makers sought to limit the amount of discretion officers can use during encounters with the public in hopes of 'professionalizing' the police (Goldstein 1977; Kelling

and Moore 1988).

Citizens also exercise discretion in their decision making during encounters. Citizens have alternatives at their disposal when interacting with officers, and their actions may in turn influence officer behavior. Citizens can choose to comply with officer demands, comply in part, or refuse to comply with officer requests. Refusal to comply with officer requests may be interpreted as a threat to officer authority, and may invoke a more intrusive order or command from the police officer. Citizens can also choose the manner in which they interact with officers, from antagonistic and hostile to civil, which may affect encounter outcomes. Thus, it is important to systematically consider factors that influence whether citizens comply with officers' requests because of the corresponding effect they may have on officer behavior.

It is important to understand discretionary decision making in police officer and citizen encounters for several reasons. First, discretion is problematic when it is exercised in an improper or illegal manner, such as unequal enforcement, discriminatory enforcement or assaults on citizens. Specifically, if police decisions reflect a discriminatory bias against a particular ethnic or racial group, this would be an unfair application of discretion. Further, Goldstein (1960) suggests that the problem with police discretion is exacerbated when the decision is unreviewable. For example, where conduct of police (and other criminal justice system actors as well) can be reviewed and evaluated by administrators if they take official action, not only is police inaction unreviewable, so too are the actions by officers which do not result in official documentation of the event, such as order maintenance encounters.

Second, the American democratic form of government is guided by laws and not

men. This implies that police officers should enforce the law, and not decide for themselves whether the law should be applied on a situation by situation basis. Furthermore, state laws report that the prescribed role of the police is to enforce the law (Burton, Frank, Langworthy and Barker 1993) and there exists no general right for officers to not invoke the law simply because they choose not to. Laws are created by legislatures and enforced by the executive branch. By the police choosing not to enforce the law, this subverts the role of the legislature and in turn police officers create policy themselves (Davis 1975; Lipsky 1980).

Third, the acknowledgment of discretion by the police officers implies that the police officers are uncontrollable. The police are structured in a hierarchical fashion in order to increase control of subordinates, and accountability up the chain of command (Fogelson 1977). However, if administrators admit that officers are largely free to do what they want, this subverts this premise of control. Indeed, the professional movement in part was a response to the corrupt and uncontrollable acts of line officers (Walker 1977; Fogelson 1977). Thus, admitting that officers exercise discretion is admitting that administrators have less control over their actions than the public may desire. This can be particularly damaging when officers perform acts which could result in a loss of legitimacy for the organization and its administrators (Crank and Langworthy 1992).

Fourth, it is important to study officer and citizen discretion because the decision making capacity of these actors in encounters may increase in the era of community oriented policing. Community policing is intended to increase the exercise of discretion of line officers when interacting with the public, and may encourage these officers to invoke legal

sanctions less often than previously estimated (Bayley 1988). If this is the case it is important to systematically examine the exercise of discretion by officers engaging in community policing in order to explore possible differences in their behavior and outcomes as compared to more traditional beat officers. Furthermore community policing advocates more discretion for line officers. This raises the question: does the role or assignment of the officer influence how officers and citizens interact?

Additionally, it is important to examine citizen responses to these different types of officers in order to understand the dynamics of the encounters and factors which may influence citizen decision making when interacting with community police officers and beat officers. It is important to systematically examine whether community policing has affected officer discretion, and if so, to what extent.

In summary, officers and citizens interact on a daily basis in focused interactions called encounters, during which time both parties have the ability to shape their actions based on the situation and expectations held by each actor. Both parties have discretion in how to interact with each other in the types of dispositions they make and whether they comply with the requests of each other. Though officers and citizens can choose between a wide array of actions (or inaction) during the course of these encounters, it is important to focus our attention on certain particular classifications of behavior. The following sections will more fully discuss the types of officer and citizen behavior involved in the current analysis, and how these behaviors may be different as community policing is implemented.

COMMUNITY POLICING: ITS HYPOTHESIZED IMPACT ON ENCOUNTERS

It has been suggested that community oriented policing is the preferred strategy in

modern American policing, and nationally agencies report widespread implementation of community policing activities (Office of Community Oriented Policing Services 1997). Community policing represents a paradigm shift from professional model policing (where the primary focus for the police was crime control and administrative control of the individuals within the police organization) to a model which emphasizes a partnership between the police and the citizens, drawing focus more on fear of crime and quality of life issues, and looser control of the organization's line employees. Interestingly, though there has been considerable attention devoted to the understanding, implementing and evaluating of community policing, a consensual definition of exactly what community policing means continues to elude police administrators, policy makers and academics. For instance, Trojanowicz and Bucqueroux (1990) suggested community policing is a new philosophy of American policing, and should be embraced by all organizational members. Kelling and Moore (1988) remarked that community policing offers a new source of legitimacy for the police, a renewed emphasis on community input and an emphasis on order maintenance functions. Wycoff (1988) stated community oriented policing is a set of programs designed to increase the number and frequency of nonthreatening police and citizen interactions in order to improve the quality of life in the community.

Discussing its central philosophical themes, Cordner (1995) remarked that under community policing the general goals of policing will broaden to include more non-law enforcement tasks. Namely, there will be increased importance and renewed legitimacy placed on order maintenance, service and general assistance of citizens. Community policing relies heavily on citizen input and greater citizen access to the police and their

priorities. It will also encourage differential enforcement contingent upon community values and norms. This differential policing will primarily affect the way police address minor offenses, local ordinances and disorder. Years earlier, Wilson and Kelling (1982) stated this differential approach to the maintenance of public order as the optimal tactic to reduce crime in communities.

Among other things, community policing should entail:

- An increase in nonthreatening police interactions with citizens,
- Decreased reliance on law enforcement,
- More community involvement in setting a police agenda (co-production) and increased mutual trust between the police and the public,
- Officers should work more closely with the public to engage in problem solving,
- Increased discretion of line officers,
- Long term orientation of police officers within neighborhoods (e.g., officers are assigned to neighborhoods for extended periods of time in order to cultivate relationships with citizens),
- An increase in non-legal remedies in encounters,
- Neighborhood variation in the delivery of police services.

In addition to the above expectations of the impact of community policing, it also calls for changes in the activities of police officers. Included in these activities is an increased use of problem solving, community building and empowerment, increased use of foot patrol, walking the beat, crime analysis, security checks, non-legal remedies to problems, and interaction with citizens of the community (Mastrofski 1992; Trojanowicz and Bucqueroux 1990).

These activities have particular importance for this dissertation. As Mastrofski (1992: 23) remarked, "Although interest in community policing has grown rapidly in the last decade, we know remarkably little about what it means to the work of the street-level officer". In addition to these activities, the types of interactions and encounters in which

officers and citizens engage would also most likely change. An underlying premise of community policing is that citizens are more likely than police to recognize and understand their public safety needs (Webb and Katz 1997). Furthermore, police should utilize community residents in order to set priorities and reinforce neighborhood values. As such, if community policing has indeed been successfully implemented, it is reasonable to infer that there has been an increase in the quantity and quality of police-citizen interactions, and there should be a radical change in the relationship between the police and the public (Eck and Rosenbaum 1994; Goldstein 1987; Kelling 1987; Skolnick and Bayley 1986). Regardless, what remains largely unknown is how community policing is translated into practice, how it has affected policing at the street level and whether it has changed the way police officers and members of the public interact (Greene 1993).

Community policing does suggest that line officers are provided more opportunities to make discretionary decisions. In addition to more discretion at the officer level, there is an increased reliance on participation of, and an intimate relationship with, citizens of the community. This is in stark contrast to the professional or reform style of policing in which the relationship between officers and citizens was removed and distant. As co-producers of police policies and priorities, the police and the citizens work collectively in order to reduce crime and improve the quality of life in the community (Kelling and Moore 1988). This hypothesized relationship implies that officers will also encounter citizens in situations that are quite different than typical law enforcement interactions that occurred during the professional model. As such, the quality and quantity of police interactions may be different under community policing.

Given the overall philosophy of community policing, several general predictions regarding how officers interact with citizens can be derived. First, community policing should decrease the reliance on law enforcement and arrest dispositions. This can manifest itself in several ways. For example, officers and citizens should enjoy a closer relationship under community policing. Given this closer relationship, there may be less adversarial relationship between the police and the public. In fact, some warn that this close relationship may actually decrease the capacity for the police to enforce the law (Bayley 1988). This close partnership, which is hypothesized to increase the effectiveness and efficiency of modern policing, may weaken the ability of the police to make strong law enforcement decisions. Police may wish to not jeopardize the gains of community policing with enforcement. Community policing may weaken the capacity of the police to uphold the law forcibly (Bayley 1988).

Second, there should be an increased use of order maintenance and peacekeeping techniques in encounters with citizens. Community policing calls for attempting to analyze the root causes of crime and efforts should be directed at attacking these causes through problem solving (Eck and Spelman 1987). In community policing officers may likely increase the frequency of order maintenance and peace keeping. Again, police-citizen encounters may be different under community policing.

Third, there should be an increase in citizen cooperation and compliance with officer requests and commands. Because the police and the citizens enjoy a more intimate relationship with each other, they may have greater understanding of each others' actions and expectations. This increased familiarity, both with individual citizens and community norms

and values, can aid officers in their choice of tactics used in order to gain compliance. Additionally, because citizens are more familiar with individual community police officers they may be more predisposed to comply with their requests and commands because they understand the underlying motives of the officers, coupled with the hypothesized desire to continue ongoing cooperative partnership with the officers. As such, the factors which influence citizen compliance with officers engaged in community policing may differ from the factors which influence compliance with traditional police officers.

Finally, the factors which influence both officer and citizen behaviors during encounters should change. For instance, certain correlates have traditionally influenced officer behavior in encounters. Legal variables such as offense seriousness significantly influenced whether officers made arrests during encounters. Other extra-legal factors such as offender or victim characteristics had inconsistent influences (Brooks 1997; Sherman 1980; Riksheim and Chermak 1993).

In the age of community policing, when officers are enjoying closer relationships with citizens and a renewed emphasis on order maintenance over law enforcement, perhaps the opposite could be true: the relative influences of legal factors may be minimized, and extra-legal factors will take on added predictive power (Mastrofski et al. 1995). However, it is equally plausible the influence of extra-legal factors may have a diminished influence on officers' behavior in the era of community policing. This may be due to the fact that because the police have a closer relationship with citizens as partners in crime prevention, and at the same time have more relevant information on which to base decision making, officers may rely less on demographic characteristics to guide their resolutions.

OFFICER AND CITIZEN BEHAVIOR

Indicators of behavior between police officers and citizens have been examined at several different levels, including the individual level (e.g., officer characteristics explain how these parties interact), situational level (e.g., the context of the encounter and citizen characteristics), organizational (e.g., characteristics of the police organization and its environment) and community (e.g., structural variations in the neighborhood in which the encounter occurs). Using these dimensions, a large body of research has developed and has contributed significantly to our understanding of police officer decision making (see Brooks 1997; Riksheim and Chermak 1993; Sherman 1980). Following this existing research, this study will attempt to extend the knowledge and familiarity with both officer and citizen behavior during dyadic interactions. Particular emphasis will be placed on comparing whether officers engaged in community oriented policing and those officers engaged in more traditional, 911 or beat policing interact differently with citizens. At the same time, whether citizens interact differently during encounters with community officers than beat officers remains unknown.

In short existing literature reports that individual, situational and community characteristics play a part in determining the behavior of officers and citizens during encounters. Therefore any attempt to assess the impact of officer's role or assignment must be concerned with controlling for these dimensions. If indeed the nature of decision making varies between these two officer types, we can begin to assess the impact of community oriented policing. This will be done by assessing whether the correlates of officer use of control (namely decisions to arrest and perform order maintenance or peacekeeping) vary

by officer.

In order to discover whether community policing has been implemented as a new organizational paradigm of policing, it is important to examine the behavior of line officers. This is due to the fact that the collective actions of the line officer in turn create policy for the larger organization (Lipsky 1980). If community policing has indeed been realized in the ways proposed by academics (Goldstein 1987; Kelling 1987; Kelling and Moore 1988; Skolnick and Bayley 1987; Trojanowicz and Bucqueroux 1990), it is reasonable to assume it could be discovered by investigating interactions between police officers and citizens, especially officers' use of coercive authority and citizens' reactions to coercive authority during these encounters. Furthermore, by examining the operations of officers engaged in COP, this study will contribute to an operational definition of COP which currently eludes both theorists and practitioners (Bayley 1998).

This dissertation proposes to examine the correlates of police officer decision making surrounding decisions to exercise control over citizens, namely arrest decisions and order maintenance decisions. It will also analyze the correlates of citizen behavior when they encounter police officers during order maintenance interactions. The correlates of these encounter dispositions will be compared and contrasted between officers engaged in COP and officers performing more traditional police services.

Limitations of Existing Research

Though prior research on officers' and citizens' behavior has contributed significantly to our understanding of these actors during encounters, several limitations exist. The first limitation of existing research is that most of the conclusions which have been

drawn concerning the correlates of behavior were based on data collected before the shift to COP. Though COP has allegedly been implemented since the 1980s, the extent to which COP permeates American policing and how it affects participants in encounters between officers and citizens remains largely unknown. It is reasonable to assume that the quality of these encounters may have changed since collection of the Reiss data (Black 1971, 1980; Black and Reiss 1970; Friedrich 1977; Reiss 1971a), the Midwest city data (Lundman 1974, 1979, 1994, 1996a, 1996b, 1998; Lundman, et al. 1978; Sykes and Brent 1980; Sykes et al. 1985), PSS data (Smith 1984, 1987; Smith and Klein 1983, 1984; Smith and Visher 1981; Smith et al. 1984; Visher 1983; Worden 1989; Worden and Shepard 1996; Worden and Pollitz 1984). As Fyfe (1996: 339) contended, given "all that has happened to policing since collection of the data that now form the conventional wisdom makes it unwise to generalize from them to either 1985 or the present." Indeed, contemporary empirical research supports contentions that officers who are classified as believing in the underlying concepts of community policing use different decision making structures than their counterparts when deciding whether to arrest citizens (Mastrofski, Worden and Snipes 1995). Additionally, perhaps due to the fact that COP involves coproduction between the police and citizens and also non-confrontational encounters, the use of coercive authority may be less common. It is reasonable to propose that COP influences officer and citizen behavior at the street level and therefore correlates which predict behavior may differ in the era of community oriented policing.

Second, prior research has been unable to compare the correlates of officer and citizen behavior involving community policing officers and traditional beat officers. Though

Mastrofski et al. (1995, 1996) explored similar issues as those raised in this study, they were only able to differentiate between officers whose attitudes were favorable or unfavorable to community oriented policing. The current study will compare officers who are assigned as community policing specialists to those assigned to traditional policing assignments. These two different officer types have different roles within the police organization, and these roles should manifest themselves in their decision making and how they interact with citizens.

Third, individual characteristics of officers have experienced some change over the past several decades. Specifically, there has been an increase in the number of females (Martin 1997; Sulton and Townsey 1981), minorities (Reaves 1996; Walker 1989) and levels of officer education (Carter, Sapp and Stephens 1989). Lundman (1996: 352) stated:

> "It used to make sense to largely ignore the social and demographic characteristics of the officer(s) exercising dispositional discretion because, almost without exception, they were young, White and male. Because this no longer is the case, it seems prudent to determine whether officer characteristics, not just offender characteristics, are important."

He further reported it broadens the range of police types and thus broadens police behavior (Lundman 1980). Though it has been suggested police socialization tends to minimize individual officer differences regarding behavior (Van Maanen 1973), these individual factors deserve a closer look as correlates of officer behavior.

Fourth, the situational characteristics of encounters may be different than in prior studies. For example, victim preference has been positively related to officer behavior (such as arrest or non arrest). However, legislation and society over the past decade have begun to define certain offenses as more serious, and mandated arrests in situations such as domestic violence (Sherman 1992). Therefore, legislation may mitigate the effects of victim

preference in many encounters.

Fifth, since COP suggests a closer relationship between the police and citizens, this may allow the police to interact with their constituents on a more intimate level than before. This coupled with the long term orientation of patrols in neighborhoods may minimize the importance of citizen characteristics in encounters. Perhaps the impact of citizen characteristics such as suspect race and social status on officer behavior may be less than prior research has displayed.

Sixth, prior operationalizations of neighborhood may have been imperfect. Research on communities and neighborhoods reports that the neighborhood should serve a locally relevant function and the members should share common interests and beliefs (Duffee 1990; Hillary 1955; Flynn 1998). Extant research has operationalized neighborhood as larger macro geographic units such as police beats, census block groups or enumeration districts (see Smith 1986). However, there is little reason to believe that arbitrary beats, blocks and enumeration districts share community level values. The use of neighborhoods which exert their own political influence on local government may yield differing results when examining the influence of community level variables on police officer behavior.

Policy Implications

Training. Understanding how officers interact with citizens (and the nature of their exercise of discretionary authority) can assist police agencies in evaluating and modifying their training techniques. The primary function of academy training is to assist officers in the performance of their job (Ness 1991). Though police academies continue to stress law enforcement techniques (Marion 1998), Reiss (1971a) found a large portion of police-citizen

interactions do not involve law enforcement. If the nature of the police-citizen interaction is changing under the rubric of COP, understanding the correlates of these non-law enforcement interactions (i.e., order maintenance) would be beneficial to police organizations. Additionally, knowledge of citizen behavior can benefit police trainers in understanding citizen responses across different communities and particular situations.

Liability. Liability attached to police officers' behavior is enormous, and the potential liability involving improper police activities is estimated to be over $780 billion (Kappeler 1993). COP is designed to increase the level of discretion of the line officer, the frequency of officer-citizen encounters, and thus may increase the exposure to civil liability of an organization (Worrall and Marenin 1998). Police organizations should understand police officer behavior to ensure officers are not systematically engaging in unfair, immoral or illegal types of behavior. Understanding officer-citizen interactions can assist administrators in monitoring and reducing organizational liability.

Development of Police Theory. Police theory consists of understanding the role of the police in a free society based on their activities and interactions with the public. Traditionally, the police have been viewed primarily as law enforcers (Crank and Langworthy 1992) though the majority of encounters do not involve law enforcement (Reiss 1971a). Understanding the contexts of the interactions between officers and citizens will contribute to the development of theories which explain police behavior.

Examining officer-citizen interactions will also assist police administrators, policy makers and academics in creating an operational definition of COP. Bayley (1998) reported one way to remedy this problem is to observe police organizations which practice COP and

use their common elements in order to create a definition of COP. This will invariably involve not only observing officer activities, but how officers interact with the public. Development of an operational definition is thus "based on experience rather than on theory" (Bayley 1998: 138).

OUTLINE OF STUDY

Chapter 1 provided background on the topics of police officer and citizen behavior and an introduction to the study. It outlined limitations of extant empirical research and policy implications which can be drawn from this project. Chapter 2 reviews existing literature surrounding correlates of officer and citizen behavior and community policing. Chapter 3 provides a description of the methods used in this dissertation, reviews the research questions guiding this study, presents a description of the police department and the data sources used in the analysis, and measurements of the dependent and independent variables.

Chapter 4 presents an analysis and discussion of the correlates of police officer decisions to arrest during encounters with citizens. Chapter 5 presents an analysis and discussion of the correlates of police officer decisions to exercise order maintenance during encounters with citizens. Chapter 6 presents an analysis and discussion of the correlates of citizen behavior and compliance to officer requests. Finally, Chapter 7 provides a discussion of the findings and implications for future research.

CHAPTER 2: LITERATURE REVIEW

INTRODUCTION

This chapter presents an overview of the theoretical and empirical literature surrounding police officer and citizen behavior in encounters. Research which utilized systematic social observations of police officers as the method employed to examine the correlates and factors which influence officer and citizen behavior will be highlighted. As outlined in Chapter 1, this study will explore dispositions and behaviors of police officers and citizens when they encounter one another giving special attention to factors which may influence the behavior of traditional beat officers and community police officers.

This chapter first presents a discussion of the types of police officer and citizen behavior to be analyzed throughout this dissertation: officer decisions to arrest a citizen, officer decisions to enact order maintenance strategies, and citizen decisions to comply with specific officer requests. Then an in depth discussion on the correlates which influence decisions in police/citizen encounters. This is done in three sections: the first section reviews the correlates of individual factors which influence officer and citizen behavior in encounters. The second outlines the situational factors which influence behavior. The third discusses community level factors which may affect officer and citizen behavior during encounters. The object of these discussions is to present an overview of the extant research on police/citizen encounters. While there is research on these correlates and decision making in interactions, these factors may exert different influences under the rubric of community policing.

TYPES OF POLICE BEHAVIOR

There are numerous different types of police behavior which have been empirically studied in the past, and provide useful information that guides the present inquiry. These include service (such as helping motorists, mediation, home or business security checks), detection (decisions to stop and question, decisions whether to investigate a situation), use of force and the exercise of coercive authority (decisions to arrest, decisions to file a report, commanding a citizen to leave a scene) (see Sherman 1980; Riksheim and Chermak 1993). This research will focus on the discretionary use of police coercive authority, including arrest and order maintenance/peace keeping techniques.

One of the basic tasks of police officers is to control citizen behavior, and this control can be obtained in several different ways. This dissertation will focus on two specific manners by which officers control citizen behavior, including legal control (through arrest) and directing behavior through imperative regulation or order maintenance. However, before this research can proceed, it is important to first set the parameters and definitions of what is meant by the terms "arrest" and "order maintenance".

One obvious example of officer exercise of coercive authority is the arrest of a member of the public, where arrest is defined as the decision to take people into custody and thus deprive them (at least temporarily) of their liberty and freedom (Lafave 1965). There has been considerable prior research conducted which attempts to predict officer arrest patterns and decision making involved in arrests of members of the public.

Control can also include levels of authority less than arrest. Though these order maintenance activities do not represent formal law enforcement actions, they do comprise critically important outcomes in police-citizen encounters. In 1976, Black discussed the

style and application of law, which he defined as governmental social control. He further posited that "law is a quantitative variable" (Black 1976: 3), and not simply present or not present in encounters between governmental representatives and the public. In other words, the amount of law in encounters will vary. He also reported law has four styles: penal, compensatory, therapeutic and conciliatory. Penal styles of control represent the prohibition of some conduct which is enforced by punishment. Compensatory control is law which is victim initiated in order to receive reparation for a wrong. Therapeutic control seeks social repair and maintenance, to ameliorate a bad situation or return the situation to a point of normality or homeostasis. Finally, conciliatory control involves the return to social harmony by the parties involved in a dispute.

A discussion of Black's behavior of law bears direct relevance on police officer actions and the discussion at hand. Of the four styles of control, police officers routinely practice penal and therapeutic styles of control.[1] An example of penal application of the law is an officer taking a person into custody through arrest. Therapeutic control which is perhaps more often exercised by officers, has received relatively little empirical attention by researchers. By returning a situation to a place of normality without effectuating a punishment (e.g., arrest), officers attempt to keep the peace or maintain order. As such order maintenance represents a lower quantity of law (and by its implication authority), but nevertheless does represent governmental social control.

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Though police officers may engage in compensatory and conciliatory styles of social control, an empirical analysis of such activities is beyond the scope of the current endeavor.

Order maintenance activities such as telling citizens to leave the scene, cease disorderly or illegal behavior, providing information regarding a suspected wrongdoer, and controlling another citizen responsible for some problem are common activities performed by officers. In fact Wilson (1968) found that the maintenance of public order is the primary function of the police. This is because there is more opportunity to exercise order maintenance in encounters with citizens (Goldstein 1990; Reiss 1971a; Wilson 1968; Wilson and Kelling 1982)[2].

In order maintenance encounters officers can exercise a considerable amount of discretion, particularly discretion which is not likely be subject to review. Brooks (1997: 153) stated officer discretion plays a greater role "...in order maintenance situations (where less serious or no lawbreaking occurs)." This is primarily because guilt may not be assigned to a citizen (as in arrest decisions), thus officer actions might be guided by other sets of factors. In this way officers must make decisions in highly ambiguous situations (Langworthy and Travis 1999), where they are often not guided by law and legal factors and use other indicators to guide their actions. Additionally, in most encounters involving order maintenance, there is no documentation of the encounter, who was involved, what the problem was, and the characteristics of the final outcome. Goldstein (1960) warned this low-visibility non-invocation of the law is especially problematic because officer's actions

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Wilson (1968: 18) reported that 30.1 percent of citizen complaints involved the request for order maintenance, versus only 10.3 percent for law enforcement. Reiss (1971a) reported that only about 7 percent of all encounters involve arrests.

are not reviewed by administrators or members of the public and there is greater opportunity for possible abuse of authority by the officer.

Finally, only rarely has order maintenance decision making been studied empirically. Still these situations should be included in analyses of police-citizen encounters (Klinger 1996c; Worden 1989). This style of social control may be the most appropriate given situational exigencies, and may be more in sync with the overall goals and objectives of an organization and police values. In short, order maintenance may be the most effective way to handle a given situation and community policing may increase the frequency of order maintenance activities (Cordner 1995). For example, in a task analysis of both community policing officers and their traditional patrol officer counterparts, Travis and Sanders (1998) found community officers engage in law enforcement activities less frequently than beat officers, while at the same time engaging more frequently in service activities. In another study, Frank, Brandl and Watkins (1997) found that community police officers engaged in significantly more non-traditional policing tasks than traditional officers, including more time coordinating community meetings and community based service activities. At the same time they spent significantly less time responding to crime related activities. Regardless of how one defines community policing, one fact remains certain: the importance of law enforcement as the key role of the police is de-emphasized and there is an increased reliance on order maintenance and resolving situations without arrest (Mastrofski et al. 1995). These factors taken in totality (great opportunity for the exercise of order maintenance, tremendous unreviewable, low-visibility discretion and application of governmental social control) indicate this type of police practice is deserving of further

review. Officers have at their disposal a range of alternatives beyond deciding whether to arrest or not arrest (Worden and Pollitz 1984).

There are several justifications for focusing on these particular types of police behavior, such as arrest and order maintenance decision making. First, the police occupy a unique role in society where they are among the few governmentally sanctioned to exercise control over the public. It has been suggested that this use of coercion and control is the core role of the police (Bittner 1970). Second, the importance of individual liberty and freedom are culturally stressed values in America (Riksheim and Chermak 1993) and control by the police can deprive individuals of this valued status. Police can use their authority to influence a citizen without making an arrest, and thus represents a mean of decreasing citizen liberty. Third, the exercise of control often shapes public concepts of the police and, in some situations, may even result in civil unrest (Blumberg 1981). Finally, the exercise of coercive authority (or the lack thereof) exposes the police to public scrutiny and both criminal and civil liability.

TYPES OF CITIZEN BEHAVIOR

In contrast to the voluminous research on officer behavior during encounters, less attention has been paid to citizen behavior during encounters. Citizens also have alternatives at their disposal when interacting with officers, and their actions may in turn influence officer behavior. Sykes and Brent (1980) reported that when officers make requests of citizens, what happens next is largely up to the citizens. Citizens can choose to comply, comply in part, or refuse to comply with officer requests. A refusal to comply with an officer's request may be interpreted as a threat to police authority, and may invoke a more

intrusive order or command from the officers.

There are several reasons for including an analysis of citizen behavior when analyzing officer-citizen encounters. First, as just noted, police officers represent only half of the equation, and citizen behavior in an interaction can influence officer actions and the eventual disposition of encounters (Sykes and Brent 1980). Second, understanding variation in citizen behavior, citizen requests and ultimately officer reaction to these requests can assist police policy makers in understanding the differing needs and desired services of citizens and communities, thus placing administrators in a position to modify police services, if necessary. This can assist police administrators and policy makers in formulating or modifying academy training curriculums.

In order to gather the most complete information surrounding police-citizen encounters so that it increases both academic and policy makers' knowledge concerning these interactions, it is important to understand that a variety of factors may influence how police and citizens act. For instance, often the citizens who are involved in encounters with the police do not enter the interactions as voluntary participants, in that they have not initiated or requested the interaction. These citizens are unwilling clients of the state bureaucracy and control, though in most cases they do indeed comply with officer requests (Lipsky 1980). Yet there are certain characteristics which may predispose citizens to be non-compliant with the police. Research findings, as will be discussed, reveal that citizens who are from a lower socioeconomic class, racial minorities and males are more likely to not follow officer directives (Mastrofski, Snipes and Supina 1996). Similar demographic characteristics have been reported as predispositions or factors which impact citizen

dissatisfaction with police officers (Bordua and Tifft 1971; Brandl, Frank, Worden and Bynum 1994; Cao, Frank and Cullen 1996; Charles 1980; Dean 1980; Decker 1981; Frank, Brandl, Cullen and Stichman 1996; Thomas and Hyman 1977). Thus, it is important to systematically consider the range of factors that may influence whether citizens comply with officers requests.

CORRELATES OF OFFICER AND CITIZEN BEHAVIOR

There have been numerous research studies which have examined police-citizen encounters. Methods used to collect the requisite data to understand these interactions include ethnographic studies (Rubinstein 1973; Skolnick 1966, Westley 1970), surveys or vignettes (Moyer 1981) and systematic social observations. There have been three major observation studies of police behavior, including Reiss in 1966, "Midwest City" in 1970 and the Police Services Study in 1977. These systematic social observation studies have produced an enormous body of data, and a large quantity of empirical research.

There have been three substantial literature reviews that explored the findings of research into officer behavior (Brooks 1997; Riksheim and Chermak 1993; Sherman 1980). Typically this body of research has examined several different levels of variables in order to understand which may influence officer actions in encounters. These include individual level differences between officers, situational differences, and community differences.[3] This section reviews the correlates of officer and citizen behavior in encounters by level of analysis. The intention is to develop a body of explanatory variables that help explain

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Research has also considered organizational level factors as correlates of officer behavior, however these variables are not relevant to this study because data used in the present research were collected at a single

officer's and citizen's behavior during encounters.

Individual Officer Level Correlates

Individual level correlates focus on the relationships between variations in officer characteristics and behavior (Riksheim and Chermak 1993). It has been shown that individual variation between officers offers little insight in predicting police officer use of coercive authority (Brooks 1997; Sherman 1980; Riksheim and Chermak 1993). At the same time, findings have supported the contention that certain officers are better at defusing situations before violence occurs (Bayley and Garofalo 1989). Additionally, Muir (1977) and Brown (1981) reported that the personalities of individual officers influence their operational styles, the activities they perform, their interpretation of situations, and how they interact with members of the public.

The four individual level variables that have received the most attention in extant studies are officer race, gender, education, and length of service. These variables have been hypothesized in the past to influence the behaviors of police officers, especially in the way officers make decisions to arrest or their practice of order maintenance. Additionally, these individual differences may also influence how citizens interact with officers. Each of these variables are more fully examined below.

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police department.

Officer Race. It is often hypothesized that black officers differ from white officers in their activities and behavior simply due to their race. However, the influence of officer race on decision making may be spurious or mixed (Riksheim and Chermak 1993). For example, some found that black officers were more likely to engage in law enforcement behavior, such as making more arrests (Friedrich 1977).[4] Other empirical research on the influences of officer race on arrest decisions present mixed or null results. Smith and Klein (1983) did not find officer race to be a significant predictor of arrest when controlling for other individual, situational and organizational covariates. Similar results were reported by Worden (1989), who also examined the impact of officer race on arrest, controlling for officer attitudes and situational characteristics. In short, though it may be intuitively pleasing to surmise that officer race influences officer decision making during encounters with members of the public, research findings do not consistently support this belief.

Perhaps, however, it may be time to re-examine this relationship. Most prior studies have used outdated data in order to draw their null conclusions. Much has changed in policing over the past several decades, including an increase in the number and proportion of African-American officers. Though African-Americans are still under-represented in American policing, the number of African-American officers has increased, especially in larger metropolitan areas (Frank et al. 1996). Formerly minority officers may have felt

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However, this finding may have resulted because black officers were primarily assigned to black communities with higher rates of crime (Alex 1976; Geller and Karales 1981; Leinen 1984). Similarly, it was hypothesized that because black officers were more similar to the population they policed, they would develop a greater level of empathy for their constituents. Alex (1976) also reported that black officers would engage in less racist behavior, harassment and brutality toward blacks. At the same time it has been shown by others that the opposite could also be true, where black officers may be stricter in black communities than their white counterparts (Banton 1964; Leinen 1984). In other words, black officers may

pressure to conform with majority actions and behavior through the process of police socialization (Van Maanen 1973). As the number of minority officers increases, so too may the ability to develop a unique operational style of activities and behavior. In short, there may be more observed differences in the dispositions of encounters between white and black officers than previously discovered.

Officer Gender. Females continue to be under-represented in policing (Balkin 1988). Similar to officer race, as the number of female officers increase, perhaps there is an increased ability for female officers to develop unique operational styles of policing. Indeed, the numbers of females and the number of police organizations which have women assigned to general patrol duties (98%) has increased greatly in the past 30 years (Martin 1989).

Research which compared female to male officers found very little difference in their activities, behaviors and indicators of job performance (Balkin 1988; Riksheim and Chermak 1993). Specifically, Bartlett and Rosenblum (1977) and Sichel, Freedman, Quint, and Smith (1978) found that male and female officers performed at parity across most indicators, even when encountering antagonistic citizens. In short, the majority of extant research reports female officers performed during encounters in the same manner as males, and were evaluated by supervisors in a similar way to their male counterparts (Balkin 1988).

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be more likely to use law enforcement than order maintenance during encounters in black neighborhoods.

However, other research findings contradicted the above, reporting female officers make fewer arrests and overall are less aggressive than male officers (Martin 1989). For example, Sherman (1975) found female officers initiated fewer encounters with citizens and made fewer arrests than male officers. Sichel et al. (1978) also found female officers make fewer total arrests. However, these observed differences in the relationship between officer gender may be spurious. For instance, Balkin (1988) reported that female officers may make fewer arrests because they are better at diffusing potentially hostile encounters that do not end in arrest. Similarly, Langworthy and Travis (1999) argued that female officers are more capable or willing to negotiate disputes, thus there is a decreased likelihood of both arrest and use of force.[5]

In short, there is no definitive answer to whether female officers behave differently than males, and therefore this correlate should be more full explored. Findings which merely count arrests may not provide complete information concerning the differences that exist between male and female officers in how they behave during encounters with citizens, particularly order maintenance situations.

Citizens may also behave differently when encountering male and female officers. As Martin (1997) noted, citizens typically defer to police officers who are of higher status than themselves (see also Sykes and Clark 1975). Problems or conflict may occur when the citizen bases social status on irrelevant characteristics (such as gender) and not the position

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Additionally, Balkin found that when male and female officers work in pairs, male officers often sign arrest charges more so than females, which gives the perception that females are making fewer arrests.

or role of police officer. For example, dyadic encounters between male citizens and female officers involve discrepancies in status roles: male citizens who would typically defer to police officers may also resist being controlled by females. Ironically, the female officer may also experience more conflict when encountering female citizens because female citizens may feel more comfortable not offering compliance to female officers. On the other hand, citizens may act in a more chivalrous manner toward female officers, granting them compliance more often because fighting with a woman may cause citizens to lose their status among their peers (Martin 1989). Thus, officer gender may affect citizen behavior in one of two opposite ways: they may be less likely to gain compliance by citizens than male officers because of the decreased social status they have due to their gender, or citizens may act in a chivalrous manner, granting them compliance because of their gender and the citizen's desire to save face. Admittedly, citizens may offer compliance to female and male officers in a similar manner simply because of their authoritative role.

Officer Education. Desires for increased education of the police can be traced back to 1917 and August Vollmer's efforts to recruit college-educated officers (Goldstein 1977). Proponents of better educated officers argue that education is a key component of police professionalism (Fogelson 1977) and that education can positively affect individual officer performance by increased tolerance of people different from themselves, the ability to more effectively analyze complex problems, and may apply more effective verbal skills in attaining solutions (Goldstein 1977; Worden 1994). Muir (1977) found these skills have a direct impact on the performance of officers, and presumably, how they interact with citizens. Officers with higher levels of education may be more likely to use

alternatives beyond law enforcement in encounters with citizens, such as order maintenance techniques and service which helps citizens. As Worden (1990:576) stated, "Because college education is supposed to provide insights into human behavior and to foster a spirit of experimentation, college-educated officers are (hypothetically) less inclined to invoke the law to resolve problems, and correspondingly are inclined more strongly to develop extralegal solutions". Thus, it would appear that as level of officer education increases, officers may be more likely to use order maintenance techniques than arrest in police-citizen encounters.

Unfortunately for proponents of higher educated police officers, empirical research has failed to categorically confirm these hypotheses. Some researchers have found that education is related to officer behavior or attitudes. Finckenauer (1975), using vignettes, found college-educated officers are less likely to use formal dispositions to resolve encounters with citizens. Sykes and Brent (1983) remarked that median officer education affected the severity of police officer responses in encounters. Furthermore, Worden (1994) found that officers with bachelor degrees were more likely than officers with lower levels of education to use reasonable force.

Most extant research, however, found officer education has little or no effect on officer behavior. Crank (1993) found officer education to be unrelated to officer exercise of legalism (such as arrest) or order maintenance. Two studies analyzed Police Services Study data and the relationship between officer level of education and behavior. Research by Smith and Klein (1983) found that officer decisions to arrest are not related to officer education, however police organizations with higher mean levels of educated officers had

lower arrest rates. Worden (1989) found similar null results.

Though it appears that education is unrelated to officer behavior and decision making in law enforcement and order maintenance situations, it may be possible that citizens could be more likely to act differently with officers who have higher levels of educational attainment. Officers with higher levels of education can apply more verbal skills in order to gain compliance in order maintenance situations. However, Worden (1990) stated that education is unrelated to officer performance in encounters when performance was reanalyzed based on citizen evaluations. Additionally, citizens are not more satisfied with college educated officers than non-college educated officers.

Though the findings concerning a relationship between level of education and officer decision making are mixed at best, there are intuitive reasons to expect that this relationship may change as community policing is implemented. Whether these pronouncements are correct, and a relationship between education and community policing behavior exists, remain empirical questions.

Officer Length of Service. The amount of time individuals have been an officer may impact their decision making in several ways. For example, officer's length of service may decrease the amount of aggressive and legalistic behavior (such as making arrests) exhibited by officers due to the fact that he/she may have increased understanding for the persons in their community or beat. Older officers may be more sympathetic and tolerant of the public (Langworthy and Travis 1999). Indeed, Forst, Lucianovic and Cox (1977) found that less experienced officers make more arrests than their more experienced counterparts. Additionally, experience certainly increases the number of cumulative encounters officers

have, thus officers have an opportunity to become familiarized with the persons they police.

However, there may be other explanations for why aggressive behavior may decrease over the tenure of an officer's career. Niederhoffer (1967) found that officers become more cynical over time, which results in decreased levels of activity, including arrests and order maintenance. His data revealed cynicism is lowest at the beginning of the officer's career, increases within the first few months on the job and continues to increase during the next seven to ten years. At this point, levels of cynicism equalize and actually decline slightly at the end of the officer's tenure.[6] This implies an inverse relationship between length of service and officer arrest and order maintenance patterns.

Empirical research is mixed regarding the relationship between length of service and arrest and order maintenance. Friedrich (1977), in his analysis of traffic violators, found formal sanctions such as arrest or citations were less likely to be imposed by officers at the beginning or end of their careers, but the number of traffic encounters decreases dramatically when officers are at the end of their careers, making comparisons difficult. He did find that younger officers, because they are least likely to be cynical, are more likely to institute legal proceedings than their counterparts. Smith and Klein (1983) found that organizations with higher mean length of officer service were negatively related to decisions to arrest, however individual officer's length of service is not significant. Crank (1993) found as length of service increases, officers are less likely to make arrests. He did not find a similar

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Similarly, Van Maanen (1975) reported officers were less active and made fewer arrests during the metamorphosis stage of police socialization.

relationship for experience and order maintenance.[7] Thus, the effects of length of service remain inconsistent and require further inquiry.

Length of service may also influence the likelihood of officers gaining compliance in order maintenance encounters. Indeed, when more experienced officers exercise order maintenance, they are also significantly more likely to elicit compliance from citizens within an encounter (Mastrofski et al. 1996). This can be explained by individuals with more experience as police officers having had greater opportunities to interact with citizens in a variety of situations and also the opportunity to hone their interpersonal and persuasion techniques in the craft of policing. Experienced officers may know what to say and how to say it in order to get citizens to cooperate with their directives.

In summation, though individual correlates of police officer behavior and the influences these characteristics may have on gaining citizen compliance have produced rather weak or inconclusive findings, there are several reasons to revisit them in the age of community policing. First, the demographic characteristics of American police organizations have changed considerably in the past several decades. Second, Mastrofski et al. (1995) found that community policing officers, due to increased levels of individual discretion, may be more influenced by factors beyond legal characteristics of the situation. As such, the individual characteristics of the officers and extra-legal variables may take on

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Worden (1989) found that overall officers with more experience were less proactive. Additionally, length of service may be related to less rigorous enforcement of the law (Worden 1990) and an increased reliance on order maintenance techniques.

added explanatory power. Third, there have been unprecedented increases in federal support for adding more police officers to the streets, in part from the 1994 Violent Crime Control and Law Enforcement Act (Cordner 1995; Maguire, Kuhns, Uchida and Cox 1997). Beyond the obvious desired increase in the variety of operational strategies of community policing, this Act has increased the number of officers with limited tenure as police officers. As such, length of service in the age of community policing should be revisited.

Situational Level Correlates

Prior research reported the factors having the greatest impact on officer and citizen behavior are situational correlates, or in other words the characteristics of the encounter between the officer and the citizen (Brooks 1997; Riksheim and Chermak 1993; Sherman 1980). It has been reported that police officers must adapt to differing situations, and that often officers are asked to base their decision-making in accordance with situational exigencies (Bittner 1970). Because situations in which the police and citizens encounter each other may differ in numerous ways, it is necessary to examine several dimensions along which the setting may vary (Friedrich 1977). Situational correlates are grouped into three broad categories: legal variables, extra-legal variables (such as citizen characteristics and citizen behavior) and physical or social setting.

Legal Variables. Legal variables are factors which influence behavior based on the rule of law. Examples of legal factors include 1) the type of offense or activity that is performed by the citizen, and 2) physical evidence or testimony that this activity occurred. It makes intuitive sense that legal variables should influence officer decision making. Namely due to the fact that the legal system is based on the rule of law, persons who commit

more serious offenses are more likely to be arrested. Similarly, where there is greater and more prohibitive evidence there is an increased likelihood of arrest.

Offense Severity. Perhaps the most consistent predictor of officer arrest decisions is severity of the offense committed by the citizen. Extant research, almost without exception, found arrest is more likely when the offense committed is more serious. In other words, as offense severity increases so too does the likelihood of a penal, law enforcement response from officers. Perhaps this is due to the fact that officers often have many constraints on their time, and the 'effort' required for an arrest is only warranted for the most serious offenses. Lesser offenses or public nuisances may be more suitable for a less coercive intervention, such as peacekeeping or order maintenance. This has been found when offense severity has been measured by the standard of felony/misdemeanor or a crime scale (Black 1971; Black and Reiss 1970; Friedrich 1977; Lundman 1974, 1994, 1996a, 1996b; Moyer 1981; Smith 1984; Smith and Klein 1983; Smith and Visher 1981; Smith, Visher and Davidson 1984; Sykes, Fox and Clark 1985; Worden 1989), in situations involving interpersonal or domestic violence (Berk and Loseke 1980-81; Feder 1996, 1998; Jones and Belknap 1999; Smith 1987; Smith and Klein 1984; Worden and Pollitz 1984), traffic offenses (Lundman 1979, 1998) and encounters involving juveniles (Lundman, Sykes and Clark 1978; Pilivan and Briar 1964).

Some notable exceptions do exist, particularly when controlling for other factors. Specifically, Visher (1983) found that females were more likely to be arrested for property offenses than violent offenses, implying officers act more chivalrous toward female offenders in offenses involving assaults. Additionally, Mastrofski et al. (1995) compared

arrest dispositions of officers with positive attitudes toward community policing to officers with negative attitudes to community policing. In their sample of officers with positive attitudes, offense seriousness was not significantly related to arrest. However, the effect of offense seriousness with negative officers followed convention, and as seriousness increased, so too did the likelihood of arrest.

Evidence. Strength of evidence that a crime has been committed is also a legal variable which can influence the behavior of individuals during encounters. Certain evidentiary standards must be met in order to take official state action, such as probable cause (for arrest) and proof beyond a reasonable doubt (for conviction of criminal offense). Often these standards are based on evidence which is available to an officer within an encounter. Greater levels of evidence (such as physical evidence, testimonial evidence, observation of a criminal offense by an officer) increases the likelihood of attaining requisite standards of proof for official sanction, thus it is reasonable to believe when there is more evidence a crime has been committed, there is an increased likelihood of arrest or higher levels of coercion. Typically testimonial evidence or police witnesses are the most common type of evidence (Friedrich 1977). Indeed, prior research confirms that as the presence of evidence increases so too does likelihood of arrest (Black 1971; Black and Reiss 1970; Friedrich 1977).

These legal variables may have decreased importance and explanatory power in the era of community policing. Based on the "Broken Windows" thesis, officer arrest and order maintenance decisions will be greatly influenced by community thresholds for behavior. In other words, officers may engage in coercive authority encounters more often for relatively

minor offenses (Wilson and Kelling 1982). Likewise, Mastrofski et al. (1995) found that community officer behavior may be more influenced by additional information beyond analysis of legal variables in making decisions. They argued that officers may be more likely than in the past to arrest individuals for relatively minor offenses, particularly if these minor offenses violate community standards. Additionally, evidentiary strength may be minimized, particularly if the individual suspect contributes to community disorder and neighborhood decline. This supposition has particular relevance for the current dissertation, in that it is thus important to re-examine the influence legal variables have on officer decision making in the era of community policing.

Extra-Legal Variables. Extra-legal variables are characteristics that refer to the citizen involved in the encounter and the citizen's behavior. Extra-legal variables are important to consider as correlates of behavior for several reasons. First, if extra-legal variables did not influence officer behavior, then all police behavior could be perfectly predicted by examining only legal factors (offense severity and evidence sufficiency), which it can not. Second, if officers make decisions based primarily on extra-legal factors without regard for legal factors, dispositions could be illegal or a violation of civil rights.[8] Indeed, few topics stir emotions regarding the criminal justice system process more-so than discriminatory behavior by its workers (Walker, Spohn, and DeLone 1996; Wilbanks 1987).

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For example, if officers behaved more coercively toward non-white citizens than white citizens (while controlling for other relative factors), this may be an example of racial discrimination. Officers who base decisions on citizen gender may be making sexist (or on the other hand, chivalrous) decisions.

The influence of extra-legal factors remains unclear. On one hand community policing may place even greater emphasis on extra-legal characteristics than before. Extra-legal factors may influence officer discretion more than in the past, and officers may use extra-legal factors to guide their behavior. However, whether this increased discretion takes the form of discriminatory enforcement (Mastrofski 1988) or assist officers in making decisions that are more reflective of community differences and preferences (Cordner 1995; Mastrofski et al. 1995; Wilson and Kelling 1982) remains an empirical question. On the other hand it is equally plausible the influence of extra-legal factors may have diminished explanatory usefulness of officer behavior. This may be due to the fact that because the police have a closer relationship with citizens they may rely less on demographic characteristics to guide their resolutions. Including citizen characteristics and behavior as predictors of encounter dispositions will allow for a closer examination of this issue in the era of community policing. Extra-legal variables included in this study include citizen gender, race, social class, age, demeanor, and intoxication.

Citizen Gender. Gender of the citizen may affect officer behavior during encounters in two different ways. Specifically, officers may view females as more deserving of informal sanctioning, such as peace keeping or order maintenance, primarily due to their gender. In this way the officers act in a chivalrous manner toward females, and thus females are less likely to be arrested than males who engage in similar behavior, especially when females act in an appropriate, 'lady like' fashion (Visher 1983). However, the opposite could be true as well. When females act outside of their gender role, they may be more likely to

be sanctioned by the police because they are more deserving of arrest (Messerschmidt 1993). As Visher (1983: 6) clarified, "...if women fail to conform to traditional female roles, then the assumed bargain is broken and chivalrous treatment is not extended."

The majority of the existing literature reported citizen gender did not influence the likelihood of arrest by an officer (Bayley 1986; Feder 1996; Lundman 1998; Mastrofski et al. 1995; Moyer 1981; Smith 1984; Smith and Klein 1984; Smith and Visher 1981; Worden 1990). However, other research reported officers were less likely to arrest females and may thus act in a chivalrous manner toward females. Visher (1983) found officers more likely to arrest females for property offenses, and not violent offenses. Smith, Visher and Davidson (1984) found that in encounters where no complainant is present females were less likely to be arrested than males and this was particularly true for white females. Similarly, Smith (1986) reported females were somewhat less likely to be arrested, controlling for other situational and community level factors.

In sum, there is no consensus on the effects of citizen gender on police behavior, though it appears that female citizens are more likely to be treated with leniency than their male counterparts. It is important to include citizen gender in the current study, if for no other reason, than to control for any effects of gender and examine the individual effects of the other variables included in this study.

Citizen Race. Citizen race is important to examine as a correlate of behavior because prior research reported race may influence officer behavior during encounters. There is some commentary that police officers interact differently with African-Americans than others during encounters (Alex 1969; Bayley and Mendelsohn 1969). Some found that

disadvantaged persons in society, such as African-Americans, are disadvantaged by officer discretionary decisions in responding to criminal conduct (Black 1976; Smith et al. 1984). There is also some research which reported that blacks are more likely to have some reason to complain about police misconduct during encounters (Walker and Graham 1998). Additionally, race of the citizen may influence whether the citizen offers compliance with officer requests and demands, where non-white persons may be predisposed to non-compliance during encounters (Mastrofski et al. 1996). In short, race may affect the dynamics in police-citizen encounters.

Research on the influence of citizen race is mixed. Some extant literature stated that African-American suspects are more likely to be stopped, questioned and arrested by police officers (Lundman 1979, 1998; Smith and Klein 1984; Smith and Visher 1981) and that officers disproportionately use force in encounters involving African-American suspects (Blumberg 1981; Fyfe 1988; Goldkamp 1976; Takagi 1974).[9] Following this logic, there is additional research which indicated race had little or no effect on encounter dispositions, particularly the arrest or non-arrest of citizens (Bayley 1986; Berk and Loseke 1980-81; Friedrich 1977; Mastrofski et al. 1995; Moyer 1981; Smith 1984; Smith and Klein 1983; Smith, et al. 1984; Worden 1990; Worden and Pollitz 1984). Unexpectantly, Mastrofski et al. (1996) found non-white citizens are more likely to be compliant with officer requests,

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These disparities however often disappear when other situational correlates are controlled. Piliavin and Briar (1964) and Black (1971) stated the reason for the apparent discriminatory officer behavior was due to the fact African-Americans were more likely to be antagonistic toward police officers than whites. Others found that African-Americans were more likely to be arrested because overall they committed more serious offenses (Black and Reiss 1970; Piliavin and Briar 1964; Wilson 1968). Furthermore, Lundman et al. (1978) found that the disparity in arrests between whites and African-Americans was primarily due to victim preferences: victims of African-Americans typically prefer arrest over other types of police action, thus accounting for the high

particularly in inter-racial encounters. It appears that the debate surrounding the impact of citizen race in police-citizen encounters remains unclear.

The relationship between community policing and citizen race is admittedly unclear. Race may not provide greater explanatory value because in theory officers may have more information on individual clients and may rely less on the perceptual cues associated with racial characteristics of the citizen (Skolnick 1966). As such the effect of citizen race may be minimized.

Citizen Age. The age of the citizens encountering the police can influence police-citizen encounters in several ways. Black and Reiss (1970) found that most circumstances surrounding police encounters with juveniles are of minor significance, and the probability of official sanction by officers is quite low. Furthermore, during encounters involving juveniles officers may be more apt to find creative and informal patterns of processing (Guarino Ghezzi 1994), thus diverting juveniles from formal intervention. Using this logic, officers may be more likely to use various styles of crime prevention, order maintenance or some other less formal invocation of the legal process in lieu of law enforcement when juveniles are encountered (Friedrich 1977; Moore and Stephens 1991; Sparrow, Moore and Kennedy 1990; Wilson 1968).

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proportion of arrests.

However, it should be noted that Black (1976) stated that juveniles are less respectable than older persons or pose a greater threat to officers[10] and thus more likely to receive formal application of law. However there may be differences between community police officers and traditional beat officers in how they interact with juveniles. As Mastrofski et al. (1995) noted, officers who expressed negative attitudes toward community policing were more likely to arrest juvenile offenders than their pro-community policing counterparts. Other researchers found community policing officers may be more disposed to informal sanctioning such as order maintenance when encountering juveniles and the role of the community police officer may be seen as mentor and role model, rather than law enforcer (Bazemore and Senjo 1997; Cordner 1995). In short, juveniles may hold a unique position in police-citizen encounters (Bazemore and Senjo 1997; Lundman et al. 1978)

A review of the empirical literature however found that age may not influence arrest as much as hypothesized, however in light of the above argument this may be due to imperfect operationalizations. Specifically, four empirical studies that defined age categorically, using the categories of "below 18", "18 to 35", and "over 35", found no relationship between age and arrest dispositions (Lundman 1979; Smith 1984; Smith and Klein 1983; Visher 1983). An additional study found no relationship between age and arrest when age was dichotomized as under 21 years old and over 21 years old (Klinger 1996b).

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However, Kavanaugh (1997) found citizen age to be unrelated to suspects resisting arrest, and Kaminski and Sorenson (1995) reported citizen's age was unrelated to officers sustaining an injury during encounters with members of the public.

This may, in part, be due to including citizens aged 26 to 35 in the 'young adult' age group. Additionally, age of the citizen may also predispose citizens toward non-compliance with officer requests. Youthful offenders may be more prone to be combative with officer requests for order maintenance or peace keeping, because juveniles simply due to of their unique status in the criminal justice system may be more irrational and less fearful of officer authority (Muir 1977). However, this hypothesis has not been confirmed by empirical research (Mastrofski et al. 1996). In summary, age should again be addressed as a potential correlate of outcomes in police-citizen encounters. There may be a curvilinear relationship between age and arrest, with the oldest and youngest citizens most likely to receive informal sanctioning or diversion by officers, while individuals from 18-25 may be more disposed to formal sanctioning by the police.

Beyond citizen demographic characteristics, citizen behavior has also been examined as an exogenous variable which influences officers behavior. Though arrest is only seldom used as a disposition by police, it is often reserved for individuals who "flunk the attitude test" (Friedrich 1977; Lundman 1998; Van Maanen 1978). How citizens behave in the face of officer authority can thus shape officers responses and dispositions. Two citizen behaviors in particular will be examined as predictors of officer exercise of arrest or order maintenance: citizen demeanor and citizen intoxication.

Citizen Demeanor. Poor or hostile citizen demeanor toward police officers, which challenges police authority has been highly correlated with the arrest of citizens. Almost without exception, researchers have revealed that failure to show deference and respect to police officers substantially increases citizens' chances of being arrested. In other words,

"Hostility toward the implementers of the law begets the sanctions of the law" (Friedrich 1977: 372). Due to the fact that arrest is exceedingly rare, it is usually reserved for only the most deserving citizens. These persons have been described as 'assholes'. The term has universal meaning and understanding among police officers, and almost uniformly these individuals are treated more harshly than those expressing deference to the officer. "Assholes...are stigmatized by the police and treated harshly on the basis of their failure to meet police expectations arising from the *interaction situation itself*" (Van Maanen 1978: 224, emphasis in original). In other words, when citizens fail to display respect for officers, or defer to their authority, the officers perceive this action as a threat and are more inclined to respond with application of the law, such as arrests (Reiss 1971a).

Consequently, the research on demeanor and police behavior is quite rich. In the 1950s and 1960s, numerous researchers commented on the relationship between demeanor and arrest (Westley 1953; Skolnick 1966; Piliavin and Briar 1964; Rubenstein 1973). Similar findings were reported in the analyses of police officer observation studies, including the Reiss data (Black 1971, 1980; Black and Reiss 1970; Friedrich 1977; Reiss 1971a), the Midwest city data (Lundman 1974, 1979, 1994, 1996a, 1996b, 1998; Lundman, et al. 1978; Sykes and Brent 1980; Sykes et al. 1985), PSS data (Smith 1984, 1987; Smith and Klein 1983, 1984; Smith and Visher 1981; Smith et al. 1984; Visher 1983; Worden 1989; Worden and Shepard 1996; Worden and Pollitz 1984) and other observation projects (Bayley 1986; Mastrofski et al. 1995). The relationship has also been observed using vignettes (Moyer 1981) and official records (Feder 1998). Similar dispositions could be laid upon non-compliant citizens. Collectively these results produced conventional wisdom in that it was

given as a truth that poor demeanor was (and is) a significant predictor of arrest, and has led some to proclaim that "only an idiot" would believe the contrary (as described in Fyfe 1996: 340).

Recently, Klinger (1994, 1996a, 1996b) found that prior assertions concerning the relationship between demeanor and arrest may be invalid, and stated extant research operationalized demeanor poorly. He stated in order to truly test the relationship, researchers must measure demeanor before arrest occurs, and demeanor must be limited to legally permissible behavior and utterances. Klinger (1994) also stated that to examine the impact of demeanor on the decision to arrest, which is a legal correlate of officer behavior, one must control for criminal activity. If the occurrence (or lack thereof) of criminal activity is not controlled, then it is impossible to determine the cause of the arrest (crime or deference). Taking these considerations into account and using contemporary data collected in Metro-Dade county in 1985, he found that indeed lack of citizen deference did not increase the likelihood of arrest (Klinger 1994, 1996a). Though researchers have since reanalyzed both Midwest data (Lundman 1994) and PSS data (Worden and Shepard 1996), the debate surrounding the influences of citizen demeanor and threats to officer authority and probability of arrest continues (see Fyfe 1996; Klinger 1996b; Lundman 1996b, Worden, Shepard and Mastrofski 1996).

This debate is of particular importance in the current study, where policing has experienced dramatic changes in recent years (Fyfe 1996; Kelling and Moore 1988), particularly community policing. Demeanor may effect contemporary officer behavior in two opposite ways. Mastrofski et al. (1995) showed that if police officers take the view of

community policing as a 'broken windows' or aggressive order maintenance approach, then threats to officer authority should continue to have a significant, positive relationship on arrests. On the other hand, if officers view community policing as a community building process, then officers should have greater tolerance for this type of citizen behavior. In other words, officers may feel that arresting citizens will lead to a breakdown in the police-citizen relationship (Bayley 1988). In this view officers may be less apt to arrest disrespectful or non-compliant citizens. Instead, officers may be no more likely to arrest disrespectful citizens than citizens who are contrite. Mastrofski et al. (1995), analyzing police officer observation data collected in 1992 in Richmond, found that both officers with positive and negative views toward community policing were more likely to arrest disrespectful citizens, suggesting community policing in that city is more akin to aggressive order maintenance than community building.

Officer Authoritativeness and Disrespect. In addition to citizen behavior which could influence office decision making, certain types of officer behavior may influence whether a citizen chooses to comply with officer requests. Sykes and Brent (1980) stated that a large component of policing is the expectation that the police officer will gain control of an encounter with a citizen. They stated that this is done through an exchange relationship, and the officer will not automatically exercise the most coercive option during an encounter. For example, they explained that an officer may first request a citizen behave in some way (e.g., cease disorderly behavior). If the citizen complies, then the encounter is concluded. If a citizen fails to comply, the officer may resort to commanding the citizen to engage in a desired behavior. If finality is not achieved, then the officer may resort to force

or coercion. In short, the manner in which officers convey their request can influence whether citizens comply with that request. If the officer simply requests, suggests or attempts to negotiate a desired response, citizens may feel they have more options and discretion in how they behave. Conversely, if the officers commands or threatens citizens to comply, perhaps the likelihood of compliance is greater. Furthermore research has found that compliance increases with the authoritativeness of the request (Mastrofski et al. 1996)

Similar to authoritativeness, officers behaving in a disrespectful manner toward citizens may influence the citizen's decision making process. Officers who display disrespectful posture toward citizens may antagonize citizens to not acquiesce to officer wishes. In this regard disrespectful officers may lack legitimacy in the eyes of the citizen to mandate their behavior. Indeed, prior research has found disrespectful officers are more likely to elicit noncompliance than officers not demonstrating such behavior (Mastrofski et al. 1996).

Citizen Intoxication. Whether a citizen is intoxicated by alcohol or drugs, can influence officer behavior during an encounter, particularly whether an arrest is made. Intoxication can influence arrest in two hypothetical ways: Officers may perceive those individuals who are intoxicated as more deserving of arrest, or perhaps pose a greater threat to society. It has been hypothesized that intoxicated citizens are more likely to resist arrest (Kavanagh 1997) and assault officers[11], both factors that are likely to lead to arrest. This is particularly true for certain offenses, such as drunk driving (Bayley 1986; Black 1980;

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However, Kaminski and Sorenson (1995), in an analysis of the correlates of officer injuries in encounters with members of the public, found intoxicated citizens were least likely to carry out successful assaults on officers.

Lundman 1996b, 1998). However, in cases involving drunk driving, degree of intoxication is more akin to a legal variable, namely offense seriousness. One would expect the same positive relationship between degree of intoxication and arrest as observed between offense seriousness and arrest.

On the other hand, officers may be less likely to arrest persons who are intoxicated in situations which do not involve operation of motor vehicles, such as public intoxication. Bittner (1967) found that order maintenance or peace keeping may be more appropriate for intoxicated citizens. Mastrofski et al. (1995) revealed that officers exercising community building may be less likely to arrest inebriated citizens. Additionally, officers may wish to avoid contact with intoxicated individuals (Lundman 1998) and actuating an arrest would involve a greater amount of effort being expended by officers with citizens. In this regard, officers may choose to dispose of intoxicated citizens in less coercive ways, such as order maintenance.

There is a dearth of empirical research examining the impact of intoxication in situations beyond traffic offenses or interpersonal disputes, thus the impact it may have in different situations is unknown. Empirical research which examined the influence of whether the citizen was intoxicated on officer decision making appears to suggest intoxicated citizens are not arrested significantly more often than sober citizens.[12] Mastrofski et al. (1995) found intoxicated citizens were more likely to be arrested by officers

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Most research however only examined this issue in domestic violence encounters (Berk and Loseke 1980-81; Feder 1996, 1998; Jones and Belknap 1999; Smith and Klein 1984), though Smith (1987) examined the impact of intoxication within all violent disputes. He reported that not only does intoxication not influence arrest, but citizens who were intoxicated were more likely to be separated by the police.

with positive attitudes toward community policing than officers with more negative attitudes toward community policing. Consequently, community police officers were more influenced by the extralegal factors of citizen intoxication than traditional officers.

Physical and Social Setting. Drawing from Friedrich (1977), a third domain of situational characteristics is physical or social setting, which includes the characteristics of the location where the encounter occurred. This should not be confused with community level correlates. Physical and social setting variables are features of the immediate situation, and include encounter visibility (such as the presence of complainants, bystanders, or other officers), relational difference between complainant and suspect, residence of the citizen, complainant preference, and the relationship complainants may have with the suspect in the encounter.

Bystanders. Visibility of the encounter may influence the dynamics and behavior of participants in police-citizen encounters. It is assumed that officers may behave differently when in highly visible places, such as public streets, or in front of other persons who are not engaged in the encounter, such as other officers, supervisors or citizen bystanders than in private arenas. Officers may act more harshly when confronting the lone offender (i.e., lack of other citizen bystanders), and thus the dyadic encounter is insulated from outside review (Friedrich 1977). On the other hand, officers may be more likely to arrest a citizen in crowd situations in order to gain control of the situation (Bittner 1970), making arrest more likely in situations where there are numerous onlookers, or when outside (Rubenstein 1973). The act of taking control (or saving face) can occur by the officer making an arrest, but it can also be accomplished by the exercise of order maintenance (Muir 1977). Or perhaps both are

possible, as Friedrich found there is a curvilinear relationship between bystander presence and arrest, where the likelihood of arrest is highest when both there are no bystanders, and more than 10 people are present. In contrast, others reported a simple positive relationship between the presence of bystanders and formal sanctioning (Buzawa and Austin 1993; Smith and Visher 1981; Visher 1983).

The presence of bystanders may decrease the likelihood of an aggressive response by officers practicing community policing, where they may be less likely to arrest or sanction members of the public in front of others because they fear this would alienate citizens observing the action and impede building community relationships. Thus officers may exercise lower levels of coercion in front of others. Additionally, the presence of other citizens may also influence citizen compliance with officer requests, in that there may be safety in numbers (or in other words, perhaps compliance is less likely in large groups). However this supposition is unsubstantiated by empirical data, and Mastrofski et al. 1996 found the presence of bystanders to not significantly be related to citizen compliance.

Other Officers or Supervisors. Similar patterns as were just noted with bystanders occur when visibility includes the presence of other police officers and supervisors. Officers may be more likely to make arrests in front of peers or superiors, in order to display their skills in making arrests (or simply to look tough). Additionally, the presence of additional police officers may display a 'show of force', thus making arrest of citizens a safer endeavor than arrests made by a lone officer.[13] However, the empirical research is mixed. Friedrich

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However, Kaminski and Sorenson (1995) reported the odds of officers being injured in assaults by citizens *increased* with the number of other officers and supervisors present at the scene. Additionally, Kavanagh (1997) found no relationship between the presence of other backup officers and the likelihood of the citizen

(1977) reports that likelihood of arrest decreases as the number of officers at the scene increases. Conversely, Smith (1984) and Smith and Klein (1984) report that arrest is more likely in situations where other officers are present. Furthermore, Mastrofski et al. (1996) reported citizens are more likely to comply with officer demands as the number of officers at the scene increases.

It appears the preferred operationalization of visibility is number of supervisors and number of bystanders present during the encounter, which will be examined over the private/public dichotomy (see Klinger 1996b). The logic is that though public places (such as a street corner, or a park) permit a greater opportunity for observation by others, by calculating the number of bystanders an interval measure can be used. Only by using some type of interval variable can the issue of a curvilinear relationship be addressed. Additionally, by using the exact number of persons present information regarding the dynamics of the physical setting is not lost by collapsing categories.

Residence. Whether the citizen lives, works or resides in the area where they encountered the police can also impact the behavior of participants. Some stated that among the tenets of community policing is officers and citizens of the neighborhood working together to solve local problems (Trojanowicz and Bucqueroux 1990). Indeed, some stated under community policing officers may be less likely to enact an arrest on community residences (Bayley 1988). Additionally community residents, who have more stake in conformity within the community, may be theoretically more likely to comply with requests made by officers, though Mastrofski et al. (1996) reported this may not be the case.

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resisting arrest.

Community Level Correlates

Variations in the neighborhood context of where the encounter occurs may also influence police officer and citizen behavior during interactions, and there are at least two rationales for examining the effects of neighborhood level characteristics and officer behavior. First, there is the hypothesized relationship between levels of neighborhood informal social control and the exercise of formal social control by police officers. One of the first attempts to explain variations in offending across urban areas was Shaw and McKay's (1942) theory of social disorganization. Essentially, in communities where there is less informal social control, there is a greater need for formal social control, such as official police intervention (Bursik 1986; Klinger 1997; Schuerman and Kobrin 1986). Others, following this logic, reported that certain fragmented and disorganized communities rely more heavily on police intervention (Duffee 1990; Langworthy and Travis 1999). Therefore characteristics of disorganized neighborhoods (such as residential mobility, racial heterogeneity and poverty) have hypothesized contextual effects on officer behavior. Further, neighborhood characteristics indicative of greater disorganization, greater threat of harm, or greater fear, in turn lead to more coercive police responses. Bayley and Mendelsohn (1969) stated in high crime, poverty stricken areas, police officers act differently to citizens encountered in these neighborhoods because of the social distance between the officer and the public. In these areas, officers are more prone to be aggressive and punitive.

Second, communities differ in what they desire police officers to do and the priorities police officers should promote. Police organizations do provide different types of services

to different types of neighborhoods, and officers should be able to adapt to the differing expectations of the residents (Banton 1964; Slovak 1986). In addition to residents' expectations, officers actions are in part motivated by expectations about appropriate behavior in each neighborhood (Werthman and Piliavin 1967). Homogeneous neighborhoods may require more service activities, where heterogeneous areas may require greater levels of law enforcement (Wilson 1968). Finally, it was reported that citizen expectations of police officer priorities differ based on racial and economic characteristics of communities (Alpert and Dunham 1986, 1988; Alpert, Dunham and Piquero 1997). In other words, the types of activities and encounter dispositions may vary by the social context of the community.

However, communities may also differ in residents' propensity to comply with officer request and commands of order maintenance. Communities with histories of strife between citizens and the police may predispose individuals within those areas to not comply with officer demands. In inner-city communities, where distrust of the police is perhaps greatest, not only may the police and citizens have greater difficulty in forging co-productive relationships and problem solving partnerships (Eck and Rosenbaum 1994), but this latent distrust may also influence citizen non-compliance in encounters with the police. Consequently citizens encountered by police in disorganized communities (i.e., high crime rates, residential instability, high proportions of non-white populations, high rates of poverty, and high proportions of single family households) may be more likely to not comply with officer requests for social order.

Crime Rate. The overall crime rate of a community may increase the likelihood of

officers making arrests in encounters with the public. Though this may seem tautological, particularly if crime rates are measured as number of arrests, the issue deserves investigation. In communities with high crime rates, particularly violent crime and serious crime, officers may be more prone to actuate arrests due to the fact that there are expectations by officers that crime is prevalent in that area and officers should make arrests in order to deter criminal activity (Sampson 1986). Additionally, in high crime communities there is greater opportunity than in low crime areas to make arrests. Officers may have a propensity to make arrests in high crime areas perhaps due to the fact of a high number of symbolic assailants or persons who represent a threat to the officer (Skolnick 1966). In short, there is reason to believe citizens encountered in high crime areas are more likely to be arrested or treated harshly than citizens in other communities.

However, it has been hypothesized that the opposite may be true. The above suggests that as conditions in a neighborhood worsen and become more disorganized, the officers will be more apt to use their coercive authority. Some commentary reported that in order for officers to make an arrest (or act with greater 'vigor'), the instant offense must be very serious in communities that have high crime rates. In low crime areas, offense seriousness does not have to be very high to elicit an arrest. In high crime areas, offense serious must be very high in order to elicit an arrest (Klinger 1997).

Additionally, the effects crime rate may have on community police officers is unknown. For example, community officers may be less disposed to make arrests in high crime areas because they may be more predisposed to look at the root causes of the disorder or crime and implement non-legal, problem solving techniques (Eck and Spelman 1987).

Community officers may engage in more order maintenance or problem solving in high crime areas, where beat officers may be more apt to simply respond with a law enforcement response.

The empirical research is mixed in regards to the impact of community crime rates on behavior in police-citizen encounters. Smith (1986) found community victimization rates to be unrelated to officer decisions to arrest, use coercion or file criminal reports. Similar null results were reported when examining arrest decisions in interpersonal disputes (Smith 1987) or across organizational classifications and arrest (Smith 1984). However, Liska and Chamlin (1984) found that cities that had greater numbers of reported crimes had correspondingly higher arrest rates.

Residential Stability. The stability of communities may also affect decisions in police and citizen encounters in several ways. A high proportion of renter occupied dwellings is an indicator of a disorganized community, and these disorganized areas may have correspondingly lower levels of informal social control that results in greater reliance on formal social control (Shaw and McKay 1942; Sampson and Groves 1989). From the above argument it can be inferred these areas may be more prone to experience arrest decisions by police officers.

Also, the number of persons who have lived in the community for a short period of time is an indicator of mobile populations. In communities with mobile populations, there is a reduced chance for police officers and citizens to have direct knowledge of each other, and reduced opportunity to build co-productive relationships. As such both community and traditional officers may be both more apt to use more aggressive techniques during

encounters, and citizens may be less likely to comply with officer requests for order maintenance. However, Smith (1986) found in communities with high proportions of persons residing in the area less than 5 years officers were less prone to exercise order maintenance, and there was no impact on arrest decisions. Due to the fact that indicators of stability can be measured in two different ways (proportion of rental units and proportion of persons residing in the community less than five years), and because these measures tap differing constructs, they should both be considered as indicators of dispositions in encounters between the police and the public.

Racial Composition. The racial makeup of a neighborhood may affect police officer decision making in that communities with high proportions of minorities may elicit more aggressive police responses by officers, regardless of citizen race. Racial conflict theory stated that racial minorities are seen as threats to the majority, as well as local agents of formal social control (Black 1976; Brandl, Chamlin and Frank 1995; Turk 1969). In this regard percent non-white population has a contextual effect on police practices, where these communities have greater perceived threat and thus greater necessity for formal application of the law. Ergo, as the proportion of non-white population of a community increases, so too should the likelihood of arrest or the use of order maintenance by the police.

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

urban areas. Similar practices were reported for arrests for proactive drug enforcement (Miller and Bryant 1993). Although, Smith (1986) did not find percent non-white population to impact arrest decisions, however proportion of non-white residents did exhibit a positive relationship with the use of coercion and order maintenance. Additionally, officers were more active, even when controlling for situational characteristics.

Economic Distress. Citizens encountered by police in communities with high economic distress such as high proportions of persons living in poverty may be more likely to receiving harsh dispositions. First, as explained earlier, communities experiencing economic hardships may have lower informal social control mechanisms and thus provide more fertile grounds for the application of formal social control. Additionally from a conflict perspective, persons encountered in poor areas may be viewed as a greater threat to those in power (Chambliss 1976; Quinney 1980) and thus the police again may be more apt to choose more punitive encounter dispositions.

Extant literature, utilizing differing measures of economic distress, supports the above contentions that people are more likely to receive coercive dispositions. In analyses of data from the Police Services Study the proportion of persons living in poverty is positively related to officer arrest decisions (Smith 1984; Smith and Klein 1984; Smith et al. 1984). Using an ordinal scale of poverty, Smith (1987) found officers less likely to intervene in interpersonal disputes in poor areas, however when they did intervene, they were more likely to arrest of one of the citizens involved in the encounter. Community characteristics remained significant even when controlling for situational influences, whereas "offenders encountered in lower-status neighborhoods have a higher categorical risk of being

arrested independent of factors such as type of crime, race of offender, offender demeanor and victim preference for arrest" (Smith 1986: 338). As proportions of persons in poverty increased so too did the likelihood of proactive drug arrests (Miller and Bryant 1993). However, Crank (1990) found that percent unemployment (another indicator of economic adversity) was related to decreased arrest rates in urban areas.

Household Structure. The characteristics of the households in the community may also influence officer and citizen behavior, where communities with high proportions of single parent families may receive disproportionately increased odds of arrests. Single family households represent decreased levels of guardianship and observation of persons in the community, particularly juveniles, and this factor has been found to be related to increased crime rates, lower levels of informal social control and greater opportunity for offending and victimization (Smith 1986). Additionally, single family households is a proxy for community status where household income is presumably lower. However, Smith (1986) found that while proportion of homes with single parents was unrelated to officer use of arrest or coercion, however it was significantly related to officers conducting criminal investigations.

Though the above review suggests community characteristics have certain effects on police officer behavior, little is known how differing community context influences officer and citizen behavior among officers practicing community policing. Community policing and the actions taken by officers relies heavily on community variation, and officer actions should differ from place to place based upon local norms and values (Cordner 1995). Community policing relies on participation and co-production from residents, and this type

of relationship may be difficult in disorganized neighborhoods, or neighborhoods with a variety of interests (Buerger 1994; Grinc 1994). In other words, communities that vary on structural characteristics are more difficult to organize for collective action (Skogan 1990). Additionally, in a pluralistic community it is naive to assume there is consensus on what the community norms and values are. In these communities, the norms and values of the most vocal or most powerful groups may be the values used by the police to implement community policing (Bayley 1988; Cordner 1995). Since community policing implies that officers will become closer to citizens and understand citizen and community norms better, it is reasonable to hypothesize that community factors which in the past have influenced arrest dispositions may not have the same effect in encounters involving COP officers.

CHAPTER SUMMARY

This chapter has presented an overview of the theoretical and empirical research conducted surrounding police officer and citizen behavior in encounters. First, this chapter outlined and defined the terms "encounter" and "discretion". Second, the central tenets of community policing were outlined, with special attention paid to the hypothesized changing relationship between officers and citizens. Next, this chapter outlined three specific types of encounter outcomes that commonly occur in encounters between police and citizens. Namely these outcomes were arrest, order maintenance, and citizen compliance with officer requests. Finally, this chapter addressed the empirical research on the individual, situational and community level correlates of this behavior. There was special focus on how the influences observed for traditional correlates of behavior may change in the era of community policing or by officers practicing community policing.

CHAPTER 3: METHODS

This chapter outlines the research procedures utilized in order to examine police officer and citizen behavior and dispositions during encounters. Special attention is paid to observed differences in encounter dispositions between COP and beat officers. In order to examine whether there are actual differences in behavior, it is first necessary to properly outline relevant research questions and other methodological issues.

This chapter has five purposes. First, this chapter presents the research questions which guide the analysis of police-citizen encounters. Second, a detailed description of the organizational arrangement of the police department under examination is presented, with a special emphasis on the assignments of officers under study. Third, this chapter examines the types of data collected, namely systematic social observations of police officers. Fourth, this chapter describes the variables used to measure the theoretical constructs. Fifth the statistical methods used in the analysis of the data are discussed.

RESEARCH QUESTIONS

This dissertation explores the individual, situational and community level correlates of police officers and citizens during encounters in the era of community policing. As described in Chapter 2, there is both empirical support and commentary that suggests officers practicing community oriented policing may display different behavior during encounters than their traditional beat officer counterparts. Additionally, citizens may also display variant behavior depending on whether they are engaging in a dyadic interaction with a COP or beat officer. Further, there is research which reported that the correlates of both police officer and citizen behavior may differ between officer types. This research

provides the basis for the formulation of the following research questions:

1. Do individual correlates which predict citizen responses to officer authority differ for community policing officers and beat officers?

2. Do situational correlates which predict citizen responses to officer authority differ for community policing officers and beat officers?

3. Do community correlates which predict citizen responses to officer authority differ for community policing officers and beat officers?

The ability of officers to gain the compliance of citizens during order maintenance requests is an important part of policing (Mastrofski et al. 1996). As discussed previously, officers that can gain this acquiescence can often alleviate the need for higher levels of coercive control, such as arrest or use of force, during encounters with citizens. Compliance has particular importance for officers practicing community policing, particularly because of the renewed importance of order maintenance. There is some commentary that COP officers are closer to the public, understand citizen needs and desires and are better able to communicate their desires with citizens, and thus may be more successful in gaining citizen compliance. At the same time, citizens may have a greater knowledge and familiarity with COP versus beat officers, and be more likely to comply with their requests.

Whether citizens offer compliance to COP and beat officers in a similar fashion also remains an empirical question. Further it is important to examine the characteristics of the encounter in order to appraise which factors influence compliant citizen behavior. For example, one of the hypothesized benefits of officers with higher levels of education is that these officers have greater verbal skills which increase the likelihood of gaining citizen compliance. Similarly, officers with greater length of service might also be expected to be

more proficient in gaining acceptance.

Characteristics of the immediate situation may also be expected to influence citizen behavior. For example, some literature revealed that citizens' demographic characteristics such as race, gender, age and social class may be predisposed to compliance or noncompliance (Mastrofski et al. 1996). Other factors, such as citizen intoxication may decrease the likelihood of compliance, where others (number of other officers) may increase compliance, and still the influence of different characteristics, such as number of citizen bystanders, remain uncertain. For example, the presence of bystanders may influence some to comply due to informal social pressures to adhere to governmental requests. On the other hand, perhaps the presence of bystanders increases individual citizen anonymity, thus decreasing the likelihood that the citizen will comply with officer requests. Finally, other factors such as the manner in which an officer makes their request could increase the way citizens comply with directives (Sykes and Brent 1980).

Finally, citizen behavior may vary by neighborhood context. The informal social norms for public actions may vary by neighborhood. In other words, in some places it may be more acceptable to not comply with police officers where in other communities such actions are not tolerated. As such, it is important to also consider structural characteristics of the community as predictors of citizen behavior.

4. Do individual correlates of order maintenance behavior differ for community policing officers and beat officers?

5. Do situational correlates of order maintenance behavior differ for community policing officers and beat officers?

6. Do community correlates of order maintenance behavior differ for community policing officers and beat officers?

As discussed in Chapter 2, only rarely have police officer decisions to exercise order maintenance been studied empirically, despite the importance this behavior holds in American policing. Order maintenance represents formal governmental social control, and it is of a lower quantity and thus less intrusive than an arrest. However, order maintenance decisions are low-visibility, and often these decisions are unreviewable by police administrators, policy makers and members of the public. Order maintenance takes on greater importance in the era of community policing, and thus two broad conclusions can be drawn. First, it may be unrealistic to assume that the same correlates which predict officer decisions to arrest also predict officer decisions to exercise order maintenance. Second, correlates of order maintenance decisions may differ between COP officers and beat officers.

The correlates of order maintenance deserve examination separate from arrest decisions. Individual level variables may exert different influences on order maintenance decisions than arrest decisions, and may further vary between COP and beat officers. Situational correlates also may exert contrasting effects, particularly in regard to legal variables, because in order maintenance encounters there may be no offense committed nor evidence to collect. Finally, though community level correlates may be assumed to have similar influence as in arrest, due to the hypothesized close relationship between COP officers and the citizens of the community, variation may occur.

7. Do individual correlates of arrest differ for community policing officers and beat officers?

8. Do situational correlates of arrest differ for community policing officers and beat

officers?

9. Do community correlates of arrest differ for community policing officers and beat officers?

Some extant research reported that officer characteristics such as race, gender, education and length of service influence their arrest behavior. However, there is little consensus on the effect of these correlates on arrest behavior, and there is a dearth of empirical research examining these issues for COP officers. Though the individual correlates have in the past displayed little explanatory value, this may not hold true in the era of community policing. There are several justifications for this assertion, including the changing demographic make-up of police organizations, the hypothesized increase of individual officer discretion, and the recent increase of persons with limited tenure as police officers under the 1994 Violent Crime Control and Law Enforcement Act.

As discussed previously, there has been considerable attention paid to the situational influences on officer arrest decisions. However legal variables, such as offense severity and evidence may have decreased predictive power among COP officers. At the same time, due in part to the increased discretion of COP officers, extra-legal variables such as citizen gender, race, social class, age, intoxication and demeanor may officer behavior differently than previous research found. Whether situational factors become more or less predictive of officer arrest decisions remains an empirical question.

Community level correlates may also exert contradictory influences on police officer decision making. Macro-level correlates of police arrest decisions have been discussed, and previous research found these structural correlates can influence individual arrest decisions (Smith 1986). However, the influence of community level variables may differ in the era

of community policing. As discussed previously, community policing activities rely heavily on community variation, and that COP officers are allegedly more sympathetic and in tune with community desires than their traditional policing counterparts. Whether COP officers are influenced by community characteristics such as crime rates, racial composition and economic composition in the same fashion as beat officers deserves further consideration.

Having outlined the research questions which guide this dissertations' analysis, I now turn to a description of the research site. It is important to discuss the organizational arrangement of the police department under study prior to a discussion of the data sources and how variables were operationalized because how the department is arranged influenced the sampling conducted in the analysis.

ORGANIZATIONAL ARRANGEMENT OF STUDY SITE

It is important to fully describe the police organization because how officers are assigned within the department and the job descriptions of officer assignments can ultimately influence their behavior. This is particularly true for police departments practicing community policing, because the organizational arrangements of community policing departments can take a variety of styles. Broadly speaking, police organizations are often classified as two distinct types. First, some departments are arranged as community policing generalists, where all officers within the organization are expected to perform the tasks typically associated with community policing. Second, departments take the form of community policing specialists, where certain officers within the organization are assigned the task of spearheading community policing efforts (Mastrofski, Parks, Reiss and Worden

1994; McGarrell, Langston and Richardson 1997; Maguire 1998; Police Executive Research Forum 1996).

Data for this study were collected from information gathered from the Cincinnati Police Division (CPD). The CPD is the largest police agency within Hamilton County Ohio, with 996 sworn officers in 1997 (Cincinnati Police Division Annual Report 1997). It was headed by a police chief, who in turn coordinated the activities of four separate bureaus: the Patrol Bureau, the Resource Bureau, the Support Bureau and the Investigation Bureau. The Patrol Bureau performed all primary police functions, and within the Patrol Bureau, there were seven separate sections: Tactical Planning, Patrol Administration, Special Weapons and Tactics (SWAT), the Night Chief, Event Planning, the Community Policing Coordinator, and the police Districts. As noted, also within the Patrol Bureau was the Community Policing Coordinator, a lieutenant whose chief responsibilities included overall coordination of COP officers and department wide planning and staffing of COP officers.

All officers who participated in this study were assigned to the Patrol Bureau at the time of observation. The first type of officer observed was beat officers. Beat officers typically perform all duties associated with traditional line-level police officers, particularly responding to calls for service. Other prescribed duties included traffic enforcement and traffic accident investigations, criminal investigations and arrests of persons believed to be engaged in unlawful activity, complete crime reports, conduct security checks in places of business, and conduct inspections of public and licensed places within the area of responsibility and enforce laws, ordinances and regulations concerning its operation (Cincinnati Police Division Patrol Officer Position Classification 1998).

The second type of officer observed in this study was community policing officers. These officers are assigned to a specific community, or in some cases, several communities, in which to perform COP functions. Their assigned duties included some of the general duties common to all officers assigned to the Patrol Bureau within their assigned neighborhood, become acquainted with citizens of their assigned neighborhood, identify neighborhood problems, forge partnerships with citizens to develop solutions to neighborhood problems, network with local service agencies to assist in problem solving, represent the Division at community meetings, prepare and share crime statistics with citizens of the neighborhood, and conduct security surveys, and develop initiatives to improve the future of the youth of the neighborhood (Cincinnati Police Division Community Policing Officer Position Classification 1998). As such the CPD was structured as community policing specialists.

The CPD was decentralized, in that officers were assigned to one of five different districts located throughout the city. Beat and COP officers reported directly to sergeants located in their respective district, and these officers performed their above outlined duties within assigned beats or neighborhoods. In all there are 22 different beats and 52 different communities in Cincinnati. In 1994, the CPD reformed all five police district boundaries so that they conformed to existing natural neighborhood boundaries. In other words, district boundaries that passed through a neighborhood causing the neighborhood to be located in more than one district were adjusted so that all neighborhoods were situated within only one district. Additionally, the CPD reformed beat boundaries in the same fashion. As a result all officer assignments conformed to neighborhood boundaries. Parameters for crime

reporting areas also conformed to neighborhood boundaries.

Beat officers typically worked 8 hour shifts, and worked a tour of duty at one of four shifts: 1st shift (beginning at 6:00 a.m. or 7:00 a.m.), 2nd shift (beginning at 3:00 p.m., 4:00 p.m. or 5:00 p.m.), 3rd shift (beginning at 10:00 p.m. or 11:00 p.m.) and power shift (beginning at 7:00 p.m. or 9:00 p.m.). Officers working these shifts typically 'rotate' (or switch shifts) on an annual basis. In contrast, COP officers worked flexible 8 hour schedules. In other words, COP officers worked varying days of the week and began tours of duty at varying times of the day. In this regard, the COP officers differed from their beat officer counterparts. Typically, COP officers worked Monday through Friday, and began their shift between 7:00 a.m. and 1:00 p.m.

DATA SOURCES

Data for this study were initially collected as part of a larger project funded by the National Institute of Justice (Frank 1996). One purpose of that study was to examine the activities and work routines of CPD beat and community policing officers. As part of that project data were collected on encounters involving police officers and citizens. These data will be used in the present dissertation.

In order to examine the research questions, data were collected from three primary sources: systematic social observations, crime data and census data. The following section outlines in greater detail the methods used to collect these data. Since many of the variables used in this study were constructed using the field observation data, the major portion of this section is concerned with a discussion of systematic social observations. Following this brief sections outline the data sources for other variables in the analysis, namely crime data

and census data.

Observations

There have been numerous research projects completed in the past which have involved direct field observation of police officers. This study follows a long tradition of field observation studies whose main focus is more quantitative. In 1966, Reiss conducted the first large scale study of the police which involved systematic social observation. This study was similar to its qualitative counterparts, however it involved more detailed note taking designed for later quantitative analysis. Reiss (1971b) stated that systematic social observations have four characteristics. First they occur in a natural setting (e.g., with the officers in their working environment during the course of their daily work). Second, notes are taken in a deliberate and methodological fashion, as such the process of data collection is systematic and can be done by many observers who code and report observed activities in a similar fashion. Third, rules for observations and coding information are created to allow for scientific inferences. Finally, the data collected by researchers is independent of that which is being observed (e.g., the police officer). In short, systematic social observations of police officers allows researchers to quantify activities which occur across numerous observation periods, thus gaining unique information to which ethnographers may not be privy.

Observation Selection Criteria. Observations of police officers, like any other form of data collection, should be guided by the study research questions. Reiss (1971b) reported that how observations are structured should be a product of the study's purpose, the

appropriate unit of analysis, identification of relevant independent and dependent variables, identification of the sampling frame, creating data collection instruments and determining reliability and validity. Further Mastrofski et al. (1998) found that decisions concerning the selection of observation periods should be made surrounding the issues of whom to observe, where to observe them, when to conduct observations and what should be observed and recorded. The following section describes the observation methods and selection criteria.

Whom and Where to Observe. It is first important to decide which officers to observe and where to observe them. The primary purpose of the larger study was to document and compare the activities of community policing officers and beat officers in one city. Therefore this project sought to observe these two different types of officers in their natural environment. Extant literature found that officer routines and behavior may vary by neighborhood characteristics (Crank 1990; Miller and Bryant 1996; Sanders 1997; Slovak 1986; Smith 1986; Smith and Klein 1983; 1984; Smith et al. 1984; Wilson 1968). Therefore, in order to make comparisons of the behavior of officers based on assignment and orientation, we sought to observe COP and beat officers in similar environmental contexts, or in other words, if the researchers observed the COP officer assigned to neighborhood X, the researchers also observed the beat officer for neighborhood X. COP officers and beat officers work in the same beats and neighborhoods, so the research staff chose to observe COP officers and their complimentary beat officer.

The number of different individual COP and beat officers varies. Each neighborhood typically had only one COP officer and more than one beat officer assigned to the neighborhood at any given time. Therefore, there are fewer different individual COP

officers than beat officers observed in the study. Specifically data were collected on 33 different individual COP officers and 161 different individual beat officers. However, a total of 206 observations were conducted with COP officers and 236 with beat officers.

When to Observe. As Reiss (1971b:10) noted, "When it is difficult to locate a satisfactory sampling frame for variables under investigation, time often is a useful sampling frame." 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. Beat officers work 24 hours a day, 7 days a week, whereas COP officers typically work from 10:00 a.m. to 6:00 p.m. Some COP officers began their 8 hour shift as early 7:00 a.m., while others as late as 1:00 p.m. This variation posed a problem in determining the shifts on which to observe beat officers, as COP officers typically work during 1st and 2nd beat officer shifts. Therefore, in order to have the most comparable observations, we decided to observe beat officers on both shifts. Using this same logic, the researchers decided to not observe beat officers working 3rd or power shifts, as COP officers in our study never worked during these time periods. Days of the week in which COP officers work also varies slightly, however most work 5 consecutive days, Monday through Friday or Tuesday through Saturday. Therefore, we decided to ride with beat officers on Monday through Saturday. In other words, no observations occurred on Sundays, or during 3rd or power shifts.

Finally, this study was conducted over a one year period. The rationale for this criterion was that typically police observation studies were conducted during the Spring and Summer months. Though previous police observation studies have been conducted over a

one year period (Sykes and Brent 1983), to our knowledge no prior study has addressed the issue of seasonality and its influence on officer behavior. Thus these other studies were unable or unwilling to assess the impact of seasonality or weather changes on officer's workload and behavior despite existing research which revealed that there is a relationship between seasonality, temperature and crime (Falk 1952; Field 1992; Lab and Hirschel 1988; Lebeau 1994; LeBeau and Langworthy 1986). If temperature and season influence the behavior of offenders and crime rates, it is likely that these same factors influence the demands on the police, and in turn, police behavior. It is further expected that season and temperature changes will affect officer-citizen encounters. By conducting observations over a 12 month period we were able to assess and analyze the relationship between seasonality, temperature and officer workload. In short, observations were conducted between April 1, 1997 and April 30, 1998.[14]

Sampling Technique. Having determined to observe COP and beat officers, to observe these officers in the same neighborhoods, and to observe them on similar days of the week and times of the day during a 12 month period, the following section discusses the sampling methods. Considerations include selecting officers, days of the week, and times of the day.

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It was the larger project's intention to conduct observations from April 2, 1997 to 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 to not disturb officers in their time of bereavement, and the fact that the holidays were approaching created a need to suspend observations until January 2, 1998. In order to compensate for not conducting the scheduled observations in December, observations were conducted on randomly selected days and times in April 1998.

The sampling frame used to select officers consisted of all 47 COP officers in the city at the beginning of the project. Four of these officers were excluded because they spent portions of their work day on bicycles, and observations of these officers were not logistically feasible. The final sampling frame was 43 officers, of which 33 were randomly selected by a computer for inclusion in the study. Of these officers, 4 were assigned to only one neighborhood, 8 officers shared a neighborhood with another officer (i.e., a neighborhood had more than one COP officer) and 18 were assigned to more than one neighborhood. Six of these officers worked in pairs (2 person units). These 33 officers were responsible for 29 of Cincinnati's 52 communities (55.8%).

Having selected COP officers for inclusion in the study, the next step was to select their comparable beat officers. There were two sampling options which could be utilized in order to select beat officers to be included in the study. One option would be to select a single officer and observe that officer throughout the year. Selecting a single officer would permit us to control for the influence of officer operational style on work activity. Unfortunately, beat officers work rotating schedules, rotating annually. Thus, beat officers could be assigned to 3rd shift, which was a time of the day that we eliminated from the study.

Alternatively, one could randomly select 8 hour shifts in each of the beats selected for inclusion in the study. This selection method would permit a larger sample of individual beat officers during work periods comparable to those of COP officers. Unfortunately, increasing the sample size resulted in a decrease in the number of observation periods for each individual beat officer. Nonetheless, a larger sample of officers increases our confidence in suggesting that observed behavior is representative of the activities of beat

officers working in a given community. Ultimately this later selection method was chosen.

As stated previously, the Cincinnati Police Division has 22 different beats, and none of these beats cross neighborhood boundaries. Therefore, the research staff determined the beats in which the selected neighborhoods were located. In other words beat and COP officers were observed in similar geographic areas. This resulted in the inclusion of 18 beats (81.2 %). Therefore, observations were conducted in 18 different beats in the city of Cincinnati.

Having determined the COP officers and the location where beat officers work, the next step was to choose the dates and times for the observations. Researchers attempted to observe ten tours of duty for COP officers and beat officers in each selected beat over a twelve month period. Researchers attempted to observe each officer no more than one time per month, though this guideline was not always followed due to unforseen circumstances such as officer vacations, officers and observers who became sick, and officers who miss work due to personal reasons. In all, 93.4 percent of the observations were completed on the assigned date.

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

or 3 days prior to the scheduled date to confirm the observation.

What to Observe. The primary purpose of the larger study was to examine the workloads and routines of community police officers and beat officers in Cincinnati. Using this broad guideline, structured coding instruments were created to capture the different dimensions of officer activities, actions and behaviors. Following other observation projects (Mastrofski et al. 1998), four different coding instruments were used to systematically structure observations and the collection of necessary information to explore the variation in the behavior of police officers: ride instruments, activity instruments, encounter instruments and citizen instruments. This section will briefly describe these instruments the data collected by each instrument.

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

Encounter instruments tapped information about any interaction the officer had with members of the public. As discussed in Chapter 2, encounters were defined as focused interactions between 2 or more persons (Goffman 1961). Like Mastrofski et al. (1998), encounters were operationalized as face-to-face verbal or physical communications with members of the public which involved three verbal exchanges of information by the officer and the citizen. Like activities, encounters contained some common information, including

starting and ending times, nature of the location, and how officers were mobilized to engage in the encounter. The primary difference between activities and encounters was the presence or absence of members of the public. As such, all actions taken by officers during any given observation is the sum of all activities and encounters.

Each encounter was further classified as either "brief", "casual", or "full". Brief encounters were typically short in duration, however may not completely satisfy the rules of an encounter. For example, if an officer requests a citizen to do something, but there is not a "three exchange of information"[15], this encounter was classified as brief. Casual encounters include contacts with the public which may satisfy the three exchange rule, however the exchanges did not involve any type of police business. An example of a casual encounter was 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.[16] Full encounters were all other police-citizen interactions, and are the focus of this dissertation.

Each encounter instrument included information on how many other officers,

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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.

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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, an officer was observed to speak 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, and subsequently coded as a 'full' encounter.

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

The third coding instrument used in the larger study was a citizen form. These forms were completed for each citizen with whom the observed officer had contact with during the ride. Since there may have been more than one citizen present at each encounter, there are more citizen forms than encounter forms. In other words, encounter forms are place specific, where citizen forms are person specific.[17] Citizen instruments contained information regarding actions taken by the officer and the citizen while in the presence of one another. First, citizen characteristics were coded, such as gender, race, approximate age, approximate social class, mental state, and whether they were under the influence of drugs or alcohol. Like encounters, citizen interactions were classified as 'brief', 'casual' or 'full' using the same coding rules as discussed previously. Any requests made by citizens of officers were recorded, such as if the citizen requested the officer to arrest (or not arrest) another citizen, citizen requested information, citizen requests for physical assistance, and citizen requests for the officer to speak on their behalf to other government agencies or other

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For example, if an officer interacts with 2 citizens at one location, the observer completes one encounter form and two citizen forms.

citizens. In turn, officer responses to these requests are also coded (e.g., did the officer comply?).

Additionally, the citizen instrument also recorded actions and requests made by the officer of the citizen. Examples of officer actions and requests included officer searching this citizen, officer arresting this citizen, officer using force on this citizen, officer asking the citizen to discontinue disorderly or illegal conduct, officer asking the citizen to seek help from others regarding their problem and officer advising the citizen to call (or not call) the police again if the problem persists. For each of these officer actions, the citizen's response to this action was also coded (e.g., did the citizen comply with the officer's request? what was the citizen's demeanor and emotional responses to the officer? did the citizen attack the officer?). In short, the citizen form captured the many dimensions of the interaction between the officer and the public (see Appendix IV).

A final data collection instrument, namely the activity form, was used to collect information regarding officer behavior when a citizen was not present. Such activities included routine patrol, enroute to a location, roll call, auto maintenance, report writing, meetings with other officers, attempting to locate a person or place, and personal time. Information collected in these activity forms is beyond the scope of this analysis.[18]

The combination of different data sets (particularly the ride instruments, encounter instruments and citizen instruments) collected relevant data to adequately address the

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This dissertation examines how COP and beat officers interact with citizens, and how citizens act/react to police officers. By definition data collected in activity forms do not involve an interaction between the police and the public.

research questions. It allows one to systematically code and report how officers utilized their work time, what types of activities they perform, what influences encounters that citizens have with officers, the characteristics of the citizens involved, and actions taken by citizens and officers during their interaction.

Coding Information. This section outlines the logistics of how information regarding officer and citizen actions was recorded, coded and archived for each observation period. Information was recorded in three ways: First, all field observations required researchers to record elements and characteristics of what was happening while in the field. In order to do this, researchers completed field notes while on the ride-a-long with officers. Second, from these field notes researchers coded relevant information in computer databases when at the University of Cincinnati using the aforementioned structured data instruments (ride, activity, encounter and citizen instruments). In addition to field notes and the database, researchers also completed a narrative description of what occurred on the observation, and attempted to clarify ambiguous events in written form.

Researchers took careful notes of activities, encounters and citizen interactions during the ride-a-long in small booklets (3" x 5"). These booklets were selected because they could be easily placed into a breast pocket or inside jacket pocket during the observation. Also, these booklets were very similar to ones used by officers to take notes. For these two reasons, we hoped that reactivity by the officers to field notation would be diminished. Observers would take notes on relevant information, however they were instructed never to complete these notes in the presence of a citizen. Opportune times for 'catching up' on note taking included immediately after the encounter, or while officers were

on routine patrol or enroute to a location.

After the completion of an observation period, researchers returned to the University of Cincinnati and coded information into computer databases. The four previously described instruments served as a foundation for the structure of the databases. These databases were created using the FoxPro 2.6 computer software program. The computer software was user friendly in that screens were created to assist the researchers in data entry. Researchers saw the instrument's questions directly on the computer screen, along with a location to enter numeric information. From this program, researchers could append and update their own databases without being required to read the questions from separate sheets of paper. This data entry was typically completed within a few days of the observation period.

Data archiving occurred as follows: First, each observer was given a floppy disk with four blank databases (one for each instrument). When observers were prepared to input data, they located a computer in the Center for Criminal Justice Research at the University of Cincinnati which contained the FoxPro program specifically designed to accommodate the databases for input. After completing data entry, the disk was given to a member of the research staff who checked it for completeness and ran diagnostic cleaning exercises on these data. Once these data were acceptable, contents of the floppy disk were copied onto a central computer under each observer's name, and the disk returned to the observer. At the end of the project data from each observer were compiled into master databases for each of the four coding forms, resulting in four databases containing all information from every observer.

Project Personnel. The researchers who participated in the observations of police

officers were graduate students in the Division of Criminal Justice at the University of Cincinnati. A total of 30 different observers participated in the project over the 13 month period. The observers consisted of 21 doctoral students (70.0%), eight students completing their master of science degree (26.7%) and the principal investigator, who has a doctoral degree. The observers were primarily male (76.7%) and white (86.7%).

Prior to conducting ride-a-longs, observers were required to complete a training course over a period of several weeks. In this training, the project and its purposes were described in great detail. Also, information was provided concerning the organizational arrangement of the Cincinnati Police Division. The majority of effort in the training sessions was devoted to reviewing and discussing the four data coding instruments, and clarifying and interpreting each of the standardized questions. As reported by Reiss (1971b), observers reviewed videotaped activities and encounters of police officers and citizens, and were asked to code the actions viewed on the videotape using the project instruments. Coding decisions were immediately reviewed and discussed by the research team and observers. In addition to these training exercises, each observer was briefed on project confidentiality, and required to complete a form stating that they would not discuss activities observed while on ride-a-longs with personnel not related to the project, and that the discovery by the project staff of impermissible discussions would result in the termination of the observer from the project.

This training was conducted in order to standardize coding rules and to increase inter-coder reliability. Over the course of the project (but especially after the first two months), the research team and the observers held meetings and debriefings in order to discuss general operations of the project. During these meetings the observers

communicated coding dilemmas as a group (e.g., "I saw the officer do ___. How do I code this?"). These issues were addressed and clarified as a group, in the hopes of increasing reliability.

Advantages and Limitations of Field Observations. There are both advantages and disadvantages to field observations. One advantage is that field observations allow the researcher to obtain information which otherwise would be difficult or impossible to collect. Specifically, it allows the researcher to obtain as close to an "insider's view" into social phenomena as possible. Field observations do not rely on official records in order to make inferences. All official records are filtered in some way, whether by the public or the police. For example, arrest records only provide information on those individuals who are arrested. However, many individuals come to the attention of the police who commit a crime and are not arrested, and indeed, arrest itself is a very rare occurrence (Reiss 1971a). In other words, field observations allow the researcher to collect information on low visibility interactions between the police and the public. Official records do not allow the researcher to gather information on many of these police-citizen encounters.

One disadvantage or limitation to field observations is reactivity, or in other words, what is being observed would not have happened naturally but is to some extent due to the presence of the researcher. Reactivity due to the presence of an observer might greatly affect the validity of a study. This is especially problematic for observations of police officers, due to the fact that police officers are a unique occupational subculture that is often leery of outsiders (Skolnick 1966). Further, police work is highly autonomous, and officers are often not used to being accompanied by someone during their normal work routines. Officers may

over engage in behavior due to the fact that they are being observed and they may want to "show the observer a good time". For example, officers may wish to demonstrate specific police-related activities, such as running record checks on the computer or making arrests. This may result in researchers over estimating the prevalence of these phenomena (Mastrofski and Parks 1990). Conversely, officers may choose to reduce the vigor with which they do their work because they feel responsible for the safety of observers, and researchers would underestimate specific officer activities. Most importantly in both situations, the study is not collecting data on the normal work routine of officers, and thus inference and validity may be problematic.

Understanding the potential for reactivity, the research team took numerous steps in order to minimize such an occurrence. These safety measures included promising study confidentiality, fully explaining the purpose of the study to the officers, maintaining a long term orientation in the police districts, utilizing trained student observers and including questions in the survey instruments which prompt the observer to determine whether reactivity occurred (see Mastrofski et al. 1998). While it is naturally difficult to determine in many instances whether this occurred, these safeguards were implemented in order to minimize reactivity.

First, the research team guaranteed the police organization and its officers confidentiality. Individuals conducting research sponsored by the federal government have limited exemption from the normal legal process (Boruch, Reiss, Garner, Larntz and Freels 1991). This confidentiality is mandated by Federal law, which states, that information obtained through observations can not be used to identify any person for any purpose other

than the purpose for which it was obtained without the consent of the person being observed. In other words, the research staff may not divulge details of observations in any fashion other than through the data input process for the project, and observers can not be subpoenaed for administrative, civil or criminal court cases, without the consent of the persons furnishing such information. Additionally, any identifiers which could be attributed to individual officers have been stripped from the data set, and names of citizens or other members of the public were never recorded in field notes or on any other data collection instrument.

Second, the purpose of the study and role of observers were clarified to police personnel as to reduce the ambiguity of the project. As noted, the primary purpose of the larger study was to examine the workloads and routines of community police officers and beat officers in Cincinnati, through the observations of street-level police officers. As such, the role of observers during ride-a-longs was passive participant-observer, and the observers were not conducting ride-a-longs to evaluate or audit officers. Observers advised officers at the beginning of each observation period of the project's purpose, that they were not present to judge, critique or offer suggestions to officers. If officers asked observers to judge how they 'handled' a situation, observers were instructed to deflect the question and explain that they are not trained police officers and thus not in a position to offer a judgement.

The research team also communicated the confidentiality agreement and the purpose of the study to the police department and its officers in several other ways. The principal investigator attended a staff meeting of department administrators prior to beginning the study, outlining the rules of confidentiality and study purpose. Then, the principal

investigator and the site coordinator attended all roll calls and met with all COP officers in the city's five police districts and again outlined the confidentiality agreement and the study.

This confidentiality agreement and the appropriate role of the observer is important to note here because both contribute to reduced reactivity by the officer. Due to the fact that officers were advised that they were not being evaluated, that their actions observed during the ride-a-long could not be communicated in any which identifies them, and that passive observers would not get directly involved in the distribution of police services, officers may have been more apt to act as they normally would during the course of the observation period.

A third safeguard to reduce reactivity was a long term orientation of observers in the various police districts. In other words, we conducted observations over a 13 month period, and whenever possible, observers were assigned to ride in locations and districts more than once. The rationale for this tactic was that over time, officers would less likely to react to the presence of the observer, especially if the same observer conducted repeated observations in the same location and a rapport was initiated between observers and officers. There were several indications which led us to believe this approach was quite successful and that officers became more comfortable with observers over time. For example, very often officers would ask observers about the well being of other observers in the project ("How is Bob doing? I see him/her here all the time."). This suggests that the officers were not threatened by the presence of observers. Also, officers would make comments to observers along the lines of "I know you rode with Officer Jones, and she said you were all right". Thus, observers gained some level of legitimacy vicariously through conversations officers

had with one another.

Fourth, trained student observers were utilized as data collectors. Each observer was required to complete a training session prior to conducting any ride-a-longs (see Project Personnel section for further detail). Following the suggestions made by Mastrofski et al. (1998), we chose to utilize students in order to reduce officer reactivity. Students typically do not pose a threat to officers, for students are not authorities on policing. Officers may not feel like they were being judged or evaluated, and officers may feel less threatened when the observers ask for clarification of what is going on or why an officer chose one course of action over another one. At the same time, observers explained the purpose of the project and the purpose of their presence, and advised the officer that they were not 'interns' or 'explorers'. Officers were advised that the observer had conducted numerous ride-a-longs and that the observation was not new or a novelty to them. The purpose of this tactic was that we attempted to dissuade officers from "showing the observer a good time", as described previously.

Though several proactive safeguards were employed in order to reduce reactivity, it was inevitable that some change in officer behavior occurred during the course of the study. As such, observers were asked on every record which they entered into a database whether they believed officers or citizens reacted to their presence, and the nature of the reactivity. Observers reported that in only 0.7 percent of all activities did they perceive the officer to react to their presence. More specifically, they reported officer reactivity in only 0.5 percent of all encounters between the police and the public, and citizen reactivity in 1.1 percent of these encounters.

Census Data

In order to identify structural differences in communities, data were collected from the 1990 U.S. Census. Data were collected at the block group level. This was necessary because definitions of community boundaries were identified at this level of analysis. These community boundaries were obtained from the Cincinnati Police Division, who, as previously discussed, realigned assignments, beats and districts in order to conform with these parameters. Maps obtained from the CPD were compared with block group census maps in order to determine which block groups corresponded with communities in Cincinnati. Following a determination of which block groups were included in each community, the block group data were obtained and aggregated to the community level. The data for each of these variables were obtained from the 1990 Census (U.S. Department of Commerce 1994).[19]

At this point it is important to more fully discuss communities in Cincinnati. Communities in Cincinnati are recognized by the city as separate political entities, whereas each community has one council which exerts political and fiscal influence on the city government. The history of these communities dates back to the early 1900s, when these

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Though observations were conducted in 1997 and 1998, Census data from 1990 were used to create the community level variables. Certainly these data may be somewhat outdated. Though it would have been preferable to use estimations of population complexity, this was not possible. Census estimations are completed only for counties and large cities, and estimations are not available for tracts or blocks. Since variables were created using tract and block level data, estimations were inappropriate.

communities were separate villages or cities not yet incorporated by the city (Thomas 1986). In fact, prior research on social disorganization utilized Cincinnati communities due in part to their geographic and political characteristics (Shaw and McKay 1942). These communities have particular relevance for community policing and the current examination due to the fact that the CPD assigned COP officers to particular communities in order work collectively with the community councils to identify problems and form solutions (Cincinnati Police Division Community Policing Officer Position Classification 1998). As such, these communities do not merely represent macro geographic units such as police beats, census block groups or enumeration districts, as prior operationalizations of "community" suggested (Smith 1986). **Crime Data**

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

bases resource allocation decision-making on these crime data.

These data sources (systematic social observations of police officers, census information and crime data) were used in order to create the dependent and independent variables used in the analysis of officer and citizen behavior. The following sections more fully discuss the measurement of these variables, as well as a description of the samples used for each of the subsequent chapters.

DEPENDENT VARIABLES

The purpose of this study is to examine police officer and citizen behavior during encounters. Regarding officer behavior, this dissertation proposes to examine police officer's use of coercive control, including decisions to arrest and decisions to exercise order maintenance. Citizen responses to specific police officer requests for order maintenance will be explored. Therefore this dissertation addresses three related, but different dependent variables. Each of these variables will be explored more fully in Chapters 4, 5 and 6.

Decisions to Arrest a Citizen

The first dependent variable to be examined is police officer decisions to arrest a citizen. Arrest represents a deprivation of citizens' liberty by police officers. Prior research has defined arrest as the decision to take people into custody and thus deprive them (at least temporarily) of their liberty and freedom (Lafave 1965). Drawing upon this definition, arrest is operationalized as whether an officer took a citizen into custody during an encounter. This variable is a dummy variable and is will be coded 0 if the citizen was not taken into custody, and 1 if the citizen was taken into custody. Table 3.1 provides a summary of how each dependent variable was measured and coded.

Decisions to Use Order Maintenance

The second dependent variable is decisions by police officers to exercise order maintenance during encounters with citizens. Though these order maintenance activities do not represent formal law enforcement actions, they do occupy a critically important outcome in police-citizen encounters, and are particularly important during the era of community policing. Order maintenance is distinguished as whether the officer suggested, requested, negotiated, commanded or threatened citizens to take some action. These requests are often intended to return a situation to a state of normality. Though normality can be reached through the application of arrest, order maintenance is a tactic available to officers to achieve this end short of taking a person into custody. Therefore, order maintenance was operationalized as whether an officer requested a citizen to 1) leave another person alone, 2) cease disorderly behavior, 3) cease illegal behavior or 4) control another person or problem-maker. These particular requests were specifically designed to return an encounter to a state

Table 3.1 - Description of Dependent Variables

Name	Description	Measurement	Data Source
Arrest	Whether an officer took a citizen into custody during an encounter	0 = no arrest 1 = officer exercised arrest	Observations - Citizen instrument
Order Maintenance	Whether an officer requested a citizen to 1) leave another person alone, 2) cease disorderly behavior, 3) cease illegal behavior or 4) control another person or problem-maker	0 = no order maintenance 1 = officer exercised order maintenance	Observations - Citizen instrument
Citizen Compliance	Whether the citizen complied with officer requests for order	0 = Citizen did not comply	Observations - Citizen instrument

maintenance	1 = Citizen complied

of homeostasis. If the officer did not request the citizen to engage in any of these four behaviors, the variable was coded as 0. Conversely, if the officer made such a request, the variable was coded as 1 (see Table 3.1).

Citizen Decision-Making

The final dependent variable under examination is citizen behavior during encounters. As discussed previously, examining officer behavior represents only half of the equation, and while officers have the ability to exercise discretion during encounters, so too do citizens. This analysis follows directly from the above discussion on order maintenance, where citizen compliance with officer requests was analyzed as either being compliant or non-compliant. Citizen compliance is coded as 0 (if the citizen refused or gave no indication as to comply with officer requests) or 1 (if the citizen complied in the presence of the officer or promised to do so in the future) (see Table 3.1).

INDEPENDENT VARIABLES

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

Individual Level

The individual demographic characteristics of officers were measured using data taken from the observation coding forms, specifically, data on the ride instrument. Observers collected this information during each field observation by asking the officers a series of questions. Observers inputed data on a ride form, which was completed for each

observation period.

Officer gender is measured as a dummy variable, where 0 = male and 1 = female. Officer race will also be measured on a dummy scale, where 0 was assigned to white/Caucasian officers, and non-white was coded 1. Non-white officers included black/African Americans, Hispanic and Asian officers. This coding decision was made partially due to the low number of observations conducted with Asian (0.4%) officers and the absence of observations conducted with Hispanic officers. Table 3.2 provides a summary of how each individual level independent variable will be measured and coded.

Length of service was measured on an interval scale in number of years. The range of length of service is one to twenty-eight years, with an overall mean tenure of 8.63. Finally, education was measured on an ordinal scale indicating the highest level of education attained by the officer at the time of the observation. Education was coded as 1 = high school graduate or GED equivalent, 2 = some college or trade school, 3 = graduated college or trade

Table 3.2 - Description of Individual Level Independent Variables

Name	Description	Measurement	Data Source
Officer Gender	Gender of officer	0 = Male 1 = Female	Observations - Ride Instrument
Officer Race	Race of officer	0 = White 1 = Non-White	Observations - Ride Instrument
Length of Service	Number of years officer was member of CPD	Years	Observations - Ride Instrument
Level of Education	Highest educational attainment of officer	1 = High School 2 = Some college or trade school 3 = College or trade school degree 4 = Some post graduate school 5 = Advanced degree	Observations -Ride Instrument

school, 4 = some post-graduate work, and 5 = an advanced degree.[20]

Situational Level

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

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In Ohio individuals can not become peace officers without at least a high school diploma or GED equivelant, thus no lower educational attainment was necessary. Additionally, it would have been preferable to disaggregate "trade school" and "college" degree because these two types of educational experiences are quite different. However the original data did not delineate between these 2 types of data.

behavior.

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

The evidence variable taps the extent of evidence indicating the citizen had committed a criminal offense. Four different types of evidence were considered, namely 1) whether the officer observed the citizen engage in an illegal act or view circumstantial evidence of an illegal act, 2) whether the officer observed physical evidence that implicated the citizen to an offense, 3) whether the officer heard claims from others which implicated the citizen in an offense, and 4) whether the officer heard the citizen confess to the offense.[21] These data were used to create a four point evidence scale, specifically for each of these conditions, one point was added to the evidence scale. In other words, if the officer observed all four of these evidence criteria, the variable were scored as a 'four'. If none of these

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

criteria were observed, a score of zero were assessed. Therefore evidence is measured on a scale from zero to four, with higher values indicating higher levels of evidence. This is an interval level variable (see Table 3.3).[22]

In addition to legal variables, several extra-legal variables were also created for the analysis. Data for each of these extra-legal variables were obtained from the citizen coding instrument. Citizen gender was be measured as a dummy variable, and coded in the same fashion as officer gender (e.g., 0 = male, 1 = female). Citizen race was coded by observers using five different categories, including white/Caucasian, black/African-American, Hispanic, Asian, American Indian and "other or undetermined". Citizen race was then recoded as a dummy variable in a similar fashion as officer race (e.g., 0 = white, 1 = non-white). Though variation in officer and citizen behavior between racial minorities may be lost by collapsing this category, there were very few observed encounters between police and Hispanics (0.5%), Asian (0.4%), American Indians (0.0%) and other racial groups of citizens (0.3%). As such, citizens with these racial characteristics was combined with black/African-

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This operationalization of evidence assumes all evidence criterion is given equal explanatory value, or in other words, it is measured as quantity versus quality of evidence. Unfortunately the existing data did not allow for further analysis of evidence quality.

Americans (who made up 50.1%) and categorized as non-white.[23]

Citizen age was coded by utilizing the following eight categories: preschool, 6-12 years, 13-17, 18-20, 21-29, 30-44, 45-59 and 60+. As described in Chapter 2, there are theoretical justifications to believe police officers may interact with juveniles differently due to their hypothesized reduced status or reduced 'respectability' (Black 1976). Further there is some commentary which states community police officers and beat officers may interact with juveniles in different ways. COP officers may be less likely to arrest or use order maintenance during encounters with juveniles because of their role model status with juveniles (Bazemore and Senjo 1997; Cordner 1995). In contrast, other research found officers who lack pro- community policing attitudes are more likely to arrest juveniles (Mastrofski et al. 1995). Therefore, citizen age was recoded where 0 represents citizens 18 and older, and 1 representing juveniles preschool to age 17.

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Hispanic is an ethnicity, not a separate race, and in fact Hispanic citizens could be classified as either white or black. However, the original data collection instrument coded Hispanic citizens as a separate race (see question 9 in the Citizen Instrument). Observers were not able to code citizens as white-Hispanic or black-Hispanic. As such Hispanic citizens, for the purposes of this dissertation, will be classified within the minority group of 'non-white'.

Citizen demeanor attempts to measure the attitude and deference the citizen pays to the officers' authority or the officers' requests. Originally, observers coded citizen demeanor on a five category scale: 1 = very deferential (citizen does everything officer wants and makes attempts to please the officer), 2 = merely civil (citizen does what officer wants, but doesn't go out of way to please officer), 3 = passive aggressive (citizen does what officer wants, but body language or verbal cues hint that the citizen is upset), 4 = moderately hostile (citizen verbally expresses that the citizen is upset with the officer, and this is obvious to the officer as well), and 5 = highly hostile or disrespectful (blatant disrespect, swearing. "This is bullshit", extreme personal insults about officer). Higher values on this ordinal scale indicated greater levels of disrespect.[24]

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During encounters where the citizen was arrested, observers coded citizen demeanor before the citizen was arrested. This was done because a citizen's demeanor could change dramatically after an arrest, and because pre-arrest demeanor would obviously be more likely to influence officer decision making. Additionally, observers coded demeanor as legally permissible behavior (Klinger 1994).

Several other operationalizations of the variable have been used in extant research examining the influence of demeanor. Lundman (1994:637) argued "there is no basis for arguing that one representation is superior to another", and in the current data different measurements of the same construct revealed high levels of inter-correlation.[25] In most of the recent research demeanor has been operationalized as a dichotomous variable, with 1 representing either disrespect or politeness (Lundman 1996; Smith 1987; Worden and Shepard 1996). This was done because the differences in citizen demeanor is a matter "of kind rather than degree, for the measurement of which an ordinal scale is inappropriate" (Worden et al. 1996: 330). In other words ordinal scales fail to capture the threshold of antagonism which would most likely impact an officers behavior. Therefore demeanor was recoded into a dichotomous scale, where 0 = deferential, civility and 1 = moderately or highly disrespectful.

As discussed in Chapter 2, recent empirical research reported that in addition to demeanor it is important to control for criminal behavior committed in the presence of the officer (Klinger 1994, 1996a, 1996b; Worden and Shepard 1996). In accordance with this research a control variable of in-presence crime was coded as 0 (no crime), 1 (minor crime) and 2 (violent or serious crime) if there was a criminal act committed by the citizen in the presence of the observed officer.

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Specifically, a three item ordinal scale was correlated to the current measurement at .88 ($p < .01$); a four category measurement where civility and very deferential was collapsed was correlated at .77 ($p < .01$); and the original five category demeanor scale was correlated at .81 ($p < .01$).

Measurements of officer authoritativeness and disrespect was used in the analysis of citizen behavior. Officer authoritativeness represents the manner in which the officers requested citizens to do something in order to maintain order. Observers coded officer authoritativeness on a six category scale: 1 = suggested, where it was merely a suggestion by the officer, without any pressure, 2 = requested, where the officer asked the citizen to do it, 3 = persuasion, when the officer tries to convince the citizen to do something, 4 = negotiation, where the officer offers to do something that will benefit the citizen if the citizen will do what the officer wants, 5 = commanded citizen, where the officer commands the citizen to do it (the officer draws explicitly or implicitly upon his authority to command citizens), and 6 = threatened, where the officer tells the citizen that they will punish the citizen does not comply. This variable was measured as a dichotomous variable of whether the officer commanded or threatened the citizen.[26] This was done because officers commanding or threatening a citizen is more confrontational than requests. The end result is a nominal dummy variable where 0 = suggest, request, persuade or negotiate and 1 = command or threaten (see Table 3.3)

Officer disrespect was measured as a dichotomous variable indicating whether the officer displayed disrespect to the citizen during the encounter. Disrespectful officers may be more likely to elicit a noncompliant response from citizens (Mastrofski et al. 1996).

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Though some information may be lost in the variation of how the request was conveyed, it is substantively important to determine between the encounters where the officer authoritatively enacted control over a citizen. With lower levels of requests (e.g., persuade, request or negotiate) the citizen may feel more free to resist acquiescence than when an officer threatens or commands them to do something.

Examples of disrespectful behavior by the officer included unnecessary, sarcastic remarks, racial or lifestyle slurs, profanity directed at the citizen or shouting at the citizen. This variable was coded as 0 = no disrespectful behavior observed and 1 = disrespectful behavior observed.

Table 3.3 - Description of Situational Level Independent Variables

Name	Description	Measurement	Data Source
Offense Seriousness	Level of seriousness of the offense of citizen during encounter	0 = No crime 1 = Minor offense/ misdemeanor 2 = Serious offense/felony	Observations - Citizen Instrument
Evidence	Extent of evidence observed, including circumstantial, physical, claims from others and confession	0 = No evidence 1 = One evidence criteria 2 = Two evidence criterion 3 = Three evidence criterion 4 = Four evidence criterion	Observations - Citizen Instrument
Citizen Gender	Gender of citizen	0 = Male 1 = Female	Observations - Ride Instrument
Citizen Race	Race of citizen	0 = White 1 = Non-White	Observations - Citizen Instrument
Citizen Age (juvenile)	Whether citizen was between 13-17 years old	0 = 18 + 1 = Preschool - 17	Observations - Citizen Instrument
Demeanor	Level of deference displayed by citizen	0 = Deferential 1 = Not deferential	Observations - Citizen Instrument
In-presence Crime	Whether crime was committed in presence of officer	0 = No crime 1 = Crime in officer's presence	Observations - Citizen Instrument
Intoxication	Whether citizen was under influence of drugs or alcohol	0 = No signs of intoxication 1 = signs of intoxication	Observations - Citizen Instrument
Resident	Whether citizen lives, works or owns property near encounter	0 = Non-resident 1 = Resident	Observations - Citizen Instrument
Citizen Bystanders	Number of citizens at the scene of encounter	Number	Observations - Encounter Instrument
Officer Bystanders	Other officers at the scene of encounter	Number	Observations - Encounter

			Instrument
Officer Authoritative-ness	Manner which the officer requested citizen behavior	0 = Request, suggest, negotiate (non-threatening) 1 = Command, threaten	Observations - Citizen Instrument
Officer disrespect	Whether officer was disrespectful to citizen	0 = No disrespect 1 = Officer displayed disrespect	Observations - Citizen Instrument

Citizen intoxication was also assessed by observers. Observers reported whether the citizen involved in the encounter showed any signs of intoxication, whether by alcohol or drugs. This variable was coded 0 for no signs of intoxication and 1 for any signs of intoxication on the part of the citizen.

Characteristics of the physical and social setting were coded on either the encounter instruments or the citizen instruments. As described in Chapter 2, visibility of the encounter was measured in two different ways: number of citizen bystanders at the scene and the number of other officers and department supervisors at the scene. Other members of the public present during the encounter (i.e., citizen bystanders) was recorded by observers on the encounter instruments. Specifically, observers indicated the maximum number of private citizens present at the scene who could reasonably observe the encounter. This variable ranges from 0 to 12, and is measured on an interval scale.

The number of citizen bystanders will be used as a measurement of visibility for the arrest and order maintenance analyses. It is reasonable to believe COP and beat officers may act differently during encounters involving more citizens. Specifically, COP officers may be less likely to arrest or use order maintenance in groups because they may not wish to damage relationships they have cultivated with neighborhood residents (Bayley 1988). On the other hand, there is some commentary which sates beat officers may act more aggressively, making an arrest in group situations because of the desire to control a situation (Muir 1977).

Visibility was measured as the number of officers present during the encounter. This rationale rests upon the fact that as the number of officers increase, citizens may feel more

pressure to comply with officers' wishes. This 'show of force' may increase citizen compliance because more officers may shift the coercive balance of power toward the police (Mastrofski et al. 1996). Observers recorded the maximum number of other police division officers and supervisors present at the scene. Often officers would "back up" the observed officer (or vice-versa), or more than one officer would be dispatched to an encounter. This variable ranges from 0 to 25, and was measured on an interval scale.

Whether a citizen was a resident of the community where the encounter occurred may also impact officers and citizens behavior. Residents may be seen as more legitimate community members and be less likely to elicit an arrest or order maintenance response from officers. At the same time residents may be more likely to comply with officer's requests. This dummy variable was coded 0 for non-residents and 1 where there was any indication the citizen lives, owns property or works in the area where the encounter occurred.

Community Level

Data on neighborhood structural variation was obtained from either the crime data or census data outlined above.[27] The crime rate for the community was calculated by using crimes known to the police collected by the CPD during the project period (April 1, 1997 to April 30, 1998), and was computed using all of the crimes as classified by the FBI as Part I or Part II crime. A crime rate for each community was computed by summing all of the Part I and Part II crimes known to the police during the project period and dividing by the

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

number of persons residing in the community.[28] As such crime rate was a ratio level variable. Table 3.4 summarizes the community level independent variables.

Residential stability was measured in two separate ways. First, the proportion of persons not living in the community for at least five years was computed. This was calculated by using the number of persons indicating that they had not resided within the same household during the full five year period before the Census data were collected, and dividing by the total number of persons residing in the community. This variable is a ratio level variable, and ranges from .33 to .79. Additionally, percent renter occupied housing units was computed by dividing the total number of rental occupied housing units by the total number of occupied housing units. This variable is a ratio level variable, and ranges from .22 to .98. It follows that higher scores for each of these indicators denote higher levels of residential instability.

Racial composition of the community was calculated by dividing the total number of non-white residents by the total number of residents. As discussed in Chapter 2, this measure taps the proportion of non-white for each community. This variable is a ratio level

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Conceptually it makes sense to evaluate the influence of Part I and Part II crimes separately because they measure two different constructs. Specifically, Part II crimes are a better measure of arrest data rather than crime per se, they are considered much less serious than Part I crimes and are probably less valid or reliable than their counterparts due to under-reporting. However because these two crime types were closely related statistically they were combined into one overall measurement of crime ($b = .729$; $p < .01$).

variable, and ranges from .01 to .97. It follows that higher scores for this variable indicate higher proportions of racial threat populations.

Economic distress was measured by calculating the proportion of persons living in poverty, for which poverty status could be determined. This was done by dividing the number of persons living below the poverty line by the total number of persons within the community. **Table 3.4 - Description of Community Level Independent Variables**

Name	Description	Measurement	Data Source
Crime Rate	Proportion of Part I and Part II crimes per community resident	Number of crimes divided by community population	Crime Data - 1995
Residential Mobility	Proportion of residents not residing in community 5 years before census	Number persons living elsewhere divided by community population	Census Data - 1990
Percent Renter Occupied	Proportion of rental occupied dwelling units in community	Number renter occupied units divided by total occupied dwelling units	Census Data - 1990
Percent Non-white	Proportion of non-white residents in community	Number African-American, Hispanic, American Indian, Asian and other persons divided by community population	Census Data - 1990
Percent Poverty	Proportion of persons living below the poverty line	Number of persons living below the poverty line divided by total number of persons in community for which poverty status could be determined	Census Data - 1990
Percent Single Family	Proportion of families with children with only one parent present	Number of families with children with only one parent present divided by total number of families with children	Census Data - 1990
Community Factor	Factor	Sum of percent renter, percent non-white, percent poverty and percent single family each multiplied by their respective factor weights.	Census Data - 1990

Percent below poverty is a ratio level variable, and ranges from .01 to .78, where higher

values indicate higher levels of community economic distress.[29]

Finally, household structure was determined by calculating the proportion of families in the community with children where there is only one parent present (e.g., proportion single parent households). This variable was created by dividing number of single-parent families by the total number of families within the community. This ratio level variable ranged from .00 to .98, where higher values indicate higher proportions of single parent families. The data for each of these variables were obtained from the 1990 Census of Population (U.S. Department of Commerce 1994).

One problem with including several different community level correlates of behavior is the increased risk of multicollinearity. One solution to this problem is to create a community level variable using factor analysis prior to the estimation of the models. Hence, the five community level variables were factor analyzed. One of these variables, percent of the population living in the community less than five years (hereafter residential mobility) did not load into a factor and therefore will be analyzed as a separate variable. The remaining variables (percent single family households, percent renter occupied housing, percent nonwhite and percent living in poverty) combined into one latent factor (see Table

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The Census reported the number of persons above and below the poverty line for individuals for which poverty status could be determined. Though status level could not be determined for all persons surveyed by the Census, those for whom status could not be determined represented a minority of the population. In fact, in Cincinnati poverty could be determined for 96.41 percent of the population, and thus should not significantly affect the measurement of the variable.

3.5).

Principal components factor analysis indicated that these variables tap the same dimension, with the eigenvalue equal to 3.014. The remaining factors all had eigenvalues of less than 0.668. The total item inter-correlation suggests there is internal consistency with these four items and that they tap the same underlying construct (Cronbach's Standardized Alpha = .8639). The items addressing community disorganization loaded on the factor between 0.787 and 0.948.

In light of the above analysis, a community factor was created in the following manner. The resulting scores range between -1.709 and 2.059. Based on the coding of these variables used in the scale, low scale scores are representative of lower levels of community disorganization and distress, while higher scores correspond to greater levels of community disorganization and distress.

Table 3.5 - Factor Analysis of Community Level Variables

Indicator	Factor Loading	Factor Score
Percent Single Family Households	.948	.314
Percent Renter Occupied Housing Units	.812	.269
Percent Nonwhite Population	.787	.261
Percent Below Poverty Line	.915	.304
Eigenvalue	3.014	
Cronbach's Alpha	.8639	

Though creation of a factor has several benefits, including reducing the risk of

multicollinearity and reducing the number of predictors in the context of relatively small samples, it also has limitations. Namely the factor, by itself, has little substantive meaning. Though the factor can be interpreted in that higher values represent greater overall population complexity, I am unable to determine the influences of any one of the indicators within the factor on the variable of interest. Regardless this procedure was necessary in order to simultaneously control for the relative influences of these indicators.

DESCRIPTION OF SAMPLES

Observed Officers: Larger Project Sample

From April 1, 1997 through April 30, 1998, Frank (1996) and his research team conducted 442 systematic social observations with officers of the Cincinnati Police Division. Observed officers in the larger study were predominately male (83%), white (57.3%) and have served for an average of 8.5 years. Additionally, 43.0 percent attained at least a college or trade school degree. Of these observations, 206 (46.6%) were conducted with 36 different community policing officers.

During these observations, observers recorded data on encounters between COP officers and 1,103 different citizens. Of these encounters, 417 (37.8%) were full encounters, 442 (38.3%) were brief, and 264 (23.9%) were casual. At the same time , while 236 (53.4%) were conducted with 136 different beat officers. During these observations, observers recorded data on encounters between beat officers and 1,568 different citizens. Of these encounters, 1,014 (64.7%) were full encounters, 447 (28.5%) were brief, and 107 (6.8%) were casual.

Citizen Compliance Sub-sample

The sub-sample analyzed for citizen behavior includes all encounters where officers made an order maintenance request of citizens. These encounters are examined when there was a specific request made by the police officer designed to change the citizen's behavior, and thus inclusion into this sub-sample was based largely on whether the observed officer requested the citizen engage in certain types of behavior. This particular sub-sample includes

all encounters that were characterized as those in which a citizen was requested to take a particular action by the officer. The rationale is that these encounters represent opportunities for citizens to exercise their discretion when confronted with government authority.[30]

For this model, two additional correlates will be included which could influence the likelihood of citizen compliance, namely the manner in which the officer conveyed their

Table 3.6 - Description of Citizen Behavior Sub-Sample

	Values	Frequency*	
Dependent Variable		Beat Officers	COP Officers
Citizen Compliance	0 = Citizen did not comply	61 (24.5%)	17 (14.4%)
	1 = Citizen complied	188 (75.5%)	101 (85.6%)
Individual Level			
Officer Gender	0 = Male	203 (83.5%)	99 (83.9%)
	1 = Female	40 (16.5%)	19 (16.1%)
Officer Race	0 = White	142 (59.4%)	57 (48.3%)
	1 = Non-white	97 (38.8%)	61 (51.7%)

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This sub-sample varies slightly from that described for order maintenance in that all encounters where officers made requests were analyzed, regardless of the role of the citizen.

Length of Service	Years	$\bar{x}$ = 5.50; sd = 5.04	$\bar{x}$ = 10.92; sd = 6.59
Level of Education	1 = High School	37 (14.9%)	16 (13.6%)
	2 = Some trade/college	106 (42.6%)	72 (61.0%)
	3 = College/Trade Grad.	82 (32.9%)	30 (25.4%)
	4 = Some advanced	13 (5.2%)	0 (0.0%)
	5 = Advanced degree	11 (4.4%)	0 (0.0%)
Situational Level			
Offense Seriousness	0 = No crime	133 (53.8%)	51 (43.6%)
	1 = Minor offense/ misd.	104 (42.1%)	61 (51.7%)
	3 = Serious offense/ Felony	10 (4.0%)	5 (4.3%)
Evidence	0 = No evidence observed	95 (38.2%)	35 (29.7%)
	1 = One evidence criteria	72 (28.9%)	36 (30.5%)
	2 = Two evidence criterion	49 (19.7%)	21 (17.8%)
	3 = Three evidence criterion	23 (9.2)	22 (18.6%)
	4 = Four evidence criterion	10 (40%)	4 (3.4%)
Citizen Gender	0 = Male	164 (65.9%)	87 (73.7%)
	1 = Female	85 (34.1%)	31 (26.3%)
Citizen Race	0 = White	79 (31.7%)	45 (38.1%)
	1 = Non-white	170 (68.3%)	73 (61.9%)
Citizen Age (juvenile)	0 = 18+	207 (83.1%)	78 (66.1%)
	1 = Preschool - 17	42 (16.9%)	40 (33.9%)
Officer Authoritativeness	0 = Request/suggest	124 (49.8%)	58 (49.2%)
	1 = Command, threaten	125 (50.2%)	60 (50.8%)
Officer disrespect	0 = No disrespect	221 (90.6%)	105 (89.7%)
	1 = Officer disrespectful	23 (9.4%)	12 (10.3%)
Citizen Intoxication	0 = No	194 (77.9%)	100 (84.7%)
	1 = Yes	55 (22.1%)	18 (15.3%)
Resident	0 = Not resident	108 (43.4%)	51 (43.2%)
	1 = Resident	141 (56.6%)	67 (56.8%)
Citizen Bystanders	Number	$\bar{x}$ = 3.15; sd = 2.94	$\bar{x}$ = 2.67; sd = 2.85
Other Officers	Number	$\bar{x}$ = 1.28; sd=1.55	$\bar{x}$ = 0.98; sd = 1.42
Community Level			
Crime Rate	Rate	$\bar{x}$ = .17; sd = .12	$\bar{x}$ = .17; sd = .13
Percent less than 5 years	Percent	$\bar{x}$ = .53; sd = .09	$\bar{x}$ = .52; sd = .09
Community Factor	Factor	$\bar{x}$ = 1.69; sd = .74	$\bar{x}$ = 1.47; sd = .19
n		249	118

*Missing values for each variable not reported

request, and whether the officer was disrespectful to the citizen. In addition, certain hypothesized correlates of officer decisions (i.e., citizen demeanor and in-presence crime) were not included as these characteristics should not influence citizen compliance (n = 365). Table 3.8 provides frequencies on the independent variables to be used in the analysis of citizen behavior.

Order Maintenance Sub-sample

Encounters in which order maintenance was analyzed also represents a sub-sample of the total number of encounters for it is not reasonable to assume order maintenance is a possible or likely option in all encounters. This sub-sample is a collection of encounters where is it reasonable to assume the officer could have exercised order maintenance. In order to be included in the order maintenance cross section, the citizen must be characterized in the role of suspect or disputant.[31] The rationale for this decision is that other roles (such as service recipient, acquaintance or victim) would most likely not be amenable to order

Table 3.7 - Description of Order Maintenance Sub-Sample

	Values	Frequency*	
Dependent Variable		Beat Officers	COP Officers
Order Maintenance	0 = No	275 (58.8%)	90 (49.7%)
	1 = Yes	193 (41.2%)	91 (50.3%)

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Citizens were classified by observers as 'suspect' when that citizen was a peace disturber, wrongdoer or a person who was complained about. 'Disputants' were those whose role of either suspect or victim is unclear, or may be both. Appendix V further describes the eleven possible citizen roles used in this study.

Individual Level			
Officer Gender	0 = Male	387 (83.8%)	149 (82.3%)
	1 = Female	75 (16.2%)	32 (17.7%)
Officer Race	0 = White	274 (60.5%)	84 (46.4%)
	1 - Non-white	179 (39.5%)	97 (53.6%)
Length of Service	Years	$\bar{x}$ = 5.70; sd = 5.21	$\bar{x}$ = 11.75; sd = 7.46
Level of Education	1 = High School	86 (18.4%)	23 (12.7%)
	2 = Some trade/college	206 (44.0%)	114 (63.0%)
	3 = College/Trade Grad.	135 (28.8%)	41 (22.7%)
	4 = Some advanced	22 (4.7%)	1 (0.6%)
	5 = Advanced degree	19 (4.1%)	2 (1.1%)
Situational Level			
Offense Seriousness	0 = No crime	316 (67.8%)	105 (58.3%)
	1 = Minor offense or misd.	143 (30.7%)	71 (39.4%)
	3 = Serious offense or Felony	7 (1.5%)	4 (2.2%)
Evidence	0 = No evidence observed	217 (46.4%)	75 (41.4%)
	1 = One evidence criteria	126 (26.9%)	61 (33.7%)
	2 = Two evidence criterion	70 (15.0%)	28 (15.5%)
	3 = Three evidence criterion	44 (9.4%)	14 (7.7%)
	4 = Four evidence criterion	11 (2.4%)	3 (1.7%)
Citizen Gender	0 = Male	285 (60.9%)	129 (71.3%)
	1 = Female	183 (39.1%)	52 (28.7%)
Citizen Race	0 = White	181 (38.7%)	72 (40.0%)
	1 - Non-white	287 (61.3%)	108 (60.0%)
Citizen Age	0 = 18+	403 (86.1%)	123 (68.0%)
	1 = Preschool - 17	65 (13.9%)	58 (32.0%)
Citizen Demeanor	0 = Deferential	380 (86.4%)	155 (85.6%)
	1 = Not Deferential	60 (13.6%)	21 (11.6%)
In Presence Crime	0 = No crime	422 (90.2%)	155 (85.6%)
	1 = Non-violent crime	46 (9.8%)	26 (14.4%)
	2 = Violent crime	0. (0.0%)	0 (0.0%)
Citizen Intoxication	0 = No	410 (87.6%)	168 (92.8%)
	1 = Yes	58 (12.4%)	13 (7.2%)
Citizen Bystanders	Number	$\bar{x}$ = 2.58; sd = 2.68	$\bar{x}$ = 2.56; sd = 2.57
Officer Bystanders	Number	$\bar{x}$ = 1.03; sd = 1.60	$\bar{x}$ = .77; sd = 1.19
Resident	0 = Not resident	236 (50.4%)	86 (47.5%)
	1 = Resident	232 (49.6%)	95 (52.5%)
Community Level			
Crime Rate	Rate	$\bar{x}$ = .17; sd = .13	$\bar{x}$ = .17; sd = .11

Residential Mobility	Percent	$\bar{x}$ = .52; sd = .09	$\bar{x}$ = .51; sd = .08
Community Factor	Factor	$\bar{x}$ = 1.62; sd = .68	$\bar{x}$ = 1.54; sd = .68
n		468	181

*Missing values for each variable not reported

maintenance dispositions. Additionally, the citizen was not ultimately arrested by the officer. The rationale for this decision is that arrest represents a higher quantity of coercive authority, and as such the cases remaining in this sub-sample represent encounters in which the officer could have reasonably exercised order maintenance, and this action represented the highest quantity of coercive authority demonstrated by the officer (n = 649). Table 3.7 provides frequencies on the independent variables to be used in the analysis of order maintenance decision making.

Arrest/No Arrest Sub-sample

Certainly not all encounters between the police and the public end in arrest, and in fact, not all encounters could be reasonably expected to end in arrest. Therefore, it is prudent to analyze only encounters in which an arrest of the citizen was a possible outcome, or in other words, only analyze a sub-sample of the total number of observed encounters between officers and a citizens. In order to be included in this particular sub-sample, probable cause must be present during the encounter to believe the citizen has committed or is committing a criminal offense. This criterion was chosen for two related reasons. First, probable cause

Table 3.8 - Description of Arrest Sub-Sample

	Values	Frequency*	
Dependent Variable		Beat Officers	COP Officers
Arrest	0 = No	163 (66.5%)	79 (73.8%)

	1 = Yes	82 (33.5%)	28 (26.2%)
Individual Level			
Officer Gender	0 = Male	206 (84.1%)	91 (85.0%)
	1 = Female	39 (15.9%)	16 (15.0%)
Officer Race	0 = White	141 (59.2%)	56 (52.3%)
	1 - Non-white	97 (40.8%)	53 (47.7%)
Length of Service	Years	$\bar{x}$ = 5.64; sd = 5.38	$\bar{x}$ = 10.17; sd= 5.75
Level of Education	1 = High School	43 (17.6%)	14 (13.1%)
	2 = Some trade/college	111 (45.3%)	66 (61.7%)
	3 = College/Trade Grad.	64 (26.1%)	25 (25.2%)
	4 = Some advanced	19 (7.8%)	0 (0.0%)
	5 = Advanced degree	8 (3.3%)	0 (0.0%)
Situational Level			
Offense Seriousness	0 = No crime	0 (0.0%)	0 (0.0%)
	1 = Minor offense/misd.	222 (91.0%)	98 (92.5%)
	2 = Serious offense/felony	22 (9.0%)	8 (7.5%)
Evidence	0 = No evidence observed	30 (12.2%)	5 (4.7%)
	1 = One evidence criteria	64 (26.1%)	45 (42.1%)
	2 = Two evidence criterion	68 (27.8%)	30 (28.0%)
	3 = Three evidence criterion	58 (23.7%)	22 (20.6%)
	4 = Four evidence criterion	25 (10.2%)	5 (4.7%)
Citizen Gender	0 = Male	168 (68.6%)	87 (81.3%)
	1 = Female	77 (31.4%)	20 (18.7%)
Citizen Race	0 = White	85 (34.7%)	41 (38.3%)
	1 = Non-white	160 (65.3%)	66 (61.7%)
Citizen Age (juvenile)	0 = 18+	205 (83.7%)	65 (60.7%)
	1 = Preschool -17	40 (16.3%)	42 (39.3%)
Citizen Demeanor	0 = Deferential	183 (79.2%)	85 (81.0%)
	1 = Not Deferential	48 (20.8%)	20 (19.0%)
In Presence Crime	0 = No crime	198 (80.8%)	72 (67.3%)
	1 = Non-violent crime	47 (19.2%)	33 (30.8%)
	2 = Violent crime	0 (0.0%)	2 (1.9%)
Citizen Intoxication	0 = No	203 (82.9%)	93 (86.9%)
	1 = Yes	42 (17.1%)	14 (13.1%)
Citizen Bystanders	Number	$\bar{x}$ = 2.54; sd = 2.77	$\bar{x}$ = 2.91; sd = 2.98
Officer Bystanders	Number	$\bar{x}$ = 1.37; sd = 1.79	$\bar{x}$ = 1.11; sd = 1.24
Order Maintenance	0 = No Order Maintenance	136 (55.5%)	40 (37.4%)
	1 = Order Maintenance	109 (44.5%	67 (62.6%)
Compliance	0 = Citizen complied	206 (84.1%)	98 (91.6%)
	1 = Citizen did not comply	39 (15.9%)	9 (8.4%)

Resident	0 = Not resident 1 = Resident	141 (57.6%) 104 (42.4%)	53 (49.5%) 54 (50.5%)
Community Level			
Crime Rate	Rate	$\bar{x}$ = .18; sd = .13	$\bar{x}$ = .16; sd = .09
Residential Mobility	Percent	$\bar{x}$ = .52; sd = .08	$\bar{x}$ = .51; sd = .08
Community Factor	Factor	$\bar{x}$ = 1.72; sd = .74	$\bar{x}$ = 1.44; sd = .59
n		245	107

*Missing values for each variable not reported

is required by Ohio statute in order to actuate an arrest. Second, this dissertation seeks to analyze discretionary behavior by both officers and citizens. If no probable cause existed during an encounter, it is reasonable to infer that arrest was not a viable option for the officer and therefore an analysis that included such events would be meaningless.

Additionally, encounters involving an arrest for an outstanding warrant were not included in the sub-sample. The justification for such follows the above, in that the presence of a warrant decreases the ability for the officer to choose between various courses of action and inaction because an arrest of the citizen is preferred (if not mandatory) during these encounters. In short, the final result is a sample that consisted of arrest eligible persons where no warrant was present, and as such the officer had the maximum discretionary decision-making power at their disposal (n = 353). Table 3.8 provides frequencies on the independent variables to be used in the analysis of the arrest decision making.

ANALYSIS

The intent of this dissertation is to examine the factors which influence discretion of officers and citizens during encounters. Each dependent variable was analyzed separately and correlates was examined for each type of officer (e.g., COP and beat). This was done in order to determine whether the correlates of officer and citizen behavior were consistent between officer types. In order to do this the following process was utilized for each of the three dependent variables.

Analysis of each dependent variable proceeded in four stages. First, bivariate models and correlation matrices were estimated for each of the three levels (individual, situational and community). This was conducted in order to examine model adequacy. Multicollinerarity was tested by examining the bivariate relationships between each of the independent variables where pairs of variables correlated at levels greater than 0.7 suggest the presence of collinearity. Then, in accordance with the method described by Berry and Feldman (1985), each of the independent variables was regressed on the other independent variables, and the R^2 for each analysis examined. R^2 values of 0.50 suggest multicollinearity between collections of the independent variables. If no multicollinearity is discovered, the analysis proceeded to the next stage.

Second, separate logistical regression models were estimated within each level of independent variables for beat and COP offices. Estimates were computed for individual, situational and community level correlates separately, yielding three (3) models for COP officers, and three (3) models for beat officers. Stated more clearly, individual level correlates were compared between the two officer types and results discussed. This was

repeated for situational and then the community level correlates. Both additive and multiplicitive models were estimated in order to discover whether the officer's assignment had a direct or indirect effect on decision making.[32]

Third, two-stage weighted least squares regression models were estimated including correlates at different levels of analysis. This allowed for an examination of the influences of correlates on the dependent variable while simultaneously controlling for the influences of variables at different levels of analysis. Two-stage least squares is required because of the multiple levels of predictors (individual and aggregate level).

Given the data it was necessary to conduct a two-stage weighted least squares for several reasons. First, heteroskedasticity may exist among the individual and aggregate level variables. This is particularly true for aggregate level correlates measured as proportions because the denominator in the proportion drives the magnitude of the overall estimate. In other words, communities with greater numbers of observed encounters will also contain correspondingly lower proportions. Summary statistics calculated with smaller numbers are less stable. Differences in error term variances may exist when studying aggregate level units, inflating the standard error and making it more difficult to reject the null hypotheses (Hanushek and Jackson 1977).

Second, including individual and aggregate level variables in the same model results in biased statistical tests. The sample size of the community level variables are artificially

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In the direct effects models a dummy variable will be included reflecting the officer's assignment (0 = COP; 1 = beat).

inflated to the sample size of the individual level variables, making it easier to reject the null hypothesis. This is due to the fact that variation in the models is based on the number of citizens encountered. However community level correlates can only vary by the number of communities where observations occurred, thus there are fewer degrees of freedom for aggregate but not individual level variables.

Analysis of the data utilizing two-stage weighted least squares remedies these problems. First, aggregate level predictors are weighted by the square root of the number of observed encounters within each neighborhood, inducing homoskedastic error terms (Hanuskek and Jackson 1977: 152-163). This is necessary because the error terms associated with the observations have unequal variances. This weighting procedure improves the efficiency of these estimates. The weights take into consideration the variances at different levels of the independent variables, eliminating heteroskedasticity from the original disturbances (Blalock 1979). Second, new estimates on the dependent variable are created by computing the log-odds ratio of the proportion of citizens arrested within each community. This reduced the occurrence of biased statistical tests on the aggregate level predictors. By performing these corrections prior to estimation of the two stage analysis, the problems associated with including individual and aggregate level predictors in the same analysis were eliminated.

The remaining analysis proceeds in the following manner: First, additive two-stage weighted least squares estimates are calculated for individual, situational and community level correlates in order to examine the direct effects of assignment on decisions to arrest. Second, multiplicative analyses are conducted for encounters involving beat and COP

officers separately in order to examine the interaction effect of assignment on the different correlates of arrest. Third, a comparison of the coefficients are conducted between the two multiplicative models in order to determine whether the correlates of arrest influence beat officers differently than COP officers. Finally, results from all of the analyses presented in this chapter are synthesized and discussed.

Fourth, a comparison of coefficients for COP and beat officers will be conducted in order to test for significant differences in the correlates of behavior between officers. This will be done by employing the equation derived by Clogg, Petkova and Haritou (1995).[33] If significant differences exist, this suggests that the correlates exert different influences on the behavior of the encounter participants due to the officer's assignment (e.g., COP or beat). This would indicate COP officers act differently than beat officers in the same circumstances. This four stage process was repeated for all three dependent variables.

Strengths and Limitations of the Current Study

This dissertation attempts to fill a void in the current research. First, much of the extant research on police officer and citizen behavior was conducted prior to the era of community policing. This is particularly true for research which utilized data from systematic social observations. This dissertation uses data collected in 1997 and 1998, in a large police department actively engaging in community policing. Further, data were collected from both COP and traditional beat officers, thereby allowing direct comparisons between these types of officers. Examinations of the influences of legal and extra-legal

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The equation ($Z = b_1 - b_2 / SQRT (SE\ b_1 + SE\ b_2)$) is most appropriate and will be utilized due to same size, as described in Brame, Paternoster, Mazerolle and Piquero (1998) and Paternoster, Brame, Mazerolle and Piquero (1998).

correlates of behavior may reveal these factors dispose COP officers differently than beat officers.

Second, there have been changes in the composition of police organizations since data were collected for previous studies. These changes may result in differing influences of individual level correlates on police officer behavior. Third, recent legislation toward pro-arrest policies, particularly in domestic violence and DUI enforcement, may mitigate the influences of victim preference for arrest. These legislative mandates attempts to routinize officer behavior, and thus decrease the level of discretion an officer enjoys during encounters with citizens.

Finally, prior operationalizations of "community" have been limited. This dissertation used data from a city with distinct geographic communities which political power on the larger city for resources and services. Prior research has delineated communities by other means, such as police beats, census block groups or enumeration districts. These arbitrary government boundaries may have different influences on officer and citizen behavior than communities as found in Cincinnati.

However, information gleaned from this dissertation should be interpreted with caution. First, though behavior can be explained by considering variations in individual, situational and community level correlates, this study is unable to assess the impact of organizational level correlates. Numerous authors have commented on the impact organizational variation may have on individual officer behavior (Brooks 1997; Riksheim and Chermak 1993; Sherman 1980; Smith 1987; Smith and Klein 1983; Wilson 1968), however such an analysis is beyond the scope of the current investigation due primarily to

the fact that all observations were conducted within the Cincinnati Police Division. Put plainly, the data reflect no variation in organizational determinants of behavior. Future studies should consider incorporating all four levels of analysis.

Second, and related to the first, generalizability is limited due to the fact that data reported are from one research site. Furthermore, though a substantial number of observations were conducted (442) and a large quantity of officer-citizen encounters were observed (3,685), this figure represents a small proportion of the number of shifts and citizen contacts done by the CPD over a given year.[34] Furthermore, as described earlier in this chapter, observations were conducted only on first or second shift, or when COP officers were on duty. As such, there were no observations between the hours of 11:00 p.m. and 6:00 a.m.. These factors, taken in totality, place limitations on the inferences that can be made from the proceeding analysis. Despite these cautions, these data do provide significant and important insight into the behavior of police officers and citizens in the age of community policing.

CHAPTER SUMMARY

This study examines dimensions of officer and citizen behavior during encounters with one another. This chapter outlined the research questions under examination. Next,

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These observations represent merely a snap-shot of officers and their work routines in the CPD. For example, these observations depict approximately the same number of tours of duty as two full time officers over a one year period. Accordingly these data are too few "to serve as the basis of a lasting and durable orthodoxy" of police officer behavior (Fyfe 1996: 339).

a review of the CPD's organizational arrangement was conducted. Then, the relevant data sources (systematic social observations, crime data and census data) were described. The variables used in this dissertation, including the dependent variables and the individual, situational and community level independent variables were operationalized and the measurement defined. Finally, a description of the sub-samples was provided and the plan for analysis diagramed. The following chapters more fully analyze the types of behavior under examination.

CHAPTER 4:

CORRELATES OF CITIZEN COMPLIANCE

Encounters between police officers and citizens are often predicated on the intention of one or the other party attempting to get the other to take some type of action or otherwise convince the other party to do something. Often these actions can be accomplished through overt coercion. For example, police officers may arrest a citizen or use force on the citizen. However most interactions do not involve such overt activities (Reiss 1971a; Wilson 1968). Citizens may ask the police to file a report, arrest another person, request information, ask for directions, etc. Officers often request citizens to cease disorderly behavior, leave the premises, provide information or take some other type of action. The possibilities are nearly limitless.

If officers can convince citizens to take certain actions more official, formal actions may not be necessary. Sykes and Brent (1980) describe how officers attempt to gain control during encounters with citizens. If initial questions asked by officers are answered satisfactorily by citizens, then definitional regulation is attained and no other action is required. If attempts to gain definitional regulation are unsuccessful, then officers may issue orders and commands to the citizen attempting to gain imperative regulation. If citizens comply with these orders, the escalation of control stops. However, if citizens are non-compliant, the encounter intensifies and officers rely on coercive control of the citizen through legal sanction, arrest or use of force.

The scenario presented by Sykes and Brent bears direct relevance to the study of police-citizen interactions in the era of community oriented policing. If officers can

successfully gain compliance by citizens, formal actions may not be necessary. Some police officers may be more successful at gaining compliance. It can be expected that officers practicing community oriented policing may be more successful in gaining compliance of citizens than beat officers. Because the "police and the public are encourages to become closely acquainted so that they will be mutually accountable" (Mastrofski et al. 1995: 270), because community police officers should have more non-threatening interactions with citizens, and because COP officers are assigned to communities over a long period of time, it may be assumed that community policing officers are more likely to secure compliance from citizens. In short, citizens may grant compliance to COP officers whereas beat officers may not be able to attain this imperative regulation.

This chapter will discuss the correlates of citizen compliance. As such, this chapter attempts to predict citizen behavior (i.e., whether citizens comply with the demands made by police officers). However it is also important to examine this topic from both directions. Specifically not only may certain characteristics predispose citizens toward compliance or noncompliance, officers may be more or less successful at eliciting acquiescence from citizens. The following citizen behavior Research Questions were proposed in Chapter 3:

- Do individual correlates of citizen compliance differ for community policing officers and beat officers?
- Do situational correlates of citizen compliance differ for community policing officers and beat officers?
- Do community correlates of citizen compliance differ for community policing officers and beat officers?

This chapter addresses the impact of individual, situational and community level

correlates of citizen compliance during encounters with COP and beat police officers. The analysis and discussion proceeds in the following manner. First, bivariate models and correlation matrices are estimated for individual, situational and community level correlates in order to examine model adequacy. The presence of multicollinerarity is explored by examining the bivariate relationships between each of the independent variables as well as between combinations of variables.

Second, separate logistical regression models are then estimated for individual, situational and community level correlates. Additive models are also estimated for each level of independent variables that include all encounters for encounters involving COP and beat officers. This will provide estimates of the direct effects of the correlates of compliance. Then multiplicative models are estimated, yielding three models for COP officers, and three models for beat officers. This tests for the conditional effects of whether officer assignment interacts with the hypothesized correlates of compliance to influence citizen's decision making.

Third, two-stage weighted least squares regression models are estimated including correlates at the three different levels of analysis. This presents an examination of the influences of correlates on the dependent variable while simultaneously controlling for the influences of variables at the different levels of analysis. Both additive and multiplicative models are estimated. Fourth, a comparison of coefficients for COP and beat officers is conducted for the conditional effects (or multiplicative) models in order to explore for significant differences in the correlates of behavior between officers. If significant differences exist, this indicates that the correlates exert different influences on the behavior

of the encounter participants. In other words COP officers act differently than beat officers in the same circumstances. Results are synthesized and discussed.

BIVARIATE RELATIONSHIPS

Bivariate correlation matrices were estimated for each level of independent variables. This was done in order to detect multicollinearity between pairs of independent variables. Significant relationships with a Pearson's Correlation of 0.70 or greater suggest multicollinearity may be present in the model. Each of the independent variables were next regressed on the other independent variables, and the R^2 for each analysis examined. R^2 values of 0.50 may indicate multicollinearity between collections of the independent variables. Appendix VI displays the correlation analyses for citizen compliance.

Individual Level Correlates

Correlation matrices were estimated for the additive model, as well as for COP and beat officers separately. Appendix VI presents the zero-order correlation matrices for the models used in this chapter. As can be seen from the additive table, the Pearson's Correlations range from .003 to .414 and no R^2 value is greater than .228. This information indicates the lack of multicollinearity among individual level predictors. The Pearson's Correlations of zero-order correlations for individual level correlates for COP officers, as well as the R^2 values for each variable regressed on the other variables range from .103 to .352 and no R^2 value is greater than .210. This suggests there is no multicollinearity among the individual level variables for COP officers. Similarly, the zero-order correlation matrix and R^2 estimates for beat officers range from .014 to .310 and no R^2 value is greater than .179. Again, these analyses suggest there is no multicollinearity between pairs of individual

level variables or collections of individual level variables.

Situational Level Correlates

Appendix VI also presents the zero-order estimates for the situational level variables. In the direct effects model the Pearson's Correlations ranges from .001 to .489 and no R^2 value exceeded .329. Based upon the aforementioned discussion, it was determined that multicollinearity is not present among these situational level variables. The zero-order correlation matrix for the situational level variables included in the analysis for COP officers. The Pearson's Correlations for these variables range from .005 to .494, however one R^2 value exceeds .503. When the severity of the offense is regressed on the other 10 independent variables, over half of the variation in offense seriousness is explained by the combination of these situational variables.

It appears that multicollinearity may be present in the proposed model estimated when citizen compliance is regressed on situational level correlates for COP officers. Including these variables in the analysis may result in the sample variance of the estimated coefficients increasing, giving less precise estimates of the true coefficients (Hanushek and Jackson 1977: 87). In order to more fully explore for the presence of collinearity, variance inflation factor (VIF) scores were calculated for the correlates in Table 5. None of the VIF scores exceed 1.489. Because VIF scores exceeding 10 denote the presence of multicollinearity (Neter, Wasserman and Kutner 1990) these tests, taken in totality, indicate multicollinearity is not present in the model. Therefore, all covariates are included in the analysis of citizen decision making.

The bivariate correlations for situational level variables included in the analysis of

arrest decisions of beat officers. Similar to the above, no multicollinearity is detected. The Pearson's Correlations range from .005 to .494 and no R^2 value is greater than .297. In short no multicollinearity was detected for any of the situational level analyses.

Community Level Correlates

In Appendix VI zero-order correlation matrices are presented for the three community level correlates of citizen decision making. The additive model Pearson's Correlations range from .003 to .493 and no R^2 value is greater than .319. The community level correlates of citizen behavior for COP officers range from .106 to .444, and no R^2 exceeds .297. Finally, the zero-order correlations for community level correlates for beat officers range from .100 to .525 and R^2 values do not exceed .333. Therefore multicollinearity was not detected in these models.

Total Models

Zero-order correlation matrices are estimated for the individual and situational level variables together. This is necessary before estimating models that includes correlates from each of the levels of analysis in order to detect multicollinearity that may occur when all variables are estimated in the same model. Pearson's Correlations for the direct model range from .001 to .498, and no R^2 exceeds .340. Therefore multicollinearity is not present in the additive model that includes correlates from each of the levels of analysis.

The Pearson's Correlations for community policing officers range from .000 to .494, however two R^2 estimates exceed the .500 threshold. Multicollinearity may exist if these variables are all included in the two-stage weighted least squares analysis. Multicollinearity is not detected in the interaction model for COP officers for the remainder of the variables.

Again, VIF scores were estimated in order to more fully explore for the presence of harmful collinearity. No score exceeds 2.29, suggesting that including these variables in the two-stage weighted least squares regression analyses for COP officers is not problematic.

The bivariate correlation matrix for beat officers range from .009 to .494, and the greatest observed R^2 was .318. Finally, the zero-order estimates for community level correlates for the two-stage weighted least squares analysis. Neither the Pearson's Correlations nor the estimated R^2 values indicate the presence of harmful collinearity. [35]

These analyses indicated the lack of collinearity among individual, situational and community level variables. These analyses are necessary in order to determine whether the models are adequate and whether logistical regression or weighted two-stage least squares regression can be properly performed.

RESULTS

This section provides the estimates of logistical regression analyses for citizen decisions to comply with requests made by officers. In each model, the discrete variable representing citizen compliance is regressed on the individual, situational and community level correlates. Models are estimated for the direct and indirect effects of the officer's assignment. A comparison of coefficients between beat and COP officers are performed and results clarified.

Individual Level Correlates

Table 4.1 provides the logistical regression estimates for the direct effects of

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Aggregate level variables were not included in the zero-order correlation matrices for the total models because the process associated with two-stage weighted least squares addresses any collinearity between individual and

individual officer characteristics of citizen compliance. To review, these variables include officer's

Table 4.1: Direct Effects of Individual Level Correlates of Compliance

	All Officers	
	b	se
Officer Assignment	-.581	.330
Officer Gender	.524	.399
Officer Race	-.040	.270
Length of Service	.009	.025
Education	-.239	.155
Constant	2.143**	.578
Model X^2	9.642	
Pseudo R^2	.029	
n	361	

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

gender, race, length of service and education. A dummy variable representing officer's assignment is also included as an independent variable. None of these individual level correlates are significantly related to citizen decision making. This indicates that while controlling for officer's demographic characteristics, the officer's assignment exerted no direct influence on citizen behavior. The R^2 for this model (.029) indicates that these correlates explain only 2.9 percent of the variance in citizen's decision making.

In order to examine the conditional effects of assignment on citizen decision making, separate logistical regression models are estimated for beat and COP officers. Included in each of these models are the individual officer level covariates, while assignment is

aggregate variables.

eliminated from the models. In Table 4.2, Model A presents the estimates for encounters involving beat officers. Similar to the additive model, none of the correlates are significantly related to citizen behavior, while the model explains 2.4 percent of the variance in the dependent variable. Model B displays estimations for the same variables for COP officers. Again none of the variables are significantly related to citizen's behavior during these encounters. The

R^2 for this model is only .018. Models presented in Tables 4.1 and 4.2 indicate that individual level correlates of compliance display neither a direct or indirect effect on the ability for officers to gain acquiescence during encounters with citizens. Given these results none of the comparisons reveal significant differences between beat and COP officers on the four individual level correlates. Thus, variation in whether citizens grant compliance to officers is not due to individual differences between officers.

Situational Level Correlates

Characteristics of the situation, such as citizen demographics, officer demeanor and visibility may also influence whether citizens comply during encounters with police officers. For example, citizens' characteristics such as race, gender and age may predispose them to compliance (or noncompliance). Officers who convey their requests in an authoritative manner may be more likely to convince citizens to conform with the request. Likewise highly

Table 4.2: Conditional Effects of Individual Level Correlates of Compliance

	Model A Beat Officers		Model B COP Officers		
	b	se	b	se	t
Officer Gender	.522	.459	.331	.824	.202

Officer Race	-.082	.316	.002	.558	-.131
Length of Service	.049	.036	-.046	.038	1.815
Education	-.212	.167	-.398	.490	.421
Constant	1.310*	.530	3.121*	1.299	
Model X^2	5.494		1.944		
Pseudo R^2	.024		.018		
n	243		118		

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

visible encounters may influence citizens that compliance is necessary due to a shift in the coercive balance of power experienced during interactions. Furthermore, whether officers are assigned as beat or community policing officers may also directly influence citizen behavior (Mastrofski et al. 1996). This section presents the logistical regression analyses using situational level correlates for encounters with police officers.

Table 4.3 provides the estimates for the direct effects of situational level correlates of compliance. Included in this model are all of the encounters for both types of officers, as well as a dummy variable indicating whether the officers involved in the interaction are assigned as a beat or COP officer. The analysis reveals several significant relationships. First, officers' assignment has a direct effect on the citizen decision making ($b = -.983$; $p < .01$). The direction of this variable is negative, indicating citizens are more likely to comply with officer's requests when the requests are made by COP officers. Stated differently, COP officers are more successful at gaining resignation than their counterparts. Additionally, the data indicate non-white citizens are more likely to comply with officer's requests than white citizens ($b = .641$; $p < .05$). Juveniles are also more likely to grant compliance than older citizens ($b = -1.457$; $p < .01$). Citizens showing signs of intoxication are also less likely to

comply with officers than sober citizens (b = -1.590; p < .01). Finally, citizens are less likely to comply with officers when there are additional citizens present at the scene (b = -.104; p < .05). This model explains 15.6 percent of the variance in citizen behavior during these encounters (see Table 4.3).

Table 4.4 presents models to examine the conditional effects of assignment on citizen behavior. It is suggested that COP officers may be more successful at gaining compliance

Table 4.3: Direct Effects of Situational Level Correlates of Compliance

	All Officers	
	b	se
Officer Assignment	-.983**	.355
Offense Seriousness	-.437	.299
Evidence	.159	.155
Citizen Gender	-.070	.336
Citizen Race	.641*	.324
Citizen Age	-1.457**	.365
Officer Authoritativeness	.310	.310
Officer Disrespectful	-.755	.461
Intoxication	-1.590**	.366
Resident	-.146	.305
Bystanders (citizens)	-.104*	.051
Bystanders (officers)	.013	.106
Constant	2.989**	.522
Model X^2	46.732**	
Pseudo R^2	.156	
n	341	

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

than beat officers, however whether the dimensions by which they vary is unknown. Model A presents the estimates for encounters involving beat officers. Offense seriousness is negatively related to citizen compliance ($b = -.834$; $p < .05$), indicating that as offense seriousness increases, the likelihood of compliance decreases. Nonwhite citizens are more likely to conform with beat officers' requests than white citizens ($b = .949$; $p < .05$). Additionally, older citizens are more likely to comply with beat officers' requests than juveniles ($b = -1.758$; $p < .01$). Intoxication displays a negative relationship with compliance ($b = -1.311$; $p < .01$), demonstrating that sober citizens are more apt to comply with demands than intoxicated citizens. Finally, visibility (measured by number of other citizens present at the scene) is positively related to compliance ($b = .166$; $p < .05$) indicating as the number of bystanders increases, so too does compliance of citizens. None of the remaining situational characteristics are significantly related to citizen compliance behavior. The R^2 for Model A is .207, indicating situational level correlates explain over 20 percent of the variance in citizen decision making during encounters with beat officers (see Table 4.4).

Model B provides the parameter estimates for the situational correlates of citizen compliance during encounters with COP officers. Officer authoritativeness is positively related to compliance ($b = 2.412$; $p < .01$). Stated differently, citizens are significantly more likely to comply with COP officers when the officer commands or threatens the citizen, than when the officer merely asks, requests or negotiates with the citizen. Similar to Model A, citizens who are intoxicated are significantly less likely to comply with the officers' requests than sober citizens ($b = -3.755$; $p < .01$). This indicates that COP officers are significantly

less

likely to elicit cooperative responses from intoxicated citizens. None of the other situational level correlates are significantly related to citizen compliance. Overall Model B explains 27.3 percent of the variance in the dependent variable.

Table 4.4 also presents a comparison of each of the correlates between the models for beat and COP officers. Though these models predict a different number of significant correlates of citizen compliance (five for beat officers, two for COP officers), only one correlate's effect is significantly different between officer assignments. Specifically, officer authoritativeness displays a significantly different effect for COP than beat officers. Whereas

Table 4.4: Conditional Effects of Situational Level Correlates of Compliance

	Model A Beat Officers		Model B COP Officers		
	b	se	b	se	t
Offense Seriousness	-.834*	.351	-1.100	.792	.307
Evidence	.297	.192	-.129	.356	-1.053
Citizen Gender	-.163	.394	.043	.965	-.197
Citizen Race	.949*	.386	-.706	.810	1.844
Citizen Age	-1.758**	.423	-1.724	1.074	-.029
Officer Authoritativeness	-.177	.378	2.412**	.896	-2.662*
Officer Disrespectful	-.704	.581	-1.960	1.034	1.059
Intoxication	-1.311**	.417	-3.755**	1.245	1.861
Resident	.199	.362	-.710	.758	1.082
Bystanders (citizens)	.166**	.061	.137	.146	-1.915
Bystanders (officers)	.069	.128	-.257	.233	1.226
Constant	2.115**	.523	3.249**	1.223	
Model X^2	44.237**		26.917**		

Pseudo R^2	.207	.273
n	229	112

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

authoritative commands or threats are much more likely to elicit compliance on the citizens behalf, no such relationship is observed for beat officers.

Community Level Correlates

Table 4.5 presents a direct effects comparison for community level correlates of citizen compliance behavior. Included in this model are the three community level variables (crime rate, residential mobility and community disorganization factor) as well as a dummy variable for officer assignment of the officers (0 = COP; 1 = beat). This table reveals no significant relationships between any of the three community variables and citizen behavior. However, the dummy variable distinguishing between beat and COP officers is significantly related to compliance ($b = .654$; $p < .05$). The direction of the relationship is negative, indicating that controlling for community level covariates, COP officers are significantly more likely to gain compliance of citizens than beat officers. Overall this model explains only 0.5 percent of the variance in citizen decision making during these encounters.

Though the data reveal that officer assignment directly impacts citizen compliance, a multiplicative analysis is necessary in order to determine whether assignment interacts with the different community level correlates to influence the decision making of citizens. Table 4.6 displays the conditional effects models for both beat and COP officers. The estimates for Model A indicate that only one community level correlate is significantly related to citizen behavior. Specifically, residential mobility is negatively related to citizen compliance ($b = -3.215$; $p < .05$). In other words encounters between beat officers and

citizens in communities with low mobility are more likely to result in citizens complying with the directives of officers,

Table 4.5: Direct Effects of Community Level Correlates of Compliance

	All Officers	
	b	se
Officer Assignment	-.654*	.307
Crime Rate	2.012	1.478
Residential Mobility	-2.870	1.401
Community Factor	-.093	.659
Constant	3.005**	.806
Model X^2	10.700*	
Pseudo R^2	.005	
n	364	

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

whereas encounters in communities with high residential mobility end in noncompliance. Neither crime rate nor the community factor is related to citizen acquiescence. The R^2 for this model is .020.

The estimates for the community level correlates of compliance are provided in Model B of Table 4.6. In contrast to Model A, none of the community level correlates are related to citizen compliance. Furthermore, a comparison of the coefficients between the two models reveals no significant differences. Therefore these correlates do not significantly influence the behavior of citizens based on whether the officer involved was assigned to traditional beat officer duties or COP officer duties.

Total Models

The preliminary analyses focused on citizens' decisions whether to comply or not comply with officers' requests during encounters within each of the three levels of

independent variables. However to this point the models have not controlled for the influence of correlates from all levels of analysis. In order to control simultaneously for individual,

Table 4.6: Conditional Effects of Community Level Correlates of Compliance

	Model A Beat Officers		Model B COP Officers		
	b	se	b	se	t
Crime Rate	1.939	1.689	2.244	3.131	-.086
Residential Mobility	-3.215*	1.626	-1.854	2.837	-.416
Community Factor	-.051	.744	-.241	1.426	.118
Constant	2.523**	.915	2.502	1.560	
Model X^2	4.697		.837		
Pseudo R^2	.020		.005		
n	246		118		

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

situational and community level correlates, it is necessary to perform a two-stage weighted least squares regression analysis. Similar to the previous analyses, the direct effects of assignment are first examined. Then, the conditional effects for beat and COP officers are estimated by examining the impact of these correlates in separate models by assignment. Finally, the correlates of citizen compliance are compared between models in order to determine whether the correlates exert a different effect for each type of officer.

Direct Effects. Table 4.7 provides estimations for the two-stage weighted least squares analysis for the pooled model. In Stage 1, the beta coefficients and standard errors for individual and situational level correlates are presented, while the the beta coefficients and standard errors for community level correlates are provided in Stage 2. Similar to the previous direct effects models, a dummy variable indicating officer assignment is also

included.

Community police officers are significantly more likely to gain compliance from citizens than beat officers, controlling for all other correlates (b = -1.124; p < .01). This indicates that aside from other covariates that may interact with assignment to influence citizen behavior, citizens are much more likely to comply with COP officers than beat officers. Additionally, non-white citizens are significantly more likely to comply with officers than white citizens (b = .858; p < .05). Similar to the earlier direct effects model, juveniles are less likely than adults to comply with officers' wishes (b = -1.675; p < .01). Finally, citizens who display visible signs of intoxication are significantly more likely to be noncompliant than sober citizens (b = -1.552; p < .01). No other individual or situational level variables are related to citizen behavior. Stage 1 explains 17.2 percent of the variance in the dependent variable.

Table 4.7: Direct Effects of the Two-Stage Weighted Least Squares Analysis for Correlates of Compliance

	Stage 1 Individual		Stage 2 Community	
	b	se	b	se
Constant	3.745**	.786	280.354*	116.719
Officer Assignment	-1.124**	.397		
Officer Gender	.316	.444		
Length of Service	-.011	.028		
Education	-.271	.175		
Offense Seriousness	-.294	.309		
Evidence	.103	.159		
Citizen Gender	-.058	.346		
Citizen Race	.858*	.340		
Citizen Age	-1.675**	.380		

Officer Authoritativeness	.234	.316		
Officer Disrespectful	-.681	.463		
Intoxication	-1.552**	.375		
Resident	-.220	.312		
Bystanders (citizens)	-.101	.052		
Crime Rate			-205.423	176.094
Residential Mobility			-403.540	225.541
Community Factor			-62.972	84.353
Model X^2/F	52.504**		1.288	
R^2	.172		.081	
n	335		47	

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

Stage 2 presents the community level correlates of compliance for the pooled model. Similar to the estimates provided in Table 4.5, none of the community level correlates are significantly related to citizen compliance. The community level correlates explain less than half as much of the variance in citizen behavior than is explained in Stage 1 ($R^2 = .081$).

Indirect Effects. The conditional effects for encounters between beat officers and citizens are presented in Table 4.8. Individual and situational level estimates are displayed in Stage 1, and community or aggregate level estimates are provided in Stage 2. Four significant relationships are reflected in the data. Non-white citizens are significantly more likely to offer compliance to beat officers than white citizens ($b = 1.270$; $p < .01$). Additionally, juveniles are more likely to be compliant to beat officers than adult citizens ($b = -2.165$; $p < .01$). The relationship between intoxication and acquiescence is negative, where sober citizens are significantly more likely to be compliant, and intoxicated citizens are more likely to be noncompliant ($b = -1.147$; $p < .01$). Finally, the relationship between the number of other citizens at the scene and compliance is negative. Encounters involving

fewer bystanders are more likely to involve compliant citizens than encounters with larger crowds. None of the remaining seven situational level correlates are significantly related to compliance, and none of the individual officer level correlates are related to compliance. Notably, when controlling for individual and community level variables, offense seriousness becomes non-significant. Stage 1 explains 24.8 percent of the variance in the dependent variable.

Stage 2 presents the community level correlates for the two-stage weighted least squares regression analysis. None of the correlates are significantly related to citizen compliance during encounters with beat officers. In a previous analysis (Table 4.6), residential mobility was negatively related to citizen compliance. This relationship does not endure after controlling for individual and situational level correlates (see Table 4.8). The aggregate level predictors explain only 2.9 percent of the variance in citizen compliance.

Table 4.8: Conditional Effects of the Two-Stage Weighted Least Squares Analysis for Correlates of Compliance for Beat Officers

	Stage 1 Individual		Stage 2 Community	
	b	se	b	se
Constant	2.476**	.763	197.176	141.216
Officer Gender	.613	.538		
Officer Race	-.204	.389		
Length of Service	.038	.040		
Education	-.293	.198		
Offense Seriousness	-.611	.369		
Evidence	.197	.198		
Citizen Gender	-.156	.419		
Citizen Race	1.270**	.418		

Citizen Age	-2.165**	.453		
Officer Authoritativeness	-.288	.392		
Officer Disrespectful	-.645	.591		
Intoxication	-1.147**	.441		
Resident	.116	.377		
Bystanders (citizens)	-.162*	.063		
Bystanders (officers)	.080	.131		
Crime Rate			141.510	217.713
Residential Mobility			-204.321	269.092
Community Factor			-82.964	103.121
Model X^2/F	53.604**		.406	
R^2	.248		.029	
n	223		44	

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

Table 4.9 presents the two-stage weighted least squares analysis for interactions involving COP officers and citizens. In Stage 1 analysis, four significant predictors are observed. First, there is a negative relationship between COP officers' length of service and compliance ($b = -.143$; $p < .05$). Stated differently, citizens are more likely to comply with requests made by less experienced officers, and more likely to be noncompliant during encounters with officers who have more experience. This relationship was not observed in the preliminary analysis. Additionally, COP officers who convey their demands via commands or threats are significantly more likely to gain compliance from citizens than community policing officers who merely ask, request or negotiate some action ($b = -3.540$; $p < .01$), though COP officers who convey these demands in a disrespectful manner are much less apt to gain compliance ($b = -3.073$; $p < .01$). Similar to interactions with beat officers, intoxicated citizens are much less likely to be compliant than sober citizens during

encounters with COP officers (b = -4.172; p < .01). No other individual or situational level correlates

are significantly related to whether citizens grant compliance to COP officers. The R^2 for this model is .385.

Stage 2 presents the aggregate level estimates for encounters between COP officers and citizens. Similar to previous analyses presented in Table 4.6, none of these relationships are significantly related to citizen compliance. The aggregate level predictors explain only 9.1 percent of the variance in the dependent variable.

Finally, Table 4.10 provides a comparison of the coefficients reported in Table 4.8 and 4.9. Several of the distinct predictors display a significantly different influence on citizen's behavior, depending on whether the interaction involves a COP or beat officer. Specifically, length of service displayed a substantially different influence for COP officers than beat officers (t = 2.320; p < .05). This indicates that COP officers with less tenure are significantly more likely to elicit compliance from citizens, where this is not observed for beat officers.

Table 4.9: Conditional Effects of the Two-Stage Weighted Least Squares Analysis for Correlates of Compliance for COP Officers

	Stage 1 Individual		Stage 2 Community	
	b	se	b	se
Constant	6.138*	2.576	385.617*	168.014
Officer Gender	-1.003	1.300		
Officer Race	1.699	1.306		
Length of Service	-.143*	.067		
Education	-.370	.750		
Offense Seriousness	.984	.817		

Evidence	-.200	.405		
Citizen Gender	.628	1.116		
Citizen Race	-2.170	1.412		
Citizen Age	-1.759	1.299		
Officer Authoritativeness	3.540**	1.195		
Officer Disrespectful	-3.073*	1.357		
Intoxication	-4.172**	1.367		
Resident	-.853	.908		
Bystanders (citizens)	.186	.180		
Bystanders (officers)	-.313	.308		
Crime Rate			261.944	234.242
Residential Mobility			-537.010	327.029
Community Factor			-19.702	122.721
Model X^2/F	34.906**		.999	
R^2	.385		.091	
n	112		33	

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

Stated differently, citizens are more likely to acquiesce to younger COP officers and be noncompliant with older COP officers than beat officers. Furthermore, non-white citizens are much more apt to comply with beat officers than COP officers ($t = -2.336$; $p < .05$). This of course means white citizens are more likely to be noncompliant with beat officers than COP officers.

As outlined above, COP officers who convey their demands in an authoritative fashion are significantly more likely to elicit a compliant response than when demands are simply requested. However no such relationship is observed for interactions between beat officers and citizens. This means that the manner by which beat officers convey their demands does not appear to influence citizens' behavior. In fact, the difference between

officers on this correlate is significantly different ($t = -3.044$; $p < .05$). Stated differently, citizens are more likely to comply with authoritative requests made by COP officers than those made by beat

officers. Finally, the analysis reveals that intoxicated citizens encountered by either beat or COP officers are more likely than sober citizens to be compliant. However, intoxicated citizens are much more likely to be compliant with COP officers than beat officers ($t = 2.160$; $p < .05$). No other comparisons differ significantly between beat and COP officers.

DISCUSSION

This chapter examined the predictors of citizen behavior. More specifically, it examined the predictors of citizen compliance when citizens are directed to take some type of action by police officers. A total of three levels of independent variables were examined. First, the influence of individual officer characteristics were considered. Second, situational level correlates were also estimated. Third the impact of community level correlates of citizen behavior was considered. The direct effects of officer's assignment as well as the conditional effects were examined controlling for other predictors within each level. Finally, after completing the preliminary analyses, two-stage weighted least squares analyses were

Table 4.10: Comparison of Coefficients between beat and COP Officers for Two-Stage Weighted Least Squares Analysis

	t
Officer Gender	1.149
Officer Race	-1.394
Length of Service	2.320*
Education	.099

Offense Seriousness	-1.779
Evidence	.881
Citizen Gender	-.658
Citizen Race	-2.336*
Citizen Age	-.295
Officer Authoritativeness	-3.044*
Officer Disrespectful	1.600
Intoxication	2.106*
Resident	.968
Bystanders (citizens)	-1.824
Bystanders (officers)	1.174
Crime Rate	-.377
Residential Mobility	.786
Community Factor	-.394

* $p < .05$

conducted which controlled for the relative influences of each predictor at the same time. The following section discusses the findings from these analyses.

Direct Effects

Preliminary logistical regression analyses reveal a direct effect of officer assignment on citizen behavior. Specifically, when controlling for situational and community level correlates of behavior, COP officers are significantly more likely than beat officers to gain compliance by citizens with whom they interact. These direct effects endure when controlling for all three levels of analysis (see Table 4.7). This suggests that COP officers, as a group, are much more successful at gaining citizen compliance. In other words, citizens are more likely to grant compliance to COP officers than beat officers. Mastrofski et al. (1996) found similar direct results, where officers with a positive community policing

orientation were more likely to gain compliance than officers possessing negative attitudes toward community policing.

There may be several explanations for these observations. First, citizens may view COP officers as possessing a different role than beat officers. Specifically if COP officers are viewed as partners in community crime prevention efforts where beat officers are simply viewed as individuals who respond to immediate problems in the community, citizens may be more apt to agree with COP officer's demands because they view COP officers as more legitimate and concerned about the best interests of citizens. Second, and related, citizens and COP officers' may be more likely to have ongoing relationships and possess greater knowledge of each other. Officers may use this intimate understanding in the types of requests and demands they seek calculating which demands will most likely end in compliance. On the other hand citizens may place greater trust in officers whom they have personal or professional knowledge.

However, these conclusions are called into question by the fact that analysis reveals residents of the community where the encounter occurred are no more likely to acquiesce to officers than nonresidents (see Tables 4.7, 4.9). If the above conclusions are true, one would logically expect a positive relationship between residence and compliance. Therefore, there may be other factors at work during these encounters.

A second plausible explanation is that COP officers may superior negotiation techniques that are exercised during encounters with members of the public. COP officer within the Cincinnati Police Division receive 40 hours of additional community oriented policing training than beat officers (who receive only four hours of training), and superior

negotiation skills may be acquired during these seminars. At any rate the data reveals being assigned to community policing duties has a direct influence on whether citizens comply with the demands made by officers.

A third possible explanation for these findings is that of community officer selection bias. Though COP officers and beat officers observed in this study possess similar individual characteristics (such as race, gender, length of service and education), perhaps officers who aspire to be assigned as community officers already possess superior communication skills. Officers may view the assignment of COP officer as a suitable vehicle to utilize these skills, and thus self-select themselves into that assignment. Finally, COP officers may be more successful at gaining compliance because of the nature of their assignment. Community officers may have more opportunity to hone their negotiation skills, and this extra practice allows them greater opportunity to practice the craft of mediation.

Indirect Effects

Individual Level Correlates. Of the four individual level correlates of compliance, only an officer's length of service was significantly related to citizens granting compliance to officers. However, this relationship is observed only for COP officers when controlling for all other correlates. As stated previously, COP officers with less experience are more likely to gain citizen compliance than more experienced COP officers. No such relationship is observed for beat officers, and the influence of length of service is significantly different between officers (see Table 4.10).

At first these results appear counter intuitive. For example, it appears intuitive that

officers with greater experience may be more likely to gain compliance simply due to more experience. Have endured similar types of encounters over time, the veteran officer may be able to perfect the craft of gaining compliance simply due to trial and error. This contention is supported by Mastrofski and his colleagues (1996). However, Niederhoffer (1967), Friedrich (1977) and Crank (1993) believed older officers become more cynical and less active than their younger counterparts. They found that older officers are much less likely to initiate encounters and make arrests. However, perhaps more experienced officers are also less tolerant of citizens and more apt to make demands of citizens that would result in noncompliance. In other words demands made by experienced officers may be more arbitrary in nature. However these explanations fail to explain why the relationship is observed for only COP officers.

Officer gender is unrelated to decisions made by citizens to grant compliance to officers. In other words, male officers are no more or less capable of gaining compliance from citizens than female officers. Officer's race is also found to be unrelated to citizen compliance. The data reveals citizens are neither more nor less likely to comply with nonwhite officers than white officers. The educational attainment of the police officers involved in these encounters is unrelated to their ability to gain compliance of citizens.

Research Question #1 asked the following question: Do individual correlates which predict citizen responses to officer authority differ for community policing officers and beat officers? The influence of three of the four individual level variables do not differ between beat and COP officers. However, COP officers with less time on the police force are more successful at gaining compliance from members of the public than beat officers. Stated

differently, citizens are much more likely to comply with the demands of younger, less experienced COP officers than beat officers. The influence of length of service differs significantly between beat and COP officers.

Situational Level Correlates. The data reveal nonwhite citizens are more likely to comply with beat officer's demands, where no such relationship is observed for COP officers.[36] When comparing the influence of citizen race across officer assignment, the analysis reveals a significantly different influence on the disposition of the encounter. Nonwhite citizens are significantly more likely to comply with the demands of beat officers than white officers. Again this is somewhat contrary to the expected relationship. If lack of compliance can be used as a proxy for lack of deference or demeanor, studies reported nonwhite citizens to be more antagonistic toward officers than white citizens (Black 1971; Piliavan and Briar 1964). If this were the case one may expect white citizens to be more compliant with officers. Further, if COP officers are viewed as 'community partners in crime prevention' whereas beat officers are viewed as individuals who may not necessarily have the citizens best interests at heart, it is reasonable to assume citizens would be more likely to defer to COP officers. Clearly this is not the case in the current study.

To more fully explore the relationship between nonwhite citizen compliance and beat officer, categorical variables were created in order to tap the dimensions of the race of the

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The analysis reveals white citizens tend to be more likely to comply with COP officers than nonwhite citizens. However this interpretation of the data must be done with caution since the influence is not statistically significant (b = 2.170; se = 1.412; p = .12).

involved actors (i.e., white officer, white citizen; nonwhite officer, white citizen; nonwhite officer, nonwhite citizen; white officer, nonwhite citizen). Additional two-stage weighted least squares models were estimated using these categorical variables in lieu of the two dummy variables indicating officers' and citizens' race. The new models reveal nonwhite citizens are most likely to comply with white officers ($b = 1.252$; $p < .05$). This additional analysis supports prior research that found compliance is also dependent upon the social distance between the police and the citizens (Lanza-Kaduce and Greenleaf 1994). Mastrofski et al. (1996: 296) stated "Out-group (minority citizen) compliance is greatest when confronted with an officer with in-group status (White), whereas in-group compliance is lowest when status relationships between officer and citizen are reversed." The current analysis confirms these results. However nonwhite citizens are therefore significantly more likely to comply with officers when the officers are white, but no such compliance is offered to officers within their same racial category.

Adults are significantly more likely to comply with beat officer's requests for order maintenance than juveniles, however no such relationship is observed for COP officers. Stated differently, juveniles are more likely to be noncompliant with beat officer's demands. This appears to support prior research that found juveniles may represent a greater threat to officers, such as not complying with their requests (Black 1976; Piliavin and Briar 1964). At the same time, the fact that null results are found in interactions between COP officers and juveniles also supports research that stated these two groups possess a unique dynamic. In other words COP officers may be viewed as mentors or role models, and not law enforcers, explaining why juveniles are more likely to defer to their demands (Bazemore and

Senjo 1997; Cordner 1995; Lundman et al. 1978). However these difference are tempered by the fact that though citizens' age contributes a substantive difference during encounters with different officers, these magnitude of the difference is not statistically significant.

The manner in which COP officers convey their requests is more influential for gaining compliance than for beat officers. For example, COP officers who command or threaten citizens are more likely to be granted compliance, whereas no such relationship is observed for encounters involving beat officers and citizens. Table 4.10 shows the magnitude of this difference to be statistically significant ($t = -3.044$). Citizens are more likely to comply with threatening demands made by COP officers than beat officers. However, the opposite is true when COP officers convey these demands in a disrespectful manner. Any benefit afforded officers who communicate demands authoritatively is lost when these commands are viewed as disrespectful. The data reveal respectful COP officers are more likely to elicit compliance, where disrespectful officers are more likely to encourage noncompliance. Citizens who view officers as disrespectful may also view their requests as less legitimate, thus choosing to forego submission. However, no such relationship manifests for beat officers, and indeed the difference between officers is not statistically significant.

As noted earlier, intoxicated citizens are much less likely to grant compliance to either COP or beat officers. This may be due in part to limited faculties and irrationality. Intoxication may impair citizens from making wise decisions. However it is interesting to note that intoxicated citizens are even more likely to comply with COP officers than beat officers.

The visibility of the encounter exerted some influence on citizen compliance behavior, depending on how it is operationalized. Specifically, as the number of citizens at the encounter increases, citizens are less likely to grant compliance to beat officers. Several possible explanations exist. First, due to the belief that there is safety in numbers, noncompliance in crowd situations may not seem to be as risky as noncompliance in dyadic encounters. Whether this calculation of compliance during solo encounters is due to fear of officers reprisals is difficult to determine. Second, citizens may feel the need to save face in front of others. This face saving operation is explained by Muir (1977) who stated officers must often save face in crowd situations in order to keep their reputation in tact. The same is plausible for citizens. Third, citizens who fail to obey with officers in crowd situations may gain status among their peers. Interestingly the same relationship does not manifest during encounters with COP officers. This may again be in part due to the fact that COP officers are viewed with a different type of legitimacy among citizens: less adversarial, and more collegial. At the same time, the difference in citizen bystanders coefficients for beat and COP officers is not statistically significant.[37]

Research question #2 posited the following: Do situational correlates which predict citizen responses to officer authority differ for community policing officers and beat officers? Though not all indicators of compliance differed significantly between officers, several statistically significant variations are observed:

- Nonwhite citizens are more likely to comply with beat officers than COP officers,
- Citizens are more likely to comply with authoritative COP officers than authoritative

[37] Though the difference approaches significance where t = 1.824.

beat officers,

- Citizens are more likely to comply with respectful COP officers than respectful beat officers,
- Intoxicated citizens are much more likely to comply with COP officers than beat officers.

Additionally, the following differences were not statistically significant:

- Juveniles are less likely to comply with beat officers than COP officers,
- Citizens in crowd scenes are more likely to comply with beat officers than COP officers.

Of course these conclusions are weakened by the fact that the difference between officers is not statistically significant, and thus should be viewed and interpreted with some trepidation. Nonetheless, it appears by and large the influences of situational correlates of citizen compliance does differ between COP and beat officers.

Community Level Correlates. Overall community level factors exert nonsignificant influences on citizen compliance decision making. The preliminary analyses reveal only residential mobility was negatively related to citizen compliance, however this influence disappears when controlling for situational and individual level correlates. Community level crime rates are unrelated to whether citizens grant compliance to police officers, and this is true for both beat and COP officers. Additionally, citizens encountered in communities characterized by high residential mobility were neither more or less likely to acquiesce to beat or COP officer demands. Finally, community level disorganization (represented by a factor which included percent of persons living below poverty, percent nonwhite, percent renter occupied dwelling units and percent single family households) does not influence the likelihood citizens will comply with the order maintenance demands made by police officers.

Furthermore, Research Question #3 proposed the following: Do community correlates which predict citizen responses to officer authority differ for community policing officers and beat officers? The data unequivocally show this is not the case. Not only do community level correlates fail to exert a direct relationship on citizen compliance, there is no evidence that these community level factors exert differing effects. Therefore the answer to this question is no: community level correlates which predict citizen responses to officer authority do not differ for COP and beat officers.

CONCLUSIONS

This chapter examined the individual, situational and community level correlates of citizen compliance for COP and beat officers. First, bivariate relationships were explored in order to examine model adequacy. Second, separate logistical regression models were estimated for individual, situational and community level correlates in order to examine the direct and indirect effects of officer assignment on citizen behavior. Third two-stage weighted least squares models were estimated controlling for all correlates of compliance simultaneously. Fourth, a comparison of coefficients between beat and COP officers was conducted.

Results indicated individual correlates did not predict decision making well across beat or COP officers, with one exception. COP officers with less experience are more likely to elicit compliance than beat officers with similar tenure. More variation was observed in the situational correlates. Specifically, variations were found regarding citizen's race, officer's authoritative tactics, officer's respect (or lack thereof) during encounters with citizens, and intoxication. Finally, results reflected no variation in community level

correlates of citizen behavior in the two-stage weighted least squares models. Therefore, when controlling for the three levels of analysis the impact of the community level correlates appear to not differ significantly between beat and COP officers more than situational or individual level correlates. Of the three levels of analysis, situational level correlates provided the greatest predictive power.

CHAPTER 5:

CORRELATES OF ORDER MAINTENANCE DECISION MAKING

Some have stated the maintenance of public order is the primary function of the police (Wilson 1968). Officers possess a great deal of discretion when interacting with members of the public, and unlike other types of activities which are less frequently performed (i.e., arrest or use of force) there are ample opportunities to exercise order maintenance during encounters with citizens (Goldstein 1990; Reiss 1971a; Wilson 1968; Wilson and Kelling 1982). During these encounters there may be no violation of the law, often guilt may not be assigned to an individual, and these situations may be highly ambiguous (Brooks 1997; Langworthy and Travis 1999). Unlike encounters involving arrest or use of force, there is rarely documentation of order maintenance encounters recording who was involved, what the problem was and the characteristics of the ultimate disposition. In this way order maintenance encounters possess low-visibility decision making (Goldstein 1960). Due to these reasons, the correlates of order maintenance decision making are rarely examined empirically. Order maintenance takes on a renewed importance in the era of community policing (Cordner 1995; Mastrofski 1992; Trojanowicz and Bucqueroux 1990; Wilson and Kelling 1982). This is due to the fact that officers are encouraged to explore options beyond legal actions in order to solve problems in the community.

The following order maintenance related research questions were proposed in Chapter 3:

- Do individual correlates of order maintenance differ for community policing officers and beat officers?
- Do situational correlates of order maintenance differ for community policing officers and beat officers?

- Do community correlates of order maintenance differ for community policing officers and beat officers?

This chapter address the impact of individual, situational and community level correlates on COP and beat police officers decisions to exercise order maintenance during encounters with citizens. The analysis and discussion proceeds in the same fashion as described in Chapter 4. First, bivariate correlation matrices are estimated for individual, situational and community level correlates in order to examine model adequacy. Second, separate logistical regression models are estimated for individual, situational and community level correlates. Third, two-stage weighted least squares regression models are estimated including correlates at the three different levels of analysis. Fourth, a comparison of coefficients between COP and beat models is conducted for the multiplicative models in order to explore for significant differences in the correlates of behavior between officers. This tests whether the coefficients associated with the predictors change in a significant manner when other variables are added as control (Clogg et al. 1995).

BIVARIATE RELATIONSHIPS

Individual Level Correlates

Appendix VII provides the zero-order correlation matrices and R^2 values for the models used in this chapter. In the additive model the Pearson's Correlations range from .017 to .285 and no R^2 value is greater than .241. This information indicates the lack of multicollinearity among individual level predictors.

The Pearson's Correlations for individual correlates of order maintenance for community policing officers range from .091 to .362 and no R^2 value is greater than .183. For beat officers the Pearson's Correlations range from .053 to .266 and no R^2 value is

greater than .142. These analyses suggest there is no multicollinearity between pairs of individual level variables or collections of individual level variables.

Situational Level Correlates

Appendix VII also presents the zero-order estimates for the situational level variables for both the additive and multiplicative models. The Pearson's Correlations for the additive model range from .000 to .286 and no R^2 value exceeded .353. Based upon the aforementioned discussion, it is determined that multicollinearity is not present among these situational level variables. Also reported are the correlations and R^2 for community policing and beat officers. None of the analyses exceed the aforementioned threasholds. In short no serious problems of multicollinearity are detected for any of the situational level analyses.

Community Level Correlates

Zero-order correlation matrices are presented for the three community level correlates of order maintenance. The Pearson's Correlations for the additive model range from .000 to .362 and no R^2 value is greater than .132. The Pearson's Correlations for the community policing officers range from .136 to .402, and no R^2 exceeds .271. Additionally, the zero-order correlations for community level correlates of order maintenance for beat officers. Similar to the above, multicollinearity is not detected. Pearson's Correlations range from .079 to .374 and R^2 values do not exceed .224.

Total Models

Zero-order correlation matrices are provided for the individual and situational level variables together. This is necessary before estimating models that includes correlates from each of the levels of analysis in order to detect multicollinearity that may occur when all

variables are estimated in the same model. The Pearson's Correlations for the additive model range from .000 to .415, and no R^2 exceeds .366. Therefore multicollinearity is not present in the additive model that includes correlates from each of the levels of analysis. The zero-order correlation matrix for COP officers only reveal Pearson's Correlations range from .008 to .403, and no R^2 estimates exceeds .469. This suggests multicollinearity is not detected in the interaction model for COP officers for the independent of the variables.

The Pearson's Correlations for beat officers range from .005 to .226, and the greatest observed R^2 was .360. Finally, the zero-order analysis for the aggregate level correlates for the two-stage weighted least squares analysis range from .014 to .233, and no R^2 value exceeds .221. Thus neither the Pearson's Correlations nor the estimated R^2 values indicate the presence of harmful collinearity. [38]

These analyses indicated the lack of collinearity among individual, situational and community level variables. These analyses were necessary in order to determine whether the models were adequate and whether logistical regression or weighted two-stage least squares regression could be properly performed.

RESULTS

Individual Level Correlates

Table 5.1 presents the estimates for the direct effects models of officers' assignment

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Aggregate level variables were not included in the zero-order correlation matrices for the total models because the process associated with two-stage weighted least squares addresses any collinearity between individual and aggregate variables.

on decisions to exercise order maintenance. Individual level correlates included in this model are officers' gender, race, length of service and level of education. Additionally, a dummy variable for officers' assignment is included (0 = COP officer, 1 = beat officer).

None of the individual level correlates are significantly related to officers' decision to exercise order maintenance. However the model does reveal that officer assignment is significantly related to order maintenance ($b = -.460$; $p < .05$). This reflects that controlling for other individual level correlates, COP officers are significantly more likely to use order maintenance techniques during encounters with citizens than beat officers, and assignment has a direct influence on order maintenance decision making. The pseudo R^2 for this model is .016, indicating the model does not explain much of the variance in order maintenance decision making.

Table 5.1: Direct Effects of Individual Level Correlates of Order Maintenance

	All Officers	
	b	se
Officer Assignment	-.460*	.198
Officer Gender	.182	.224
Officer Race	.272	.166
Length of Service	-.019	.014
Education	-.009	.096
Constant	.076	.352
Model X^2	10.126	
Pseudo R^2	.016	
n	640	

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

Table 5.2 presents the conditional effects models for beat and COP officers. These

models allow for an examination of the correlates of order maintenance independent of assignment. Model A regresses decisions to use order maintenance on the individual correlates for beat officers. None of the four variables significantly influenced beat officers' decision making. This model explains 1.2 percent of the variance in beat officers actions. Furthermore, Model B presents the logistical regression estimates for individual level correlates of order maintenance for COP officers. Similar to beat officers, Model B displays no significant relationships between the correlates and order maintenance. This model explains only 2 percent of the variance in COP officers' decisions to use order maintenance. Finally, a comparison of the coefficients between beat and COP officers reveals no significant differences between the officers. These values indicate the predictors do not change in a significant way between the officers. Thus, any variation in the exercise of order maintenance between beat and COP officers is a function of their assignment, and not due to variation in the individual correlates.

Table 5.2: Conditional Effects of Individual Level Correlates of Order Maintenance

	Model A Beat Officers		Model B COP Officers		
	b	se	b	se	t
Officer Gender	.188	.270	.169	.409	-.104
Officer Race	.356	.202	.310	.323	.121
Length of Service	-.025	.020	-.022	.023	-.098
Education	.068	.107	-.424	.258	1.761
Constant	-.557	.328	.983	.695	
Model X^2	5.556		3.722		
Pseudo R^2	.012		.020		
n	459		181		

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

Situational Level Correlates

Police officers often use order maintenance techniques in order to "handle" encounters by compelling a citizen to take some action (Klinger 1996c). It follows then that the situational characteristics of the encounter may influence impact the actions of police officers during these encounters. Unfortunately, unlike decisions to arrest, police officers' decisions to exercise order maintenance have only rarely been studied empirically. This section presents logistical regression analyses for order maintenance for situational level correlates for beat and COP officers.

Table 5.3 presents the direct effects model of order maintenance on situational characteristics. The analysis revealed several significant relationships. Both legal variables were significantly related to the exercise of order maintenance. As offense seriousness increases, so too does the likelihood of peacekeeping by the officer ($b = .492$; $p < .05$). Similarly, as evidence criterion increases during an encounter, so too does order maintenance ($b = .240$; $p < .05$). Additionally, juveniles are more likely to receive commands by police officers than adults ($b = .712$; $p < .05$). Officers were more likely to impose order maintenance techniques on citizens who display signs of intoxication ($b = 1.306$; $p < .01$). Citizens who display hostile demeanor toward the officer were more likely than deferent citizens to receive order maintenance commands from officers ($b = 1.597$; $p < .01$). Also, citizens who are residents of the community where the encounter occurred are more likely to be handled by officers through order maintenance ($b = .542$; $p < .01$). Finally, as the number of other officers present at the scene increases, so too does the likelihood of order

maintenance (b = .123; p < .05). However, officer assignment was unrelated to decisions to exercise order maintenance. In other words, assignment alone does not influence order maintenance decision making of officers. This model explained 19.3 percent of the variance in the dependent variable.

Since assignment does not exert a direct effect on order maintenance decision making, the analysis now examines the conditional effects comparing the correlates of order maintenance for beat and COP officers. Model A in Table 5.4 presents the estimates for beat officers. As the seriousness of the offense increases, so too does the likelihood of the officers

Table 5.3: Direct Effects of Situational Level Correlates of Order Maintenance

	All Officers	
	b	se
Officer Assignment	-.223	.216
Offense Seriousness	.492*	.219
Evidence	.240*	.103
Citizen Gender	-.123	.199
Citizen Race	.333	.196
Citizen Age	.712*	.234
Demeanor	1.597**	.316
In-Presence Crime	.587	.345
Citizen Intoxication	1.306**	.317
Resident	.542**	.193
Bystanders (citizens)	-.049	.063
Bystanders (officers)	.123**	.038
Constant	-1.839**	.294
Model X^2	124.363**	

Pseudo R^2	.193
n	591

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

exercising order maintenance (b = .647; $p < .05$). Juveniles also are more likely to be directed by officers to take some action than adults (b = .857; $p < .01$). Citizens who display hostile demeanor toward officers significantly increase their likelihood of receiving order maintenance by officers (b = 1.813; $p < .01$), even when controlling for crimes committed in the presence of officers (b = .991; $p < .05$). Citizens who are residents of the community where the encounter occurred are more likely to receive order maintenance responses by officers (b = .551; $p < .05$). Finally, officers are more likely to exercise order maintenance techniques as the number of officers at the encounter increases (b = .122; $p < .01$). This model explains 20.6 percent of the variance in order maintenance decision making (see Table 5.4).

Model B in Table 5.4 displays the logistic regression estimates of order maintenance decision making on the situational correlates for COP officers. Only three correlates are significantly related to decisions to exercise order maintenance. The quantity of evidence criterion is positively related to order maintenance (b = .667; $p < .01$). Thus as the amount of evidence that indicates the citizen committed a criminal offense increases during the encounter there is an increased likelihood officers will use order maintenance. Similar to their counterparts, COP officers are more likely to exercise order maintenance during encounters with intoxicated citizens (b = 1.980; $p < .05$). Also, as the number of other officers at the scene increases, so too does the likelihood that the officer will attempt order maintenance techniques during the encounter. Model B explains 21.3 percent of the variance

in order maintenance decision making.

Table 5.4 also presents a comparison between the beat and COP officers. These

Table 5.4: Conditional Effects of Situational Level Correlates of Order Maintenance

	Model A Beat Officers		Model B COP Officers		
	b	se	b	se	t
Offense Seriousness	.647*	.273	.151	.444	.952
Evidence	.112	.121	.667**	.245	-2.031*
Citizen Gender	-.226	.233	.267	.407	-1.051
Citizen Race	.409	.236	.143	.385	.589
Citizen Age	.857**	.236	.616	.388	.531
Demeanor	1.813**	.367	.688	.635	1.534
In-Presence Crime	.991*	.462	.273	.574	.974
Citizen Intoxication	1.157**	.355	1.980*	.865	-.880
Resident	.551*	.232	.719	.396	-.366
Bystanders (citizens)	-.044	.070	-.158	.179	.593
Bystanders (officers)	.122**	.045	.178*	.084	-.587
Constant	-2.068**	.311	-2.093**	.501	
Model X^2	94.648**		38.725**		
Pseudo R^2	.206		.213		
n	424		167		

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

comparisons reveal one significant difference between officers. Specifically, the effect the evidence criterion has on decision making is significantly different for COP officers than beat officers ($t = 2.031$; $p < .05$). The evidence criterion is positively related to COP officers' decisions to exercise order maintenance, where evidence exerts no such influence on beat officers. Thus, of the two legal variables, order maintenance decision making for

beat officers is influenced by offense seriousness,[39] whereas evidence influences the decision making for COP officers. No other comparisons were significantly different between beat and COP officers at the conventional .05 level (see Table 5.4).

Community Level Correlates

Community policing suggests that officers' decisions and actions will vary by neighborhood, and that officers will vary their order maintenance techniques or other methods of informal social control depending on community level characteristics (Alpert and Dunham 1988; Alpert et al. 1998; Wilson and Kelling 1982). This section analyzes community level correlates of order maintenance for beat and COP officers. Table 5.5 presents the direct effects for community level correlates and a dummy variable indicating officer assignment. None of the three community level correlates of interest (ie., crime rate, residential mobility and community disorganization factor) exert a significant influence on officers' decisions to use order maintenance during encounters with citizens. However, officer assignment has a direct effect on these activities ($b = -.394$; $p < .05$). Officers assigned as COP officers are more likely to use order maintenance during encounters with citizens, controlling for community level characteristics of the encounter. This indicates that simply being assigned as a COP officer directly influences the exercise of order maintenance. This model explains 1.1 percent of the variance in decision making (see Table 5.5).

Though the data reveal that officer assignment directly impacts order maintenance decision making, a multiplicative analysis is necessary in order to determine whether

[39] Though offense seriousness does not exert a significantly different effect on beat than COP officers.

assignment interacts with the different community correlates to influence decision making.

Table 5.5: Direct Effects of Community Level Correlates of Order Maintenance

	All Officers	
	b	se
Officer Assignment	-.394*	.177
Crime Rate	-.177	.737
Residential Mobility	1.334	.979
Community Factor	.282	.382
Constant	-.777	.524
Model X^2	7.224	
Pseudo R^2	.011	
n	646	

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

Table 5.6 provides the conditional effects models for beat and COP officers. The estimates for both Model A and Model B reveal none of the community correlates significantly influence decisions to exercise order maintenance for either beat or COP officers. Furthermore, an examination of the t-values between models reflects these correlates do not influence the behavior of officers differently based on assignment. Each of the models explain very little of the variance in order maintenance activities for beat (0.6 %) or COP (0.8 %) officers (see Table 5.6).

Total Models

The preliminary analyses to this point focused on police officers' decisions to use order maintenance within each of the three levels of independent variables (e.g., individual, situational or community levels). However these analyses do not provide estimates

controlling for the influence of variables from the other levels of analysis. In order to control for the influences of the factors that can influence decision making across the levels of

Table 5.6: Conditional Effects of Community Level Correlates of Order Maintenance

	Model A Beat Officers		Model B COP Officers		
	b	se	b	se	t
Crime Rate	-.531	.844	1.019	1.666	-.830
Residential Mobility	1.314	1.125	1.451	2.004	-.060
Community Factor	.574	.452	-.489	.724	1.245
Constant	-1.255*	.605	-.642	1.005	
Model X^2	2.849		1.593		
Pseudo R^2	.006		.008		
n	466		180		

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

independent variables simultaneously it is necessary to utilize two-stage weighted least squares regression techniques. First, the direct effects of officers' assignment are estimated including individual, situational and community level correlates of order maintenance. Second, the conditional effects for beat and COP officers are estimated by disaggregating encounters by officer assignment. Third, the correlates of order maintenance are compared between beat and COP officers in order to determine whether the separate correlates exert a significantly different effect for each assignment.

Direct Effects. Table 5.7 provides the two-stage weighted least squares regression estimates controlling for individual, situational and community level variables. This table presents the coefficients and standard errors for the individual and situational level correlates

in Stage 1, and the coefficients and standard errors for the aggregate level predictors in Stage 2. Similar to the other direct effect models a dummy variable indicating officer assignment

Table 5.7: Direct Effects of the Two-Stage Weighted Least Squares Analysis for Correlates of Order Maintenance

	Stage 1 Individual		Stage 2 Community	
	b	se	b	se
Constant	-1.704**	.466	-21.568	61.161
Officer Assignment	-.356	.239		
Officer Gender	.303	.257		
Length of Service	-.021	.017		
Education	.027	.111		
Offense Seriousness	.569*	.220		
Evidence	.198	.105		
Citizen Gender	.102	.201		
Citizen Race	.350	.207		
Citizen Age	.665**	.243		
Citizen Intoxication	1.356**	.316		
Resident	.501*	.195		
Demeanor	1.611**	.321		
In Presence Crime	.562	.347		
Bystanders (officers)	-.066	.038		
Bystanders (citizens)	.118**	.038		
Crime Rate			-25.631	86.191
Residential Mobility			19.101	119.759
Community Factor			32.104	43.602
Model X^2/F	124.302**		.190	

R^2	.194	.013
n	583	45

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

is included in the analysis. Offense seriousness is positively related to decisions to use order maintenance techniques (b = .569; p < .05). Juveniles are more likely to receive order maintenance requests from officers than adults (b = .665; p < .01). Citizens who are residents of the community where the encounter occurred are significantly more likely than non-residents to receive order maintenance during encounters with officers (b = .501; p < .05). Additionally, citizens who display hostile demeanor are significantly more likely to elicit an order maintenance command from officers (b = 1.611; p < .01). Citizens who demonstrate visible signs of intoxication are significantly more likely to receive order maintenance from police officers (b = 1.356; p < .01). Finally, encounters which include more citizens as bystanders are more likely to involve the use of order maintenance during that encounter (b

= .118; p < .01). No other individual level variables are significant predictors of order maintenance, including officer assignment. None of the officer-level individual variables are significantly related to decisions to exercise order maintenance. The individual and situational level correlates explained 19.4 percent of the variance in order maintenance decision making (see Table 5.7).

The estimates provided in Stage 2 of the analysis reveal none of the community level correlates significantly increase the exercise of order maintenance during encounters with citizens. Aggregate level predictors explain only 1.3 percent of the variance in order

maintenance decision making. Additionally, officer assignment is unrelated to this type of police action. Therefore, whether the officer is assigned as a beat or COP officers bears no direct influence on their decisions to use order maintenance.[40]

Indirect Effects. The conditional effects for beat officer encounters are presented in Table 5.8. The coefficients and standard errors for the individual and situational level correlates are presented in Stage 1, whereas the estimates for the aggregate level community variables are presented in Stage 2. The pattern of significant predictors of beat officer decision making is similar to the direct effects model. As the seriousness of the citizen's offense increases, so too does the likelihood of order maintenance ($b = .789$; $p < .01$). Nonwhite citizens are also more likely to receive order maintenance commands from officers ($b = .501$; $p < .05$), as are juveniles ($b = .657$; $p < .05$). Citizens who are residents of the community where the encounter occurred are significantly more likely than non-residents to

receive order maintenance during encounters with beat officers ($b = .532$; $p < .05$). Intoxicated citizens are significantly more likely to be requested to take some action by beat officers than sober citizens ($b = 1.224$; $p < .01$). Citizens who demonstrate a hostile demeanor are significantly more likely to elicit an order maintenance response from beat officers than deferential citizens ($b = 1.813$; $p < .01$), even when controlling for crimes committed in the presence of officers ($b = .968$; $p < .05$). Finally, beat officers are more likely to exercise order maintenance techniques with citizens encountered in crowd

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Analyses presented in Table 5.1 and 5.5 indicate assignment had a direct effect on order maintenance decision making. This direct relationship disappears when situational level variables are added as controls.

situations than in dyadic or smaller encounters (b = .117; p < .01). None of the other situational characteristics, nor any of the individual officer characteristics, are significant predictors of order maintenance. Overall this model explained 20.9 percent of the variance in beat officers'

Table 5.8: Conditional Effects of the Two-Stage Weighted Least Squares Analysis for Correlates of Order Maintenance for Beat Officers

	Stage 1 Individual		Stage 2 Community	
	b	se	b	se
Constant	-2.245**	.469	-3.630	78.958
Officer Gender	.412	.320		
Officer Race	.150	.244		
Length of Service	-.028	.023		
Education	.064	.124		
Offense Seriousness	.789**	.280		
Evidence	.064	.124		
Citizen Gender	-.217	.239		
Citizen Race	.501*	.247		
Citizen Age	.657*	.315		
Resident	.532*	.237		
Citizen Intoxication	1.224*	.362		
Demeanor	1.813*	.376		
In Presence Crime	.968*	.462		
Bystanders (officers)	-.053	.069		
Bystanders (citizens)	.117*	.045		
Crime Rate			3.245	108.905
Residential Mobility			-51.705	151.971
Community Factor			45.680	58.004

Model X^2/F	94.662**	.256
R^2	.209	.019
n	416	43

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

decision making (see Table 5.8).

Stage 2 presents the two-stage weighted least squares estimates for the aggregate level predictors. Crime rate, residential mobility and the community disorganization factor are not significant predictors of beat officers' decisions to use order maintenance techniques. The aggregate level predictors explain only 1.9 percent of the variance in the dependent variable (see Table 5.8).

The conditional effects of the two-stage weighted least squares regression analysis for community policing officers are presented in Table 5.9. The individual and situational effects are estimated in Stage 1, and the aggregate level estimates are provided in Stage 2. Only two correlates offer explanatory power for COP officers' decisions to use order maintenance during encounters with citizens. Evidence criterion is positively related to the exercise of order maintenance ($b = .675$; $p < .05$). Thus as the amount of evidence present at the encounter that implicates the citizen in criminal behavior increases, so too does the likelihood of order maintenance techniques being used by the COP officer. Furthermore, citizens who display visible signs of intoxication are more likely to elicit order maintenance responses by COP officers than citizens who display no such signs ($b = 2.049$; $p < .05$). None of the other situational variables, and none of the individual officer variables

significantly contribute to explaining the exercise of order maintenance by COP officers. Stage 1 explains 22.4 percent of the variance in the dependent variable.

The second stage of the analysis provides estimates for the aggregate level independent variables. Similar to the previous models, none of the community level correlates are significantly related to the exercise of order maintenance. This suggests that variation in

Table 5.9: Conditional Effects of the Two-Stage Weighted Least Squares Analysis for Correlates of Order Maintenance for COP Officers

	Stage 1 Individual		Stage 2 Community	
	b	se	b	se
Constant	-1.762	.983	67.965	158.196
Officer Gender	.419	.491		
Officer Race	.328	.472		
Length of Service	-.022	.028		
Education	-.091	.330		
Offense Seriousness	.152	.447		
Evidence	.675*	.250		
Citizen Gender	.335	.418		
Citizen Race	-.084	.474		
Citizen Age	.707	.413		
Resident	.665	.412		
Citizen Intoxication	2.049*	.865		
Demeanor	.704	.640		
In Presence Crime	.234	.590		
Bystanders (officers)	-.197	.197		
Bystanders (citizens)	.178	.087		

Crime Rate		122.683	214.823
Residential Mobility		-43.088	307.428
Community Factor		-108.489	106.002
Model X^2/F	40.970**	.034	
R^2	.224	.377	
n	167	35	

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

the structural characteristics of the community where the encounter occurred does not significantly influence COP officer's decisions to use order maintenance. The R^2 for the aggregate level predictors is .034.

Table 5.10 displays a comparison of the coefficients between the estimates provided for beat officers (in Table 5.8) and COP officers (in Table 5.9). Though the models estimated for beat officers appear to be different than those estimated for COP officers, particularly in terms of the number of significant explanatory variables, only one of the comparisons are statistically significant. As noted previously, COP officers are more likely to exercise order maintenance during encounters with more observed evidence at the scene, whereas no such relationship exists for beat officers. The influence of evidence is significantly greater for COP officers than beat officers ($t = -2.189$; $p < .05$). None of the other individual, situational or community level correlates offer significantly different influences on COP than beat officers.

DISCUSSION

This chapter explored the correlates of beat and COP officers' decisions to exercise order maintenance during encounters with members of the public. A total of three different

levels of independent variables were considered. First, the influence of individual officer characteristics were estimated. Second, the impact of situational characteristics were computed. Third, the consequences of community level correlates were estimated. The influence of each of the correlates was analyzed controlling for other factors within their respective level of analysis. Then two-stage weighted least squares regression models were computed where each of the variables were controlled simultaneously. The direct and indirect effects of officer's assignment were estimated. The following section relies on the analysis

Table 5.10: Comparison of Coefficients between beat and COP Officers for Two-Stage Weighted Least Squares Analysis

	t
Officer Gender	-.011
Officer Race	-.335
Length of Service	-.166
Education	.440
Offense Seriousness	-1.208
Evidence	-2.189*
Citizen Gender	-1.146
Citizen Race	1.094
Citizen Age	-.096
Resident	-.279
Citizen Intoxication	-.880
Demeanor	1.487
In Presence Crime	.979
Bystanders (officers)	.690
Bystanders (citizens)	-.623
Crime Rate	-.496
Residential Mobility	-.025

Community Factor	1.284

* $p < .05$

conducted using two-stage weighted least squares regression to discuss and interpret the findings.

Direct Effects

In the preliminary analysis officer assignment appeared to directly influence decisions to use order maintenance. Namely, controlling only for other individual (see Table 5.1) or community (Table 5.5) level correlates, the data reveal COP officers are significantly more likely to use order maintenance techniques during encounters with members of the public. However, when the direct effects of assignment are estimated controlling for all levels of analysis in the two-stage weighted least squares model (Table 5.7), these direct effects disappeared. Therefore, if decisions to exercise order maintenance with citizens vary between beat and COP officers, the decisions will vary on variables that interact indirectly with officer assignment.

Indirect Effects

Individual Level Correlates. The data reveal order maintenance activities do not differ significantly based upon the individual differences between officers (such as officer's gender, race, length of service and level of education). These findings are consistent across the models that control for only individual level correlates (Table 5.2) or when variables at other levels of analysis are controlled (Tables 5.8, 5.9) for either beat or COP officers. Officers' gender does not influence the use of order maintenance.

Research Question #4 posed the following: Do individual level correlates of order maintenance differ for community officers and beat officers? Overall the above results

indicate that beat and COP officers perform at parity across the four officer level variables. Not only do none of the individual level correlates exert a direct effect on decision making, there is no variation in effects of variables between officers assigned to general patrol duties or community policing duties. None of the coefficients, when directly compared to one another, were significant at the .05 level. These results, taken in totality, indicate individual correlates of order maintenance do not differ for community policing and beat officers.

Situational Level Correlates. The analyses presented in this chapter reflect some situational level characteristics exert differing effects on police officers' decisions to exercise order maintenance, though for the most part the magnitude of the variation is quite minimal. The seriousness of the offense by the citizen that leads to the encounter has a positive influence on beat officers' decision making (see Table 5.8). No such relationship is observed for COP officers. This indicates that beat officers use the severity of the offense to judge whether the citizen is a viable candidate for order maintenance, where no such processing occurs for COP officers. Though the severity of the offense exerts a different effect for beat officers than community policing officers, the magnitude of this difference is not statistically significant ($t = 1.208$, see Table 5.10).

In contrast to severity of the offense, evidence criteria exerts a positive influence on COP officers' decisions to exercise order maintenance. As the number of evidence criterion suggesting a citizen may have committed an offense increases, there is an increase in the likelihood COP officers will use order maintenance. No such relationship is observed for beat officers, and in fact the difference between the officers is statistically significant ($t = 2.189$, see Table 5.10). The impact of the two legal variables on order maintenance can be

summed as the following: beat officers are more likely to take offense severity into account when deciding whether to use order maintenance,[41] whereas COP officers are more likely to base their decision making on the level of existing evidence at the scene of the encounter.

Non-white citizens are significantly more likely to receive directions or commands from beat officers than white citizens'. This race relationship is not observed for COP officers (see Tables 5.8, 5.9). The influence of citizen's race however was not significantly different across officer assignment. In the case of beat officers, these results support prior research that reported differences in discretionary decision making based on citizens' race (Lundman 1979, 1988; Smith and Klein 1984; Smith and Visher 1981). Nevertheless, the influence of citizen's race did not vary significantly between beat and COP officers.

Juveniles are significantly more likely to have order maintenance used in their encounters with beat officers than adult citizens. No such relationship is observed for COP officers. On its face these results support research reported by Bazemore and Senjo (1997) who stated COP officers may interact quite differently than their beat officer counterparts. Unfortunately, a comparison of the influence of this explanatory variable between beat and COP officers reveals the difference between officers is negligible. Thus the influence of the citizen's age on order maintenance decisions does not differ significantly based on officer assignment.

Whether citizens are residents of the community where the encounter occurs also has an influence on the decision making of beat officers. These officers are significantly more

[41] Though the difference between the officers is not statistically significant.

likely to exercise order maintenance during interactions with residents than non-residents. Individuals who either lived, worked or owned property in the community were more likely to have their encounters disposed of through the informal means of order maintenance. No such relationship was evident for COP officers: residence of the citizen did not significantly influence the order maintenance decision making of community officers.

Beat and COP officers are significantly more likely to use order maintenance techniques during encounters with intoxicated citizens than sober members of the public. Lundman (1998) stated officers may be less likely to take action and avoid contact with intoxicated citizens, whereas Bittner (1967) stated order maintenance (or peacekeeping) behavior is most appropriate for intoxicated citizens on skid row. The current analysis appears to support the latter contention: intoxicated citizens, regardless of officer assignment, are more likely to elicit an order maintenance response than non-intoxicated citizens. The impact of citizen intoxication was not significantly different for beat than COP officers.

Citizen's demeanor exerts a slightly different effect for beat officers than COP officers. Specifically, the two-stage weighted least squares regression analysis finds citizens with hostile demeanor significantly more likely to bear the brunt of order maintenance from beat officers than non-hostile citizens, even when controlling for crimes committed in the presence of the officer. However COP officers encountering hostile citizens are no more or less likely to exercise order maintenance. It appears that COP officers may be more tolerant of non-deferential citizens than beat officers. Therefore demeanor has an influential effect for beat officers but not for COP officers. The influence of hostility however is not

significantly different for beat officers and COP officers.

Visibility of the encounter also exerts a different, though non-significant effect for beat and COP officers. Other officers present at the encounter has no affect on the disposition for either beat or COP officers (see Tables 5.8, 5.9). However, as the number of citizens present at an encounter between beat officers and citizens increases, there is an increased likelihood beat officers will exercise order maintenance. This supports some research that reported officers are more likely to take some type of action (such as arrest or peacekeeping) during encounters in crowd situations (Bittner 1970; Friedrich 1977; Rubenstein 1973). However no such relationship between other citizens at the encounter and the use of order maintenance is observed for COP officers.

Research Question #5 asked the following: Do situational correlates of order maintenance differ for community policing and beat officers? The analyses presented in this chapter indicate certain situational characteristics may substantively exert varying influences on beat officers, whereas no such relationship is realized for COP officers. These correlates were as follows:

- COP officers are more likely to use order maintenance during encounters when the strength of the evidence is greater.

The following differences were observed, but the magnitude between community policing and beat officers were not significantly different:

- Beat officers are more likely to use order maintenance during encounters when the severity of the present offense is greater,
- Beat officers are more likely to use order maintenance during encounters when the citizen is non-white,
- Beat officers are more likely to use order maintenance during encounters when the citizen is a juvenile,
- Beat officers are more likely to use order maintenance during encounters when the

citizen is a resident of the community,
- Beat officers are more likely to use order maintenance during encounters when the citizen displays hostile demeanor,
- Beat officers are more likely to use order maintenance during encounters when there is an increased number of citizens at the scene of the encounter.

However these conclusions must be viewed with caution due to the fact that most of these observed differences are not statistically significant. This indicates that the correlates offer predictive value for beat officers, but not for community policing officers. However the same general processes are present for each officer assignment, but simply magnified for one and not the other.

Nevertheless, this means that though within each of the models these correlates are influential for beat officers but not COP officers, the impact of these correlates is not demonstrably different across officer assignment.[42] With the exception of evidence present at the scene situational level correlates do not significantly differ for community policing officers and beat officers. However several situational correlates of order maintenance offer greater predictive value for beat officers than COP officers.

Community Level Correlates. The influence of community level correlates on decisions to use order maintenance is minimal. None of the preliminary analyses nor any of the subsequent two-stage weighted least squares regression analyses reveal a direct or indirect effect on decision making. Specifically, community crime rates do not significantly influence beat or COP officers' decisions to exercise order maintenance during encounters

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In fact only the amount of evidence criterion exerts a measurably different effect on COP than beat officers, and is the thus the only explanatory variable which can be said to have a different influence with any confidence.

with citizens. Residential mobility has no influence on whether officers use order maintenance during encounters with citizens. Though it seems reasonable to assume in communities with high mobility there may be a decreased likelihood to exercise order maintenance (Smith 1986), this was not supported by the data. Finally, the community factor (that was derived based on values of percent renter occupied dwelling units, percent non-white, percent living below poverty and percent living below poverty) exerted no demonstrable effect on either beat officers or COP officers decisions to exercise order maintenance.

Research Question #6 proposed the following question: Do community correlates of order maintenance differ for community policing officers than beat officers? Clearly, the data reveal community level correlates have no significant influence on either the decision making processes of beat or COP officers. Though literature surrounding the impact of community oriented policing states order maintenance decision making should differ based on aggregate level variables (Alpert and Dunham 1986, 1988; Alpert and Moore 1993; Alpert et al. 1997; Cordner 1995; Eck and Spelman 1987; Goldstein 1987; Webb and Katz 1997), the data fails to support these contentions. It appears that order maintenance is no more or less likely to occur in high crime, highly mobile or disorganized communities that in other communities.

CONCLUSIONS

This chapter examined the individual, situational and community level correlates of order maintenance for beat and COP officers. First, bivariate relationships were computed to examine model adequacy. Second, separate logistical regression models were estimated

for individual, situational and community level correlates and the direct and indirect effects of assignment examined. Third two-stage weighted least squares models were estimated controlling for all correlates of arrest simultaneously. Fourth, a comparison of coefficients between beat and COP officers was conducted.

Results indicated individual correlates did not predict order maintenance decision making well for beat or COP officers. Some variation was observed in the situational correlates of arrest, though only evidence criterion achieved statistical significance. Finally, results reflected no variation in community level correlates of order maintenance in the two-stage weighted least squares models. When controlling for the three levels of analysis the impact of the community level correlates appears to not differ significantly between beat and COP officers more than situational or individual level correlates. Under the rubric of community oriented policing, the exercise of order maintenance takes on renewed importance. The current study shows that for the most part the determinates of this type of behavior remain unclear.

CHAPTER 6:

CORRELATES OF ARREST DECISION MAKING

Among the many tasks performed by police officers perhaps law enforcement is most central and visible to the overall police function. Officers have a great deal of discretion at their disposal in the manner in which invoke the law (Bittner 1967; Davis 1969, 1975; Goldstein 1960; Klockars 1985; Rumbault and Bittner 1979). Indeed decisions to arrest a citizen have been frequently analyzed empirically (Brooks 1997; Ricksheim and Chermak 1993; Sherman 1980). Unfortunately, only limited attention has been directed at arrest decisions during the era of community oriented policing.

The following arrest related research questions were posed in Chapter 3:

- Do individual correlates of arrest differ for community policing officers and beat officers?
- Do situational correlates of arrest differ for community policing officers and beat officers?
- Do community correlates of arrest differ for community policing officers and beat officers?

This chapter addresses the impact of individual, situational and community level correlates of COP and beat police officer decisions to arrest a citizen during an encounter. The analysis and discussion proceeds in the same manner as the previous two chapters. First, bivariate models and correlation matrices are estimated for individual, situational and community level correlates in order to examine model adequacy. Second, separate logistical regression models are then estimated for individual, situational and community level correlates. Third, two-stage weighted least squares regression models are estimated including correlates at the three different levels of analysis. This allows for an examination

of the influences of correlates on the dependent variable while simultaneously controlling for the influences of variables at the different levels of analysis. Fourth, a comparison of coefficients for COP and beat officers is conducted for the conditional effects (or multiplicative) models in order to explore for significant differences in the correlates of behavior between officers.

BIVARIATE RELATIONSHIPS

Bivariate correlation matrices were estimated for each level of independent variables. This was done in order to detect multicollinearity between pairs of independent variables. Each of the independent variables were next regressed on the other independent variables, and the R^2 for each analysis examined to determine whether there is multicollinearity between collections of independent variables. Appendix VIII displays the correlation analyses for this chapter.

Individual Level Correlates

Correlation matrices were estimated for the additive model, as well as for COP and beat officers separately. These estimates are presented in Appendix VIII. In the additive estimations, the Pearson's Correlations range from .001 to .353 and no R^2 value is greater than .209. This information indicates the lack of multicollinearity among individual level predictors.

The Pearson's Correlations for the individual level correlates for community policing officers range from .046 to .469 and no R^2 value is greater than .276. Taken in totality this suggests there is no multicollinearity among the individual level variables for COP officers. Similarly, the Pearson's Correlations for the individual level correlates for beat officers

range from .042 to .322 and no R^2 value is greater than .165. These analyses suggest there is no multicollinearity between pairs of individual level variables or collections of individual level variables.

Situational Level Correlates

Appendix VIII also presents the zero-order estimates for the situational level variables, including additive and multiplicative models. The Pearson's Correlations the additive model range from .006 to .415 and no R^2 value exceeds .334. Based upon the aforementioned discussion, multicollinearity is not present among these situational level variables. The Pearson's Correlations for situational level correlates for community policing officers range from .004 to .420 and no R^2 value exceeds .470. The bivariate correlations for situational level variables included in the analysis of arrest decisions of beat officers range from .010 to .299 and no R^2 value is greater than .350. In short no multicollinearity was detected for any of the situational level analyses.

Community Level Correlates

In Appendix VIII, zero-order correlation matrices are presented for the three community level correlates of arrest. The Pearson's Correlations for the additive model range from .045 to .561 and no R^2 value is greater than .408. The Pearson's Correlations for the community police officers and community level correlates range from .087 to .663, and no R^2 exceeds .440. Finally, the zero-order correlations for community level correlates of arrest for beat officers range from .125 to .537 and R^2 values do not exceed .411.[43]

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In addition to the above diagnostic checks for the adequacies of the models to be used in this chapter, listwise deletion was also performed on the community level correlates for both COP and beat officers. Listwise

deletion involves the removal of one independent variable at a time to see if removing each correlate affects the coefficients or standard errors of the remaining variables, at the same time taking into account the relative influence of these variables on the endogenous variable. Examination revealed no dramatic changes in the beta or standard errors, further demonstrating the lack of harmful collinearity. These analyses, taken in totality, indicate these variables are sufficient for inclusion in logistic regression analyses.

Total Models

Zero-order correlation matrices are estimated for the individual and situational level variables together. This is necessary before estimating models that include correlates from each of the levels of analysis in order to detect multicollinearity that may occur when all variables are estimated in the same model. Pearson's Correlations for the additive model range from .012 to .415, and no R^2 exceeds .352. Therefore multicollinearity is not present in the additive model that includes correlates from each of the levels of analysis. The Pearson's Correlations for COP officers only range from .003 to .487, however one R^2 estimate exceeds .595. This suggests the independent variables in this model predict over half of the variation in the number of officers present at the scene and almost half of the variation in officer race ($R^2 = .495$). Multicollinearity may exist if these variables are all included in the two stage weighted least squares analysis. Multicollinearity is not detected in the interaction model for COP officers for the remainder of the variables. Pearson's Correlations for beat officers range from .006 to .410, and the greatest observed R^2 was .347. Finally, the zero-order matrix for community level correlates for the two-stage weighted least squares analysis. Neither the Pearson's Correlations nor the estimated R^2 values indicate the presence of harmful collinearity. [44]

It appears that multicollinearity may be present in the proposed models estimated for

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Aggregate level variables were not included in the zero-order correlation matrices for the total models because the process associated with two-stage weighted least squares addresses any collinearity between individual and aggregate variables.

the two-stage weighted least squares analysis. Specifically, the estimates for the correlates of arrest for COP officers reveals R^2 of .565 for officer bystanders and .495 for officer race. Including both of these variables in the analysis may result in the sample variance of the estimated coefficients increasing, giving less precise estimates of the true coefficients (Hanushek and Jackson 1977: 87). In order to more fully explore for the presence of collinearity, variance inflation factor (VIF) scores were calculated including the correlates in Table 11. None of the VIF scores exceeded 2.20. Because VIF scores exceeding 10 denote the presence of multicollinearity (Neter et al. 1990) these tests, taken in totality, indicate multicollinearity is not problematic in the model. Therefore, all covariates are included in the analysis of arrest decision making.

RESULTS

The following section presents logistical regression analyses for individual, situational and community level variables. Separate models are estimated for COP and beat officers. Further, a comparison of coefficients between police officer types are calculated and the findings discussed.

Individual Level Correlates

Prior to estimating logistical regression models for COP and beat officers separately, an additive model to test for the direct effects of assignment is presented. Table 6.1 displays the additive model for individual level correlates of arrest. Independent variables included in this model are officers' gender, race, length of service and level of education. Additionally, a dummy variable indicating the assignment of the officer (0 for COP officers, 1 for beat officers) is included in the model.

Two individual level correlates are significantly related to officers' decisions to arrest: officer gender and officer education. The model reveals male officers are significantly more likely to arrest citizens than female officers ($b = -.892$; $p < .05$).[45] Additionally, officers with greater levels of education are significantly more likely to arrest citizens ($b = .359$; $p < .05$). Officer assignment is not significantly related to arrest decisions, suggesting that whether the observed officer was a COP or beat officer alone does not increase the likelihood of arrest. Thus beat officers are not more likely to arrest citizens than COP officers and vice versa. The pseudo R^2 for this model is .040, indicating this model does not explain much of the variance

Table 6.1: Direct Effects of Individual Level Correlates of Arrest

	All Officers	
	b	se
Officer Assignment	.176	.281
Officer Gender	-.892*	.373
Officer Race	-.334	.249
Length of Service	-.024	.023

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Unlike OLS regression where heteroskedasticity is often caused by a lack of cases clustered around particular combinations of values on the independent variables, logistical regression avoids this problem through maximum likelihood parameter estimation. In short the coefficients are only interpretable for those values within the sample. Therefore the problems associated with unequal error variances are less likely to occur when data are analyzed using this procedure. Relatedly, with regard to problems associated with autocorrelation, due to the fact that logistic regression is not bound by the assumption of linearity serial correlation is avoided due to different assumptions concerning the functional form and shape of the sampling distribution.

Education	.359*	.145
Constant	-1.300*	.509
Model X^2	11.404*	
Pseudo R^2	.040	
n	349	

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

in arrest decisions.

Though the above analysis did not reveal significant differences between beat and COP officers, it is important to examine multiplicative or interaction effects of officer's assignment and the other individual level correlates. In order to do so logistical regression models is estimated regressing 'arrest' on the same four individual correlates first for community policing officers only, and then beat officers. Table 6.2 presents the logit models for COP and beat officers.

Model A in Table 6.2 displays the correlates of beat officers decisions to arrest. Three of the variables (officer gender, race and length of service) did not significantly influence beat officer decisions to arrest. However officer education significantly increases the likelihood of arrest (b = .429; p < .01). In other words as officers' level of education increases so too does the likelihood of arrest. This model explains 3.5 percent of the variance

Table 6.2: Conditional Effects of Individual Level Correlates of Arrest

	Model A Beat Officers		Model B COP Officers		
	b	se	b	se	t
Officer Gender	-.635	.422	-2.047	1.075	1.227
Officer Race	-.156	.300	-.535	.486	.664
Length of Service	-.012	.028	-.078	.054	1.109

Education	.431**	.160	-.228	.435	1.422
Constant	-1.473**	.498	.649	1.248	
Model X^2	3.884		8.507*		
Pseudo R^2	.036		.067		
n	238		107		

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

in beat officer arrest decisions. Model B in Table 6.2 estimates the influence of individual level correlates on arrests for COP officers. None of the individual correlates significantly predict COP officers' decisions to arrest citizens. Overall individual level variables explain only 6.7 percent of the variance in arrest decision-making.

An examination of the coefficient comparisons reveals no significant differences between COP and beat officers. Though officer education significantly influences the decisions of beat officers to arrest and no such relationship was observed for COP officers, the differences do not meet the conventional standard of .05 (t = 1.422).

Situational Level Correlates

Prior research found the factors having the greatest impact on decisions to arrest include situational correlates, or characteristics of the encounter between officers and citizens (Brooks 1997; Ricksheim and Chermak 1993; Sherman 1980). However, with few exceptions situational correlates have not been compared between beat and COP officers (see Mastrofski et al. 1995). This section presents logistic regression analyses for arrest regressed on situational level correlates of arrest for beat and COP officers.

Table 6.3 presents the additive model that examines the direct effects of officer assignment and situational characteristics. The analysis reveals several significant

relationships. Specifically, as the quantity of evidence criterion increases, so too does the likelihood the citizen was arrested (b = .636; p < .01). Male citizens are significantly more likely to be arrested by officers controlling for other situational factors (b = -1.453; p < .01). Additionally, juveniles are more likely to be arrested than adult citizens (b = 1.005; p < .01), as well as citizens who display signs of intoxication (b = 2.102; p < .01).

Table 6.3: Direct Effects of Situational Level Correlates of Arrest

	All Officers	
	b	se
Officer Assignment	.262	.375
Offense Seriousness	.823	.508
Evidence	.636**	.151
Citizen Sex	-1.453**	.393
Citizen Race	.540	.351
Citizen Age	1.005**	.377
Resident	.174	.308
Citizen Intoxication	2.102**	.426
Demeanor	.969*	.399
In Presence Crime	.291	.368
Citizen Non-compliance	1.283**	.451
Bystanders (citizens)	.064	.059
Bystanders (officers)	.208*	.101
Order Maintenance	-1.177**	.349
Constant	-4.333**	.835
Model X^2	128.943**	
Pseudo R^2	.365	
n	321	

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

Citizens who fail to display deferential behavior to the officer (b = .969; p < .05) or

do not comply with officers' requests[46] (b = 1.283; p < .01) are significantly more likely to be arrested than deferential and compliant citizens. Encounters where there are a larger number of officers present at the scene significantly increases the odds the citizen participant is arrested (b = .208; p < .05). Additionally, encounters where officers does not exercise order maintenance are more likely to result in arrest (-1.177; p < .05). In other words, when officers attempt to handle the situation with order maintenance techniques, citizens are not ultimately arrested. Officer assignment is not significantly related to arrest decisions in this model. This means that there is no direct effect of assignment on arrest.

Table 6.4 reports the estimates for the logistical regression models for both beat and COP officers separately. In each model, arrest is regressed on 12 situational level correlates.[47] Model A reports the beta coefficients and standard errors for beat officers.

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"Compliance" is measured slightly different than as presented in Chapter 4. In this chapter, it is measured where 0 = compliance, 1 = noncompliance. This is done for several reasons. First, it is hypothesized that noncompliance will exert a different effect in kind on officer's behavior than compliance (see Worden et al 1996), thus the construct of interest is citizen noncompliance. Second, and relatedly, discrete dummy independent variables in logistic regression analysis should be coded as '1' for the event of interest. Third, when using dummy variables in logistical regression, the modal category should be coded as '0' (Hanushek and Jackson 1977, Ch.7). Frequency distributions presented in Chapter 3 show that the most frequent outcome is compliance. For these reasons, this variable is reverse coded from the dependent variable in Chapter 4.

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One situational correlate (whether the citizen was a resident of the community where the encounter occurred) was eliminated from these analyses. The rationale for this determination was three-fold. First, this correlate was not significantly related to either the dependent variable or any of the other independent variables for either type of officer (see zero-order correlations). Additionally, it was not significant in the additive analysis. Second, the ratio of predictors to sample size was quite small for COP officers. When this occurs the standard errors of the correlates increase and the likelihood of making a Type II error increases (Blalock 1979). With this in mind, I desired to decrease the number of predictors. Since 'resident' was not related to any of the other variables used in this study it was the only appropriate variable to be considered for removal from the analysis. Third, other analyses (not reported here) found citizen residence to not be significantly related to arrest for beat (b = .076; se = .393; p > .05) or COP (b = -170; se = .714; p > .05) officers. Therefore, since it was not a statistically significant predictor, but did introduce potential bias into the final models, it was removed from

Overall the model predicts 42.4 percent of the variance in the endogenous variable. Of the legal variables only evidence is statistically significant. As the presence of circumstantial or physical evidence, claims from witnesses or confessions increases so too does the likelihood that beat officers arrest citizens ($b = .532$; $p < .01$).

Several of the extra-legal correlates of arrest significantly increase the likelihood beat officers arrest citizens. When beat officers encounter male suspects they are significantly more likely to make an arrest than when they encounter female citizens ($b = -1.570$; $p < .01$). Citizens who display signs of intoxication are also more likely to be arrested than sober suspects ($b = 2.534$; $p < .01$). Furthermore, citizens who display hostile and disrespectful demeanor to officers are significantly more likely to be arrested ($p = 1.081$; $p < 05$), even when controlling for crimes committed in the presence of the officers. Similarly, citizens who do not comply with officers' requests during an encounter are more likely to be arrested by beat officers ($b = 1.461$; $p < .01$). In contrast citizen race is not related to beat officers' arrest decisions.

Finally, during encounters where officers do not attempt order maintenance techniques, citizens are significantly more likely to be arrested ($b = -1.346$; $p < .01$). Stated differently, when officers attempt order maintenance during encounters where citizens could be arrested, they are more likely to not arrest the citizens. In these cases order maintenance is used in lieu of arrest (see Table 6.4).

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the analysis.

In Table 6.4, Model B displays the logistic regression estimates for COP officers. Overall the model predicts 33.3 percent of the variance in the dependent variable. Like beat officers, offense seriousness does not significantly increase the likelihood of arrest. At the same time as the amount of evidence increases, so too does the likelihood of arrest ($p = 1.005$; $b < .05$)

In contrast to beat officers, no extra-legal variables are found to be significantly related to arrest. The correlates of citizen gender, race, age, intoxication, demeanor and the

Table 6.4: Conditional Effects of Situational Level Correlates of Arrest

	Model A Beat Officers		Model B COP Officers		
	b	se	b	se	t
Offense Seriousness	.906	.622	.044	1.248	.618
Evidence	.532**	.173	1.005*	.391	-1.106
Citizen Gender	-1.570**	.478	-1.961	1.050	.339
Citizen Race	.767	.431	.583	.748	.213
Citizen Age	.793	.480	1.032	.657	-.294
Citizen Intoxication	2.534**	.533	1.773	1.017	.662
Demeanor	1.081*	.502	.921	.774	.173
In Presence Crime	-.728	.538	1.551*	.621	-2.774**
Citizen Non-compliance	1.461**	.535	.476	1.127	.790
Bystanders (citizens)	.132	.072	-.047	.153	1.058
Bystanders (officers)	.163	.118	.602	.314	-1.309
Order Maintenance	-1.346**	.445	-1.184	.759	-.184
Constant	-3.947**	.959	-4.587**	1.766	
Model X^2	105.247**		35.513**		
Pseudo R^2	.424		.333		

n	221	104

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

presence of bystanders are not found to be significantly related to arrest decisions at the conventional .05 level.[48]

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Though the control variable of whether there was a crime committed in the presence of the officer significantly increases the likelihood of arrest in the theoretically expected direction.

Upon examination of the t values for the comparison of coefficients, only the control variable 'in presence crime' is significantly different between beat and COP officers ($t = 2.774$; $p < .01$). However, given the above analysis and discussion it appears that the correlates of arrest differ slightly between beat and COP officers. Though none of the correlates differ significantly by officers' assignment, overall the models vary considerably. Specifically, of the 12 situational correlates of arrest six significantly predict decisions to arrest. In contrast, only one situational correlate is significantly related to COP officers' decisions to arrest.[49] Additionally, the situational model for beat officers explains more of the variance in arrest decisions than the model for COP officers (42.4 % versus 33.3 %). It appears the traditional situational correlates of arrest more accurately predicts the arrest decision making process of beat officers than COP officers.

Community Level Correlates

One of the assumptions of community policing is that the delivery of police services should vary by neighborhood. Communities with greater levels of disorganization not only may have greater levels of crime (Bursik 1986; Klinger 1997; Scheurman and Kobrin 1986), but also may rely more heavily on police services (Duffee 1990; Langworthy and Travis 1999) or be more likely to elicit arrests by officers (Bayley and Mendelsohn 1969).

Table 6.5 presents the additive model for community level correlates and a dummy variable indicating officer assignment. One significant relationship is observed. The community factor is significantly related to arrest, or in other words, citizens encountered

[49] Excluding the control variable of crimes committed in the presence of the officers.

in communities with greater proportions of non-white residents, renter occupied housing units, single family households and persons living below the poverty line are more likely to be arrested, regardless of officer assignment. Furthermore officer assignment is not found to be related to arrest decisions. This indicates whether officers are assigned as COP or beat officers does not impact their decisions to arrest when controlling for community level correlates. Overall this model explains 3.9 percent of the variance in the dependent variable.

Table 6.5: Direct Effects of Community Level Correlates of Arrest

	All Officers	
	b	se
Officer Assignment	.105	.269
Crime Rate	-1.681	1.333
Residential Mobility	1.845	1.578
Community Factor	1.981**	.635
Constant	-2.668**	.854
Model X^2	12.800*	
Pseudo R^2	.039	
n	346	

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

Alpert and Dunham (1988) reported that officers practicing community policing will be more likely than beat officers to consider community characteristics when making arrest decisions. In order to examine this contention it is necessary to estimate models for COP and beat officers separately, and then compare the estimates between these models. Whether these community level correlates influence COP and beat officers differently can be determined by examining the conditional effects.

Table 6.6 displays two logistic regression models: Model A provides estimates for

beat officers and Model B provides estimates for COP officers. Similar to the additive model, the estimates in Models A and B reveal that both beat and COP officers are more likely to arrest citizens encountered in communities with greater values on the community factor (b

Table 6.6: Conditional Effects of Community Level Correlates of Arrest

	Model A Beat Officers		Model B COP Officers		
	b	se	b	se	t
Crime Rate	-1.195	1.402	-5.933	3.409	1.285
Residential Mobility	3.871*	1.913	-3.222	3.312	1.854
Community Factor	.592*	.232	1.118*	.490	-4.091**
Constant	-3.600**	1.044	-.120	1.707	
Model X^2	11.860**		8.346**		
Pseudo R^2	.055		.087		
n	240		106		

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

= .592; $p < .05$ for beat officers, b = 1.118; $p < .05$ for COP officers). However, the impact of this factor on decisions to arrest is greater for COP officers. The comparison of coefficients indicates that the influence of the community factor is significantly greater for COP officers ($t = -4.091$; $p < .01$).

Additionally beat officers are significantly more likely to arrest citizens in neighborhoods with greater residential mobility (b = 3.871; $p < .05$). This relationship is not observed for COP officers, though the difference between beat and COP officers is not statistically significant. Community level crime rate does not affect arrest decisions for either type of officer. The beat officer model explains 5.5 percent of the variance while 8.7

percent of the variance in arrest decisions for COP officers (see Table 6.6).

Total Models

The preceding sections were devoted to estimating the impact of individual, situational and community level correlates on arrest. To this point all analyses were limited to examining the impact of these correlates within their respective level of analysis. These analyses however did not simultaneously control for the impact of the correlates of arrest across levels of analysis. In order to control for the influence of correlates at all levels of analysis a two-stage weighted least squares regression is estimated.

Direct Effects. Table 6.7 presents the two-stage weighted least squares analysis for correlates across the levels of analysis.[50] The table reports the coefficients and standard errors for the individual and situational level correlates (Stage 1) and the coefficients and standard errors for the community level correlates (Stage 2). The dummy variable that indicates the assignment of the observed officers is not significantly related to decisions to arrest.

Furthermore, none of the individual officer level variables are observed to be statistically significant predictors. Several situational level variables however are significant predictors of decisions to arrest. Evidence is positively related to arrest ($b = .556$; $p < .05$). Male citizens ($b = -1.504$; $p < .01$) and juveniles ($b = .886$; $p < .05$) are significantly more likely to be arrested than females or adults. Additionally, citizens who displayed signs of intoxication were significantly more likely to be arrested ($b = 2.042$; $p < .01$). Citizens who

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Variables removed from the analysis include whether the citizen was a resident of the community where the encounter occurred (because of the lack of an observed relationship between this correlate and other independent variables or the dependent variable), officer race and number of other officers at the scene (due to problems of collinearity).

display hostile demeanor (b = 1.146; p < .01) and citizens who are non-compliant with requests made by officers (b = 1.283; p < .01) also are more likely to be arrested. Finally, in encounters where officers do not attempt order maintenance techniques citizens are significantly more likely to be arrested than citizens confronted during other encounters (b = -1.172; p < .01).

None of the community level correlates in Stage 2 significantly increase the likelihood

Table 6.7: Direct Effects of the Two-Stage Weighted Least Squares Analysis for Correlates of Arrest

	Stage 1 Individual		Stage 2 Community	
	b	se	b	se
Constant	-4.665**	.931	-112.679	118.599
Officer Assignment	.272	.373		
Officer Gender	-.246	.448		
Length of Service	.006	.029		
Education	.256	.182		
Offense Seriousness	.964	.491		
Evidence	.556**	.147		
Citizen Gender	-1.504**	.391		
Citizen Race	.597	.332		
Citizen Age	.866*	.368		
Citizen Intoxication	2.042**	.414		
Demeanor	1.146**	.374		
Citizen Non-compliance	1.283**	.442		
In Presence Crime	.188	.359		
Bystanders (citizens)	.097	.054		
Order Maintenance	-1.172**	.336		
Crime Rate			-89.431	172.190

Residential Mobility		73.972	231.179
Community Factor		108.303	83.877
Model X^2/F	126.379**	.584	
R^2	.390	.041	
n	321	44	

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

of arrest. Community crime rate, residential mobility and community disorganization are unrelated to officers' arrest decisions (see Table 6.7). In summary, none of the individual level variables were found to be significantly related to police arrest decisions, six of the ten

Table 6.8: Conditional Effects of the Two-Stage Weighted Least Squares Analysis for Correlates of Arrest for Beat Officers

	Stage 1 Individual		Stage 2 Community	
	b	se	b	se
Constant	-4.551**	1.031	-172.412	143.095
Officer Gender	.192	.550		
Length of Service	.041	.037		
Education	.350	.204		
Offense Seriousness	.851	.605		
Evidence	.472**	.171		
Citizen Gender	-1.754**	.481		
Citizen Race	.700	.411		
Citizen Age	.696	.491		
Citizen Intoxication	2.499**	.524		
Demeanor	1.343**	.495		
Citizen Non-compliance	1.340*	.552		
In Presence Crime	-.743	.532		
Bystanders (citizens)	.149*	.069		
Order Maintenance	-1.395**	.444		

Crime Rate		-209.706	202.005
Residential Mobility		137.596	281.141
Community Factor		195.928	98.282
Model X^2/F	108.946**	1.391	
R^2	.452	.094	
n	221	43	

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

situational level variables were significantly related to arrest, and none of the three community level correlates was significantly related to arrest. Finally, officer assignment is not directly related to decisions to arrest.

Table 6.9: Conditional Effects of the Two-Stage Weighted Least Squares Analysis for Correlates of Arrest for COP Officers

	Stage 1 Individual		Stage 2 Community	
	b	se	b	se
Constant	-2.317	2.326	138.296	251.229
Officer Gender	-1.201	1.178		
Length of Service	-.120	.087		
Education	-.720	.652		
Offense Seriousness	1.302	1.125		
Evidence	.726	.383		
Citizen Gender	-1.170	.885		
Citizen Race	.795	.705		

Citizen Age	.924	.660		
Citizen Intoxication	1.347	.983		
Demeanor	1.348	.806		
Citizen Non-compliance	1.177	1.070		
In Presence Crime	.848	.604		
Bystanders (citizens)	.023	.125		
Order Maintenance	-.864	.701		
Crime Rate			191.186	495.859
Residential Mobility			-455.750	464.329
Community Factor			118.931	214.050
Model X^2/F	34.068**		.515	
R^2	.266		.063	
n	104		26	

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

Indirect Effects. The indirect effects for beat and COP officers are presented in Tables

6.8 and 6.9, respectively. Similar to the above additive model, each table reports the coefficients and standard errors for individual and situational level correlates in Stage 1 and the coefficients and standard errors for the community level correlates in Stage 2.

Table 6.8 reports the estimates for the two-stage least squares analysis for beat

officers. None of the individual officer correlates (gender, length of service and education) are significant predictors of arrest. Of the legal variables, only level of evidence criterion ($b = .472$; $p < .01$) is significantly related to arrest. Intoxicated citizens encountered by beat officers are also more likely to be arrested than their counterparts ($b = 2.499$; $p < .01$). Similarly, citizens who display hostile demeanor ($b = 1.343$; $p < .01$) and who were non-compliant ($b = 1.340$; $p < .01$) were significantly more likely to be arrested by beat officers. Also the more visible the encounter (measured by the number of citizen bystanders), the more likely the encounter ends in an arrest ($b = .149$; $p < .05$). Finally, beat officers who do not exercise order maintenance techniques during an encounter are more likely to arrest the citizen involved in the encounter ($b = -1.395$; $p < .01$) (see Table 6.8). After controlling for individual and situational level correlates of arrest, none of the three community level variables are found to be significant predictors of arrest.

Table 6.9 displays the two-stage least squares estimates for COP officers. Unlike the models estimated for beat officers, none of the individual or situational level correlates are significant predictors of arrest. Additionally none of the community level correlates of arrest reported in Stage 2 are statistically significant (see Table 6.9).

Table 6.10 provides a comparison of coefficients between the two-stage weighted least squares multiplicative models for beat and COP officers. Though the models estimated for beat officers in Table 6.8 appear to be very different from the models estimated for COP officers in Table 6.9, only one correlate is significantly different across

Table 6.10: Comparison of Coefficients between beat and COP Officers for Two-Stage Weighted Least Squares Analysis

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Officer Gender	1.071
Length of Service	1.702
Education	1.566
Offense Seriousness	-.353
Evidence	.606
Citizen Gender	-.580
Citizen Race	-.116
Citizen Age	-.277
Citizen Intoxication	1.034
Demeanor	-.005
Citizen Non-compliance	.135
In Presence Crime	-1.976
Bystanders (citizens)	10.275*
Order Maintenance	-.640
Crime Rate	-.748
Residential Mobility	1.093
Community Factor	.327

* $p < .05$

officer assignment. The influence of encounter visibility is significantly different for beat and COP officers ($t = 10.275$; $p < .05$). Visibility significantly increases the likelihood of arrest for beat officers, where no such relationship is observed for COP officers. None of the aggregate level correlates are significantly different between beat and COP officers (see Table 6.9).

DISCUSSION

The preceding analyses examined the correlates of police officers' decisions to arrest. Three different levels of independent variables were analyzed: individual level correlates, situational correlates and community correlates. First, each of these levels were analyzed

separately. Both direct and indirect effects of officer assignment were analyzed. Second, each of these correlates were included in a total model that simultaneously controlled for the impact of correlates across levels of analysis. Direct and indirect effects were explored.

Direct Effects

Each of the additive models assesses the direct effect of officer assignment on the decision to arrest citizens. The dummy variable indicating assignment is not significantly related to arrest decisions. In other words, whether officers are assigned as beat or COP officers alone does not significantly influence their decisions to arrest. Therefore, if decisions to arrest citizens vary between beat and COP officers, the decisions will vary when predictors or covariates are added as control variables.

Indirect Effects

Individual Level Correlates. Overall, these analyses support existing research that contends individual variation between officers offers little insight for predicting police officer decisions to arrest (Brooks 1997; Ricksheim and Chermak 1993; Sherman 1980). Initial estimates reveal male officers are more likely to arrest citizens than their counterparts. In the analyses of conditional effects on assignment as well as the models that controlled for situational and community level correlates male officers are no more likely to arrest citizens than female officers. These analyses support results reported by Balkin (1988), Bartlett and Rosenblum (1977), and Sichel et al. (1978).

Officers' level of education was found to be unrelated to decisions to arrest citizens for COP officers. These results confirm prior research that found education does not significantly influence officers' arrest decisions (Crank 1993; Finckenauer 1975; Smith and

Klein 1983; Sykes and Brent 1983; Worden 1989). However beat officers with greater levels of education are more likely to arrest citizens (see Table 6.2). This relationship remained when examining the conditional effects model that combined both officer assignments. This is contrary to research reported by Finckenauer (1975) that stated officers with greater levels of education are more likely to impose informal dispositions to resolve encounters. Though level of education for beat officers significantly increases the likelihood of arrest and this relationship is not found for COP officers, the difference between the two officers is not statistically significantly at the conventional .05 level (t = 1.422). Finally when situational and community correlates are controlled, beat officers' level of education is not statistically significant. Therefore, education is a relatively weak predictor of officer's arrest decision-making.

Research Question # 7 posited the following: Do individual correlates of arrest differ for community policing officers and beat officers? Overall the above results indicate hypothesized individual level correlates are not related to arrest decisions. Indeed the pseudo R^2 for all models is quite low (.040 for the overall model, .036 for COP officers, .067 for beat officers) suggesting little of the variance in the dependent variable is explained by these correlates. Furthermore none of the individual level correlates are significant predictors of arrest after controlling for situational and community level variables, and none of the coefficients, when compared, are significantly different between beat and COP officers. These results, taken in totality, indicate individual correlates of arrest do not differ for community policing officers and beat officers.

Situational Level Correlates. These analyses at times both confirmed and called into

question results reported in extant literature. These analyses supports prior research that reported level of evidence to be positively related to arrest (Black 1971; Black and Reiss 1970; Friedrich 1977). As the number of evidence criterion increass, both beat and COP officers are more likely to arrest the citizen involved in the encounter. This relationship remains even when individual and community level correlates are controlled. Thus, the data reveals the more important legal variable to be the amount of evidence that alleged the citizen had committed an offense, and not the severity of the offense itself.

The findings provide mixed conclusions regarding the influence of citizens' demographic characteristics. Male citizens are more likely to be arrested than females. However, the multiplicative analyses revealed this to only be true for beat officers. Though COP officers are not more likely to arrest males the observed difference between officers is not statistically significant. In fact this difference is not statistically significant when controlling for other situational level variables or in the two-stage weighted least squares models. These findings surrounding beat officers' decision making supports research reported by Smith (1986) while undermined others (Smith et al. 1984; Visher 1983). The insignificant relationship between gender and arrest for COP officers supports the majority of existing literature that reports citizen gender had no affect on arrest decision making (Bayley 1986; Feder 1996; Lundman 1998; Mastrofski et al. 1995; Moyer 1981; Smith 1984; Smith and Klein 1984; Smith and Visher 1981; Worden 1990).

The two direct effects models (Tables 6.3, 6.7) indicate juveniles are more likely to be arrested than older citizens. These findings support studies that found juveniles are more likely to be arrested by officers (Lundman 1979, 1998; Lundman et al. 1978; Pilivan and

Briar 1964; Smith and Klein 1984; Smith and Visher 1981). However, these significant findings are not observed when beat and COP officers are analyzed separately, controlling for other situational level correlates or in the two-stage weighted least squares models (see Tables 6.4, 6.8 and 6.9). It follows that the magnitude of the differing impact between officer types was also not significantly different (see Table 6.10). Therefore the more prudent conclusion would be beat and COP officers do not make arrest decisions based upon the citizens' age.

Intoxicated citizens encountered by beat officers are significantly more likely to be arrested. This relationship is not observed for COP officers. This is in contrast to findings reported by Mastrofski and his colleagues (1995) where officers with pro-community policing attitudes were more likely to arrest intoxicated members of the public. Though the difference between beat and COP officers is not statistically significant, it appears COP officers may be more tolerant of intoxicated citizens than their beat officer counterparts.

The influence of demeanor and non-compliance is particularly interesting. Model A in Table 6.4 revealed that citizens with hostile demeanor or who are non-compliant with beat officer requests are significantly more likely to be arrested. Similar results are reported when controlling for individual and community level correlates (see Table 6.8). These findings are well supported in the extant literature (Bayley 1986; Black 1971, 1980; Black and Reiss 1970; Lundman 1974, 1979, 1994, 1996a, 1996b, 1998; Lundman, et al. 1978; Feder 1998; Friedrich 1977; Mastrofski et al. 1995; Moyer 1981; Reiss 1971a; Smith 1984, 1987; Smith and Klein 1983, 1984; Smith and Visher 1981; Smith et al. 1984; Sykes and Brent 1980; Sykes et al. 1985; Visher 1983; Worden 1989; Worden and Shepard 1996;

Worden and Pollitz 1984). In contrast, however, Model B in Table 6.4 and the two-stage weighted least squares model in Table 6.9 reveals hostile or non-compliant citizens are not more likely to be arrested by COP officers.

These analyses taken in totality infer COP officers may be more tolerant of hostile citizen behavior and may not simply arrest citizens who "flunk the attitude test". This may be in part due to community officers' desires to refrain from making arrests of citizens in hopes of not breaking down the police-citizen relationship they may enjoy. Though the magnitude of the influence of demeanor between beat and COP officers failed to attain statistical significance when controlling for other situational correlates ($t = .173$; $p > .05$) or when controlling for individual, situational and community level correlates ($t = -.005$; $p > .05$) the fact that the influence of demeanor is consistent across the various models lends support to the contention that beat officers and COP officers may interact with disrespectful citizens differently.

The observed relationship between visibility and arrest for beat officers supports existing research that reported positive relationships between encounter visibility and arrest (Buzawa and Austin 1993; Smith 1984; Smith and Klein 1984; Smith and Visher 1981; Visher 1983). Beat officers appear to be more apt to gain control during encounters with large groups through arrest. While COP officers are not more likely to make arrests during crowded encounters. One reason for the lack of an observed relationship between visibility and arrest decisions for COP officers may be due to the fact that COP officers are less likely to arrest or sanction members of the public in front of others because they fear this would alienate citizens observing the action and impede building community relationships.

Finally, the data revealed that beat officers are significantly more likely to arrest citizens when they do not first attempt to exercise order maintenance during the encounter. This supports findings reported by Sykes and Brent (1980) who contended officers go through a series of stages during encounters with citizens in order to gain control of the encounter. By exercising order maintenance over or issuing orders to citizens, officers attempt to gain imperative regulation. If citizens comply with these orders, officers are not compelled to actuate an arrest. However, if citizens do not comply with these orders, officers invoke coercive regulation by making an arrest or using force.

The analysis for beat officers supports this scenario. Where beat officers attempt order maintenance there is a decreased likelihood of arrest. During encounters where beat officers do not attempt order maintenance, no imperative regulation is achieved and the officers simply exercise coercive regulation and arrest the citizen.[51] Similarly, during encounters where citizens do not comply with attempts by officers to attain imperative regulation pursuant to orders and requests, the citizens are more likely to be arrested.

Research Question # 8 asked the following: Do situational correlates of arrest differ for community policing officers and beat officers? Overall the above results indicate situational level correlates of arrest may substantively exert different influences on beat officers than on COP officers, though the magnitude of these differences do not achieve

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It should be noted that though the relationship between order maintenance techniques and arrest was not observed in the analysis of COP encounters, it approaches but does not achieve statistical significance at the conventional .05 level.

statistical significance. Certain correlates of arrest possessed a greater magnification for beat officers than COP officers. Specifically, the following correlates influenced beat officers differently than COP officers:

- Beat officers were more likely to arrest males than COP officers,
- Beat officers were more likely to arrest citizens with hostile demeanor or who were non-compliant than COP officers,
- Beat officers were more likely to arrest intoxicated citizens than COP officers,
- Beat officers were more likely to arrest citizens during encounters when no order maintenance was used than COP officers, and
- Beat officers were more likely to arrest when the encounter was highly visible than COP officers.

However, these conclusions must be tempered due to the fact that for the most part the differences between the estimates for officers were not statistically significant. This indicates similar general decision making processes are influencing the behavior of both officers, though these correlates only offer predictive value for beat officers.

These situational variables explain beat officers' decision making better than COP officers. For example the pseudo R^2 for the situational models are quite high: .333 for COP officers, .424 for beat officers. However the situational correlates predicts more of the variation in behavior in encounters involving beat officers than COP officers. Nonetheless, though the total models appear to indicate situational correlates of arrest do differ for community policing officers and beat officers, the magnitude of these differences are not significantly different. As such the situational correlates of arrest do not significantly differ between beat and COP officers.

Community Level Correlates. Several conclusions can be drawn from these analyses. Community level crime rate does not significantly affect arrest decision-making

in any of the models. This supports prior research that found crime rate to be unrelated to individual arrest decisions (Smith 1984, 1986, 1987). Neither beat officers nor COP officers are more likely to make arrests in communities with greater residential mobility. Finally, citizens encountered in communities with greater values on the community factor (which was a combination of percent living below poverty, percent non-white, percent renter occupied housing and percent of single family households) are neither more nor less likely to be arrested by both beat and COP officers.

Research Question # 9 asked the following: Do community level correlates of arrest differ for community policing officers and beat officers? Overall the data indicate that officers do not change their arrest decision making based on the neighborhood characteristics of where the encounter occurred. Additionally, the data indicate beat officers and COP officers decisions to arrest do not differ significantly based on their assignment.

CONCLUSIONS

This chapter examined the individual, situational and community level correlates of arrest for beat officers and COP officers. First, bivariate relationships were explored in order to examine model adequacy. Second, separate logistical regression models were estimated for individual, situational and community level correlates in order to examine the direct and indirect effects of officer assignment on decision making. Third two-stage weighted least squares models were estimated controlling for all correlates of arrest simultaneously. Fourth, a comparison of coefficients between beat and COP officers was conducted.

Results indicated individual correlates did not predict decision making well across beat of COP officers. Some variation was observed in the situational correlates of arrest,

though none of the differences achieved statistical significance. Finally, results reflected no variation in community level correlates of arrest in the two-stage weighted least squares models. Therefore, when controlling for the three levels of analysis the impact of the community level correlates appears to not differ significantly between beat and COP officers more than situational or individual level correlates.

CHAPTER 7: CONCLUSION

Overview of the Study

The purpose of this study was to determine which factors influence the decision making processes of police officers and citizens when they interact with each other. Special attention was paid to differences between community policing officers and traditional beat officers. The general questions proposed in this dissertation is whether the influences on officer and citizen behavior vary based on the assignment of the involved officer.

Three types of decision making were considered. These decisions represented the three dependent variables used in the study. First, the factors that influence whether citizens comply with demands made by officers were analyzed in Chapter 4. Second, the factors that impact police officers' decisions to exercise order maintenance were considered in Chapter 5. Finally, the predictors of officers' decisions to arrest citizens were addressed in Chapter 6.

These particular decision making dispositions were chosen because they represent a logical progression of the police-citizen encounter. Order maintenance is a non-legal remedy used to return situations to a condition of homeostasis. Officers have discretion during encounters whether to exercise this form of peace keeping. Specifically, when officers encounter members of the public, citizens have alternatives at their disposal. In these encounters citizens have behavioral alternatives at their disposal. In these encounters they may decide whether to comply with the officers' directives. Citizen compliance is likely to result in these encounters when officers use order maintenance, a non-legal remedy, to return the situation to homeostasis. Alternatively, citizen noncompliance may lead to

officers deciding to arrest. Each of these decisions by officers and citizens involve discretionary choices. Finally, while discrete and separate decisions were addressed in this study they are each related to one another as citizen compliance influences the decisions of officers and vice versa.

Independent variables used in this analysis were divided into three primary levels. Individual level variables consisted of the characteristics of the police officers (such as the officer's race, gender, education and length of service). Situational level variables consisted of characteristics of the citizens involved in the encounter and characteristics of the physical and social setting. Community level variables consisted of aggregate level characteristics of the community where the encounter occurred.

The data used in this study came from three different sources. The first data source was systematic social observations with community policing and beat officers (Frank 1996). From April 1997 to April 1998, trained researchers conducted 442 observations with officers of the Cincinnati Police Division. During these observations field researchers collected information regarding police officers' activities and encounters with members of the public. These data were used to create the individual and situational level factors, as well as measurements of the dependent variables. The second data source was obtained from the U.S. Census (U.S. Department of Commerce 1994). Data were collected at the block group level and aggregated to the community level. These Census data were used to create community level demographic characteristics. Third, crime data were obtained from the CPD. The crime data consisted of all crimes reported to the police during the observation project period. These data were aggregated to the community level in order to determine

community level crime rates.

A systematic analysis was conducted using the above data. Bivariate models were estimated for each of the models used in this study in order to determine model adequacy. Logistic regression equations were estimated for each of the levels of independent variables separately. Both additive and multiplicative models were estimated in order to discover whether the officer assignment had a direct or indirect effect on decision making. Following these preliminary analyses, two-stage weighted least squares regression models were estimated that included correlates from all three levels of analysis. Finally, a comparison of coefficients for COP and beat officers was computed in order to test for significant differences in the influences of officer and citizen behavior.

SUMMARY OF FINDINGS

Direct Effects

Being assigned as a community policing officer had no direct effects on whether officers exercised order maintenance or made an arrest during encounters with citizens. This conflicts with existing literature that stated community policing officers would be less likely to make arrests and more likely to use non-legal remedies during encounters (Bayley 1988; Cordner 1995; Mastrofski 1992; Trojanowicz and Bucqueroux 1990). The analyses indicate that in Cincinnati, beat officers and community policing officers perform at parity when exercising coercive control over citizens.

Analyses in Chapter 4 however revealed citizens are significantly more likely to comply with the demands of COP officers than the demands of beat officers. When the influences of individual, situational and community level correlates are controlled, citizens

are more likely to acquiesce to COP officers (see also Mastrofski et al. 1996). As outlined in Chapter 4, there may be several possible explanations for this relationship. Citizens may view COP officers as possessing a different role than beat officers. Additionally, citizens and COP officers' may be more likely to have ongoing relationships and possess greater knowledge of each other. COP officers may also possess superior negotiation skills than their counterparts, and skills that are developed during the additional training they must undergo. Regardless of exactly what causes compliance, COP officers who direct citizens to take some action are more likely to have their requests granted than beat officers.

Indirect Effects: Individual Level

The findings indicate that individual officer characteristics exert little influence on whether citizens comply with police officers' requests, whether officers exercise order maintenance or whether officers arrest citizens. Whether officers are male or female failed to add predictive value across any of the models for either community policing or beat officers. Sichel et al. (1978) and Sherman (1975) stated female officers are less aggressive than male officers making fewer number of arrests. This is not supported in the current study. Neither male nor female officers are more successful at gaining the compliance of citizens. The evidence supports the assertion that male and female officers perform similarly across these three dependent variables.

The race of the officer also has no significant influence on the three types of behaviors under examination. Nonwhite officers are neither more nor less likely to use order maintenance or make arrests when controlling for other correlates. Similarly citizens are neither more nor less likely to acquiesce to nonwhite officers than their white counterparts.

Some research reported nonwhite officers tend to be more aggressive than white officers (Friedrich 1977) while others found that officer race did not significantly influence the behavior of participants in police-citizen encounters (Smith and Klein 1983; Worden 1989). This study supports this later contention. Furthermore there is no difference between COP and beat officers based on race.

Analyses presented in Chapter 4 showed beat officers with lesser length of service are more likely to gain the compliance of citizens than officers with longer tenure. No such relationship is observed for COP officers. Though the influence of length of service is magnified for beat officers, the influence of this variable is not significantly different between beat and COP officers. Thus length of service does not have a different effect in kind, but only in degree, between officers for compliance. Length of service does not have any predictive value on order maintenance or arrest decision making for either beat or COP officers.

Finally, the level of officer education does not significantly influence citizen compliance, order maintenance or arrest decisions. Additionally, education does not influence either beat of COP officers. It seems logical that skills learned over the course of more formal education (such as verbal skills and the ability to analyze complex problems) would assist officers with higher levels of education to obtain compliance (Goldstein 1977; Muir 1977; Worden 1994). However this assumption is not supported by the data. These results support prior research that reported education level was unrelated to decision making during encounters (Crank 1993; Finckenauer 1975; Smith and Klein 1983; Sykes and Brent 1983; Worden 1989).

Individual correlates of police officer and citizen decision making offer little predictive value during encounters. With the exception of the inverse relationship between beat officer length of service and compliance, none of the individual level correlates significantly influence the behavior of police officers and citizens. Also is no evidence these correlates behave significantly different for beat officers and COP officers.

Indirect Effects: Situational Level

Offense severity is only related to whether beat officers decide to use order maintenance during encounters with citizens. As the severity of the offense increases, there is an increased likelihood beat officers will use order maintenance. No such relationship is observed for community policing officers, and the difference in the magnitude of the influence of offense seriousness does not differ significantly based on assignment. Offense severity has no predictive value for citizen conformity or arrest decisions. This is in contrast to much existing research (see Riksheim and Chermak 1993). There are possible explanations for why null results occur surrounding decisions to arrest. One explanation for these findings is that both beat and COP officers are more likely to make arrests for relatively minor offenses than officers analyzed in prior research. Indeed, the Broken Windows thesis stated arrests for minor offenses may be more common than previously articulated (Wilson and Kelling 1982). This is due to the fact that minor crimes are viewed as more important than before because they can give the impression that an area is unsafe, and thus suitable for the commission of more serious crime.

As evidence criterion increases, COP officers are more likely to use order

maintenance. In contrast, beat officers are more likely to make an arrest.[52] This is particularly interesting because the data indicate that evidence (which is a legal variable) is a useful predictor of encounter dispositions. When evidence exists that indicates a citizen has committed an offense, the officer's action is influenced by their assignment. Citizens who encounter community policing officers are more likely to receive non-formal outcomes (e.g., order maintenance) whereas citizens encountering beat officers have a greater chance of being arrested.

It would appear that citizens who have committed a crime or citizens involved in encounters with more evidence that could be used against them would be more likely to comply with officers' wishes. This is because citizens have more at stake to lose, namely their freedom. These types of encounters may be characterized in the following manner: When there is evidence that a crime has been committed by the citizen, the officer possesses probable cause to make an arrest and therefore the authority to deprive citizens of their liberty. During these situations noncompliance is not in the best interests of the citizen, and noncompliance represents a calculated gamble on the part of citizens (Mastrofski et al. 1996). In other words by attempting to direct the citizen's behavior officers are giving citizens an option to avoid legal sanction. However, during encounters where no crime has

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When comparing the coefficients between beat officers and community policing officers in terms of order maintenance decision making, the influence of evidence is different in kind and not merely magnitude. Evidence exerts a significantly different effect for COP officers than beat officers. No such significant relationship is observed for decisions to arrest.

occurred (or a minor infraction which by statute does not carry the possibility of arrest) citizens may feel more free to refuse to comply with officers. Noncompliance in non-crime encounters would be less likely to be met with legal sanction, and are thus much less of a gamble. However, this does not appear to be the case in the current study.

The gender of the citizen involved in the encounter has some influence on the behavior of the actors. Results presented in Chapter 6 display males are more likely to be arrested than females, but the multiplicative analysis reveals this is only true for beat officers. This finding indicates beat officers are more likely to act in a chivalrous manner toward females, whereas no such behavior is exhibited by community policing officers. The difference between beat officers and COP officers however was not significant.

At the same time, the gender of the citizen involved in the encounter did not influence the decision making processes for order maintenance or compliance. Whether the citizen involved in the encounter is male or female has no impact on whether beat or COP officers exercise order maintenance during encounters. Similarly, whether citizens comply with the requests of police officers does not vary by their gender. This is counter to some research that reported the gender of the citizen influences how citizens interact with officers during encounters (Lanza-Kaduce and Greenleaf 1994; Mastrofski et al. 1996). One might expect females, due to gender stereotyping, to be more agreeable to the demands made by officers. However this is not the case. Give these findings, it is obvious the influence of gender does not significantly differ across assignments of officers.

The race of the citizen only influences the dispositions in order maintenance and compliance. Nonwhite citizens encountered by beat officers are more likely to receive

directions and commands for order maintenance than white citizen. At the same time nonwhite citizens are also more likely than white citizens to comply with these requests made by beat officers. No such relationship is observed for COP officers, and the magnitude of the difference in race does achieve statistical significance, indicating a difference in the kind of effect race has on compliance. Race of the citizen however does not influence arrest decisions. Neither beat nor COP officers were more likely to arrest non-white citizens. Citizen race consistently failed to offer explanatory value across any of the direct or indirect models that controlled for other situational level variables, or the models that also controlled for individual and situational level variables. This is in contrary to extant research that reported officers vary their decision making based on citizen race (Alex 1969; Bayley and Mendelsohn 1969; Lundman 1979, 1998; Smith and Klein 1984; Smith and Visher 1981).

The age of the citizen influences compliance and decisions to use order maintenance for beat officers, but does not affect the arrest decision making processes of either type of officer. Juveniles are more likely to be commanded by beat officers to take some type of action (e.g., order maintenance demands) than adults. At the same time juveniles are more likely to be noncompliant with these requests. No such relationship is observed for COP officers, and in fact, the difference between the coefficients of beat and community policing officers is not statistically significant. The citizen's age does not have a significant influence on officer's decisions to make arrests when other correlates of arrest are introduced as controls.

Citizen intoxication showed consistent differences across all three dependent variables. Police officers, regardless of assignment, are more likely to demand that

intoxicated citizens take some type of action, and these intoxicated citizens are less likely to comply with these requests. This is particularly true for community policing officers -- intoxicated citizens are significantly more likely to be noncompliant with COP officers. Finally intoxicated citizens are more likely to be arrested by beat officers than sober citizens. No such relationship between intoxication and arrest is observed for COP officers. This indicates that although intoxicated citizens are more likely to not comply with the requests made by community policing officers, they are not more likely to be arrested. Community policing officers have more tolerance for inebriated citizens than their counterparts, though the magnitude of this difference does not achieve statistical significance. Bittner (1967) in his analysis of policing skid row found order maintenance is a preferred approach for dealing with the intoxicated. Later, Mastrofski et al. (1995) found officers exercising community building (e.g., community policing officers in the current study) are less likely to arrest inebriated citizens. Both of these contentions are confirmed in the current study.[53] One fact remains fairly obvious: drunk citizens act differently than sober citizens during encounters, and furthermore tend to elicit differing responses from police officers.

Citizens who are encountered in their community of residence for the most part are not treated significantly different than nonresidents. The only exception is with beat officers who are more likely to exercise order maintenance with residents of the community than

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However it is important to remember the non-significant difference in the decision making processes between beat and COP officers decisions to arrest the intoxicated tempers this finding.

nonresidents. This is not the case for community policing officers, where residence of the citizen does not influence their order maintenance decision making. Additionally, though one would expect citizens who are residents of the community where the encounter occurred to comply more often with officers than nonresidents, the data fails to support this contention. This should be particularly true for encounters involving COP officers who are responsible for long term crime prevention strategies within communities. Noncompliance may alienate COP officers. Since COP officers are assigned to communities for long periods of time, it would appear logical that residents would guard against alienation of these officers. However the data indicate this is not the case.

The demeanor a citizen displays during encounters with the police has some influence on the decision making of beat officers, but no influence on the behavior of community policing officers.[54] Citizens who display hostile or non-deferential demeanor to beat officers are both more likely to be arrested and more likely to be commanded to take some type of action to instill order. The difference in the impact of citizen demeanor on beat and COP officers is not statistically significant. Therefore, the influence of demeanor is magnified for beat officers where it is less important for COP officers. The impact of demeanor between beat officers and community policing officers is more in magnitude than in kind.

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Demeanor and whether a crime is committed in the presence of the officer were not included in models predicting citizen compliance because there is no theoretical reason to believe citizens' demeanor should influence citizen behavior, rather the two should be intercorrelated.

The visibility of the encounter influences the activities of both types of officers, but the effect depends on how visibility is measured. The number of other officers at the encounter does not influence the behavior of citizens or officers in any of the total models. When visibility is measured as the number of other citizens present at the encounter, some variation occurs. There is a positive relationship between the number of citizens present at the encounter and the likelihood of the use of order maintenance and arrests. These findings support those reported by Smith (1984) and Smith and Klein (1984). No such relationship is observed for COP officers in the present study. Further, the influence of citizen bystanders in arrest decision making is significantly different for beat officers than community policing officers. Finally, as the number of citizen bystanders increases citizens are less likely to comply with the demands of beat officers during encounters.

Whether or not citizens comply with officers was also included as an independent variable to predict police officers' decisions to arrest. Noncompliance with police directives can be interpreted as a form of disrespect for officer authority. Citizens who fail to comply with requests made by beat officers are significantly more likely to be arrested than compliant citizens, though no such relationship was observed between compliance and arrest for community policing officers, though the magnitude of the difference is not statistically significant. Noncompliance therefore influences the arrest decisions beat and COP officers in the same manner as hostile demeanor. Finally, beat officers who do not first attempt order maintenance techniques during encounters are significantly more likely to arrest citizens, while no such relationship exists for COP officers.

The above described sequence of events for beat officers is very similar to the one

described by Sykes and Brent (1980). As outlined in Chapter 4, order maintenance is the attempt by police officers to gain imperative regulation. If citizens comply with these orders, the encounter typically ends without formal intervention. However, if the citizen does not grant imperative regulation to the beat officer (e.g., noncompliance) there is an increased likelihood the encounter will end in what Sykes and Brent called coercive control. In the current study arrest represents coercive control.

The influence of two final independent variables were estimated for the models predicting citizen compliance. The manner by which COP officers convey their demand for order maintenance directly influences the behavior of citizens. Namely, when community policing officers command or threaten citizens, they are more likely to gain compliance. No such relationship is observed for commands or threats made by beat officers. In fact, the difference between beat and COP officers on this independent variable is significantly different. The reason for this phenomena may be two-fold. First, officers exercising authoritative demands in general may be more likely to elicit compliance (Bayley and Garafalo 1989; Mastrofski et al. 1996; Reiss 1971a; Sykes and Brent 1983). This is because citizens calculate that noncompliance would not be in their best interests. In short, though citizens have options at their disposal regarding whether they comply, if these demands are threatening in nature citizens interpret this as more coercive and therefore in the end grant officers their wishes. Second, threats or commands may be perceived as more legitimate because of the caretaker and cooperative crime prevention role COP officers enjoy among the citizenry. In other words, citizens who perceive demands made by COP officers as being in their best interests, and when COP officers convey these demands in an authoritative

fashion, compliance is granted more frequently. On these same lines, COP officers may be less arbitrary in their exercise of threats or commands, reserving them for only certain encounters when they are necessary.

Any benefits gained by commands or threats by community policing officers is lost if the officer is perceived as disrespectful. The data indicates citizens are more likely to be noncompliant when COP officers treat them in a disrespectful manner. No such relationship is observed for beat officers. These two correlates (officer authoritativeness and officer disrespect) indicate the manner in which COP officers make their demands for order maintenance is very important when attempting to gain compliance. However these dimensions are much less predictive of the outcomes of encounters between beat officers and citizens.

Situational correlates of citizen and officer behavior consistently explained more of the variance in the dependent variables across the numerous models than either individual or community level correlates. Also a greater number of the situational level variables were significant predictors than across the other levels. While the influence of several of these correlates are significantly different between beat officers and community policing officers (i.e., evidence criterion and order maintenance, citizen race and compliance, authoritativeness and compliance, and citizen bystanders and arrest), more often the differences in the influence of these correlates were merely in magnitude than in kind. In other words the predictive influence of correlates did not differ in substance, but did differ in strength.

Indirect Effects: Community Level

Community level characteristics exert minimal influence on both officer and citizen behavior. Across the various two-stage weighted least squares regression equations that measured the influence of aggregate level correlates while controlling for individual and situational level correlates, none of the variables achieved statistical significance. It should be noted that preliminary analyses reveal that some of the community level correlates are significantly related to the variables of interest (i.e., residential mobility is negatively related to compliance but positively related to arrest during encounters with beat officers, and the community factor is positively related to arrest for both types of officers). These relationships are non-significant when other correlates were added as controls.

Eck and Rosenbaum (1994) stated that inner-city communities with histories of strife with police officers and high levels of distrust may be incapable of sustaining co-productive partnerships and problem solving relationships with police officers. It is reasonable to assume citizens encountered in these communities may be less likely to comply with the directions of police officers. These communities can be characterized by the types of factors operationalized in the present study (e.g., high crime, residential mobility, disorganization). Based upon these assumptions, it is reasonable to infer compliance in these geographic units would be limited. However the empirical analysis presented in this chapter does not support these hypotheses.

Eck and Rosenbaum (1994) further stated community officers may be less likely to make arrests and more likely to engage citizens informally (such as order maintenance) in communities with high crime. In contrast, beat officers may be expected to actuate an arrest in similar situations. This was not substantiated by the current study. Overall community

crime rates do not influence COP officers during order maintenance or arrest encounters, and furthermore do not influence the decision making of beat officers differently than their counterparts. These null results support prior research reported by Smith (1986).

Some prior research indicates community level correlates may be related to individual decisions to make arrests. Crank (1990), Miller and Bryant (1993), and Smith (1986) all stated that there should be a positive relationship between aggregate crime rates and arrest, where Klinger (1997) stated the relationship is more complex than a simple positive relationship. Overall the data indicate that officers do not change their arrest decision making based on the neighborhood characteristics of where the encounter occurred. Additionally, the data indicate beat and COP officers' decisions to arrest do not differ significantly based on their assignment.

The data indicate that community level correlates do not significantly influence the individual decision making of police officers. Furthermore, community level correlates do not explain much of the variance in the dependent variables.[55] These results, taken in totality suggest the influence of community level characteristics on individual decision making of citizens and police officers during encounters is minimal.

DISCUSSION OF FINDINGS AND POLICY IMPLICATIONS

Situational correlates of behavior consistently offer more explanatory value than either individual correlates or community correlates. By comparing the correlates of behavior between beat officers and community policing officers this study is able to determine whether these correlates exert a different influence on decision making depending

[55] R^2 values range from .013 to .094.

on the assignment of the officer. Most comparisons between beat and COP officers reveal these correlates do not exert disparate influences across officer assignment.

However two observations are of particular interest. First is the relationship between order maintenance, compliance and arrest decisions for beat officers. Decisions made by both beat officers and citizens early in encounters influence whether the encounters end in arrests. As stated previously, if beat officers attempt order maintenance during encounters, officers are less likely to arrest the citizen. At the same time, if citizens comply with these order maintenance demands during encounters, the encounters are less likely to end in arrests. Thus, during these encounters there are two opportunities to avoid official police intervention. If officers choose to exercise non-legal order maintenance, then often arrest is avoided. Likewise, if citizens recognize these directives as an opportunity to bypass arrest, this gives citizens an "out" and a corresponding decreased likelihood of arrest.

This information can assist policy makers in training officers in skills to avoid arrest and official sanctioning of citizens. Training should focus on the decision making choices during the encounter that can avoid arrest. Training seminars can provide officers with different tactics to exercise order maintenance, and increase the likelihood of gaining compliance on the part of citizens. For example, this study also showed community policing officers who issue demands as threats or commands while treating citizens respectfully are two specific strategies that can be employed and refined during in-service training. These strategies can be developed and refined during training sessions. Reducing the exercise of formal application of the law are more in line with the tenants of community oriented policing.

Second, this study showed citizens who are intoxicated received different dispositions during encounters with both beat and community policing officers. Intoxicated citizens are significantly more likely to be noncompliant, more likely to receive order maintenance, and more likely to be arrested. These findings are consistent across all analyses.

Increased training can also assist officers during these encounters as well. Officers should be trained on situations involving citizens with a higher risk for noncompliance. This study showed that encounters involving intoxicated citizens are more likely to end in arrest. However white citizens, juveniles, and large numbers of bystanders are also related to noncompliance during encounters involving beat officers. Training sessions can focus on order maintenance and problem solving skills during encounters involving these specific populations.

This study shows these risk factors do not have the same influence for COP officers. Perhaps COP officers can assist in training other officers within the division to be more tolerant of the actions of these special populations. Bayley and Garafalo (1989) stated that specific officers are more successful at minimizing violence during encounters. Perhaps the same type of relationship occurs during encounters between community policing officers and members of the public.

FUTURE RESEARCH

Though perhaps this study addresses some questions about police officer and citizen behavior during interactions, many questions remain unanswered. It is suggested that future research concentrate on four primary areas: organizational variation, differences in

community policing arrangements, utilizing aggregate level correlates from smaller geographic units and developing more sophisticated outcome measures. First, Wilson (1968) reminds us variations in organizational structure, organizational culture and political arrangements can influence the behavior of individual police officers. This study was unable to determine the correlates of decision making of officers across different organizations due to the fact that data were collected from only one police department. Using Wilson's typology, future research can conduct observations in organizations classified as watchmen, service and legalistic in order. The influence of organizational level correlates can be included in a two-stage weighted least squares analysis, similar to how community level correlates were analyzed in the current study.

Relatedly it is important for future research to also consider the decision making of police officers and citizens from smaller organizations and cities. Walker (1983) noted how most research on the police occurs in large agencies, resulting in a big city bias in how researchers develop police theory. This is particularly important concerning since 88 percent of police organizations in America have fewer than 50 officers. Though recently there has been an increased concern for research conducted in smaller police organizations (Frank and Travis 1998; Weisheit, Falcone and Wells 1999) we still know relatively little about the decision making processes of officers in smaller organizations. It appears unrealistic to assume discretionary decision making in smaller police organizations is similar to those in larger police organizations. Yet, this remains an empirical question.

Second, future research should consider different variations of how community oriented policing is administered. McGarrell et al. (1997) describe variations in the delivery

of community policing as either a specialists approach or a generalists approach. Specialists, such as in the Cincinnati Police Division, are specific individuals who are assigned community policing tasks. However others stated that in order to more fully administer community policing strategies as generalists, all organizational members must participate fully in community oriented policing (Trojanowicz and Bucqueroux 1990). Still others stated police officers should engage in problem oriented policing (Goldstein 1990). Each of these different organizational arrangements can influence the decision making processes of individuals during encounters. Data and results from this study provide a baseline of decision making correlates for an organization engaged in specialist community oriented policing. Future research should focus on police organizations engaged in a generalists arrangement or in problem oriented policing, and results can be compared across community policing strategies.

Third, future research should consider aggregate level correlates from a smaller geographic area. Results from this study indicate community level correlates are unrelated to the decision making of police officers and citizens. Future research may choose to revisit this relationship from a census tract or block level. Perhaps too much variation exists in communities to use this aggregated level. The characteristics of the physical area changes not only across communities, but from street corner to street corner. Perhaps citizens encountered on one street corner may receive different dispositions than citizens on a neighboring corner, though both locations fall within the same community. Sherman, Gartin and Buerger (1989) stated crime is located in 'hot spots', or small areas such as street corners and addresses, indicating community level crime rates may be best understood by analyzing

smaller geographic units of analysis. Disaggregating community level information would provide more information on whether this phenomena is true for behavior of officers and citizens.

Fourth, different outcome measures should be developed. The current study considers only whether actors engage in three distinct types of behavior. Other types of behavior that should be studied include reasonable use of force, unreasonable use of force, decisions to provide service to citizens, decisions to issue citations, tickets and warrants to citizens, decisions to investigate problems, and engage in problem solving. Though this study uses a discrete dependent variable, future research may analyze behavior on a more continuous scale (see Klinger 1996b). Drawing on research reported by Sykes and Brent (1980) future research may choose to more fully refine the temporal order of decision making. Relatedly, researchers should explore different exogenous variables that could logically and theoretically influence the behavior of citizens and police officers.

Police officers and citizens make decisions on how to act during encounters with each other thousands of times each day. It seems intuitive that with these actions come consequences. This study represents an analysis of specific types of behavior, in one police department, in specific locations, over a one year period. In order to more fully understand and develop police theory replications are necessary in other jurisdictions at other times. By pooling information gleaned from this study, prior studies and future research we can begin to understand the complexity of the police-citizen interaction in the era of community policing.

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