The Role of Procedural Justice and Legitimacy in Shaping Public Support for Policing

Jason Sunshine   Tom R. Tyler

This study explores two issues about police legitimacy. The first issue is the relative importance of police legitimacy in shaping public support of the police and policing activities, compared to the importance of instrumental judgments about (1) the risk that people will be caught and sanctioned for wrongdoing, (2) the performance of the police in fighting crime, and/or (3) the fairness of the distribution of police services. Three aspects of public support for the police are examined: public compliance with the law, public cooperation with the police, and public willingness to support policies that empower the police. The second issue is which judgments about police activity determine people's views about the legitimacy of the police. This study compares the influence of people's judgments about the procedural justice of the manner in which the police exercise their authority to the influence of three instrumental judgments: risk, performance, and distributive fairness. Findings of two surveys of New Yorkers show that, first, legitimacy has a strong influence on the public's reactions to the police, and second, the key antecedent of legitimacy is the fairness of the procedures used by the police. This model applies to both white and minority group residents.

Introduction

Mechanisms for social control are a universal feature of all human societies, and it is difficult to imagine a culture that lacks the means of ensuring that its people follow its norms, rules, or laws. Bringing the behavior of members of the public into line with norms, rules, and laws is a core function of legal authorities. As a consequence, understanding how people respond to different potential mechanisms of social control is important to policy makers, legal scholars, and social scientists (Tyler 1990; Tyler & Huo 2002). Our concern here is with public responses to one institution of social control—the police, and to one mechanism of social control—police legitimacy. We examine such responses among two samples of the residents of New York City using questionnaire-based responses to "voice of the community" surveys.

This study has two goals. The first is to test the argument that police legitimacy has an important influence on public support for

the police. In this study, we examine the influence of police legitimacy on three aspects of public support: behavioral compliance with the law, behavioral cooperation with the police, and public willingness to support policies that empower the police to use their discretion in enforcing the law. We compare the influence of legitimacy to the influence of three types of instrumental judgments: risk, performance, and distributive fairness.

Legitimacy is a property of an authority or institution that leads people to feel that that authority or institution is entitled to be deferred to and obeyed. It represents an "acceptance by people of the need to bring their behavior into line with the dictates of an external authority" (Tyler 1990:25). This feeling of obligation is not simply linked to the authority's possession of instruments of reward or coercion, but also to properties of the authority that lead people to feel it is entitled to be obeyed (Beetham 1991). Since the classic writing of Weber (1968), social scientists have recognized that legitimacy is a property that is not simply instrumental but reflects a social value orientation toward authority and institutions—i.e., a normative, moral, or ethical feeling of responsibility to defer (Beetham 1991; Kelman & Hamilton 1989; Sparks, Bottoms, & Hay 1996; Tyler 1990). This analysis will explore the importance of legitimacy, beyond the influence of instrumental factors shaping reactions to the police.

Instrumental models suggest that people's willingness to accept and cooperate with legal authorities is linked to evaluations of police performance, to risk, and to judgments about distributive justice. This model, the *instrumental perspective*, suggests that the police gain acceptance when they are viewed by the public as (1) creating credible sanctioning threats for those who break rules (risk), (2) effectively controlling crime and criminal behavior (performance), and (3) fairly distributing police services across people and communities (distributive fairness).

The second goal of this study is to examine the determinants of legitimacy. The procedural justice perspective argues that the legitimacy of the police is linked to public judgments about the fairness of the processes through which the police make decisions and exercise authority. If the public judges that the police exercise their authority using fair procedures, this model suggests that the public will view the police as legitimate and will cooperate with policing efforts. However, unfairness in the exercise of authority will lead to alienation, defiance, and noncooperation.

This procedural justice-based perspective on the antecedents of legitimacy is again contrasted with an instrumental model that links police legitimacy to instrumental judgments about the police. The instrumental model suggests that the police develop and maintain legitimacy through their effectiveness in fighting crime

and disorder in the community. This instrumentally based model of legitimacy is often found in studies of political leaders, in which public support is viewed as based upon leader performance in dealing with economic and social problems (Citrin & Muste 1999).

Conceived of more broadly, the two-stage model outlined reflects *process-based regulation* (Tyler & Huo 2002). Process-based regulation seeks to manage the relationship between legal authorities and the communities they police through self-regulation that flows from the activation of people's own feelings of responsibility and obligation to the community and to community authorities. These social values—i.e., legitimacy—are, in turn, linked to public assessments of the fairness of the manner in which authorities exercise their discretionary authority when implementing the law and/or making decisions about whether and how to provide assistance to those in need. This process-based approach to regulation builds upon the recognition by social theorists that legal authorities depend upon their ability to activate feelings of obligation and responsibility for their effectiveness (Weber 1968; Beetham 1991), and that those feelings, in turn, are linked to justice-based judgments about legal authorities (Tyler 1990).

Police and Policing

Since the establishment of the first formal full-time police force in the United States circa 1837, the police have endured numerous challenges to their legitimacy as an institution of social control. Throughout their history, the relationship between the police and the public has been tumultuous. Instances of police misconduct, with recent examples being the police beating of Rodney King in Los Angeles, the shooting of Amadou Diallo in New York, and the sexual assault on Abner Louima in New York, have long sparked reactions ranging from full-scale riots to public indictments of police practices and public mistrust of the police (Skolnick & Fyfe 1993).

The public is clearly divided over their feelings for the police. And, of particular concern, studies of public views about the police typically reveal large racial and ethnic group differences, with minority group members expressing much more negative attitudes about the police and having lower trust and confidence in institutions of social control. A polarized public is problematic on numerous levels. It inhibits the police from fulfilling their regulatory role in society and produces polarization and discontent through the recognition that certain groups feel disproportionately mistreated by the police. Thus, understanding what it is about police behavior that the public finds problematic is important to

accurately address the needs of citizens as well as to enable the police to function effectively.

The Influence of Legitimacy on Public Support

The legitimacy of the police in the eyes of the public is important because it is the fulcrum of the relationship between the police and the public. We hypothesize, first, that if the public views the police as legitimate, then they are more likely to obey the law. To test this argument, we examine the relationship between people's evaluations of the legitimacy of the New York City Police Department (NYPD) and their *behavioral compliance* with the law. We compare the extent to which judgments of legitimacy guide people's behavior with the degree of influence of instrumental factors also thought to shape people's behavior. In particular, we consider the influence of people's estimates of the likelihood that they will be caught and punished for wrongdoing (risk).

Traditional law enforcement strategies are hinged on the belief that people will be deterred from engaging in criminal activity if they fear getting caught and being punished. Strategies based on this belief are grouped under the term *deterrence*. Though policing in the United States has undergone numerous changes in the past decades, the belief in deterrence-based strategies as an effective method of crime control has largely been left intact. It is believed that the best way to regulate the public's behavior is by making undesirable behaviors extremely risky (Harcourt 2001; Kelling & Coles 1996; McArdle & Erzen 2001). This is achieved by increasing the number of officers on the street, increasing arrests, and/or increasing the threat or use of force by the police (Silverman 1999).

Second, we examine the relationship between people's judgments about police legitimacy and their *willingness to cooperate with police activities*. This concern with cooperation develops from the recognition that effective crime control and disorder management depends on public cooperation with the police (Sampson, Raudenbush, & Earls 1997). We test the argument that if the public views the police as legitimate, they will be more likely to assist the police with crime prevention (i.e., reporting crime or calling for help). We compare this argument to the view that cooperation develops from instrumental judgments about the effectiveness of police performance in fighting crime. This instrumental perspective suggests that people will help the police when they think that the police are being effective in managing crime and urban disorder.

If the police are viewed as effective, citizens may view the help the police have to offer as more important because it would have a greater likelihood of leading to concrete results. As with the deterrence perspective, this view of public support is instrumental. It suggests that people make instrumental evaluations of authority, working with the police when they think that the police are effectively dealing with community issues and problems (Skogan 1990; Skogan & Hartnett 1997).

Third, we examine the relationship between people's judgments about police legitimacy and their *willingness to empower the police*. We test the argument that, if the police are viewed as legitimate, they are given a wider range of discretion to perform their duties. When they are not viewed as legitimate, their actions are subject to challenge, their decisions are not accepted, and their directives are ignored. We contrast this view with the distributive justice perspective, which suggests that people support and empower officials when they think that those authorities distribute police services fairly across groups (Sarat 1977).

The distributive justice argument is that people will be more willing to give power to legal authorities when they feel that those authorities deliver outcomes fairly to people and groups. Sarat (1977) argues that the demand for equal treatment is a core theme running through public evaluations of the police and courts. He suggests that the

> perception of unequal treatment is the single most important source of popular dissatisfaction with the American legal system. According to available survey evidence, Americans believe that the ideal of equal protection, which epitomizes what they find most valuable in their legal system, is betrayed by police, lawyers, judges, and other legal officials. (1977:434)

This argument roots evaluations of the police and police services in judgments of resource distribution across people and across groups (Tyler et al. 1997).

Legitimacy as a Social Value-Based Motivation

Political scientists, psychologists, and sociologists have long considered legitimacy to be an essential quality for leaders and regimes to have. When people view an authority as legitimate, it is believed that they will voluntarily comply with that individual or institution's edicts. Tyler (1990) has demonstrated that when people believe the police or the courts are legitimate, they are more likely to comply with their directives. The key point is that this motivation is distinct from the belief that one is likely to be caught and punished for breaking the law.

This study tests a broader model of the consequences of legitimacy. In addition to exploring the influence of legitimacy on compliance, as did Tyler (1990), this study also examines the importance of legitimacy in shaping cooperation with the police. It has been recognized that the police want more from people than just their willingness to defer to law by limiting their engagement in illegal behavior. The police also want members of the community to engage in proactive behaviors that help the police fight crime. In fact, recent studies make clear that the police cannot effectively control crime and disorder without the cooperation of community residents (Sampson, Raudenbush, & Earls 1997).

Further, legal authorities want the public to accept the legitimacy of granting discretionary authority to the police to allow them to fight crime in the community. Recent research makes clear that the boundary of police authority is a contested one, with community residents sensitive to being stopped and questioned, arrested, and jailed by the police as part of police crime-fighting authority. The issue of whether and in what way the police have the authority to intrude into people's lives by stopping them on the street or in cars, by questioning them, and by arrests and detentions, is central to current controversies about racial profiling, all of which address the question of when the police have discretion to decide whom to stop, question, and ticket. Clearly, the police must have some discretion about how to do their jobs. And in some areas, such as whom to shoot, the police have traditionally been given wide discretion, since the threshold for retrospectively judging a shooting to be inappropriate is quite high. The question addressed here is what factors shape the boundaries of discretion in the eyes of the public.

The Determinants of Legitimacy

This study also explores the aspects of police behavior that influence people's assessment of the legitimacy of the police. As before, we compare two models, one linked to instrumental judgments about the police and the other to procedural justice. Again, the outcome model is built upon three types of evaluations of the police: (1) their ability to catch rule-breakers, (2) their performance in fighting crime, and (3) the fairness of their distribution of outcomes.

We contrast this outcome perspective with a procedural justice model. The procedural justice model focuses on how the police treat people as antecedents of people's views on police legitimacy, rather than seeing legitimacy as linked to how effective they are or whether they provide people with fair outcomes.

A wide body of research makes clear that people's reactions to their personal experiences with the police are shaped by their evaluations of the fairness of the procedures the police use to exercise their authority (Tyler & Lind 1988; Tyler 1990; Tyler et al. 1997; Tyler & Huo 2002). Further, studies demonstrate that procedural justice is central in other hierarchical situations in which people are dealing with authorities, such as in mediation (Pruitt et al. 1993), work organizations (Tyler & Blader 2000), courts (Casper, Tyler, & Fisher 1988; Tyler & Lind 1988), and prisons (Sparks, Bottoms, & Hay 1996). Hence, considerable evidence suggests that procedural justice will be central to the relationship between people and legal authorities in the arena of policing.

Our hypothesis is that procedural fairness will also be a primary influence on judgments of legitimacy when people are evaluating the police in general, in addition to when they are reacting to personal encounters with particular authorities. This assumption underlies a procedural justice approach of policing. It is supported by prior studies of personal experience (Tyler 1990), by secondary analyses of several public opinion polls of public evaluations of the police and courts (Tyler 2001b), and by the findings of studies of rule-following behavior in work settings (Tyler & Blader 2000). While suggestive, these prior efforts lack a direct comparison of the role of procedural and instrumental factors in shaping legitimacy in legal settings. This study provides such a direct comparison.

In considering the procedural justice-based model of legitimacy, it is important to recognize that we are working with cross-sectional data in the studies outlined. It is always possible that compliance leads to legitimacy and perceptions of procedural justice. While the data examined here cannot address this issue, other longitudinal data (Tyler 1990) suggest that the model articulated here is reasonable. Ultimately, experiments are needed to test the causal sequence outlined.

A procedural justice-based approach to policing has numerous advantages over an instrumental approach—i.e., an approach that links cooperation to risk, performance, and/or distributive fairness. One advantage stems from the intrinsic motivations engaged by legitimacy, which leads to a self-regulatory stance by community residents. In other words, when people view the police as legitimate, they are more likely to voluntarily defer to police action and less likely to challenge it. Further, intrusive police tactics are more widely tolerated by the public when the public trusts the motives that drive those tactics (Tyler & Huo 2002). Greater discretionary authority will enable the police to perform their regulatory role more effectively and efficiently.

Second, research suggests that a procedural approach to citizen interaction may enhance the safety of both law enforcement officers and community residents (Tyler & Huo 2002). As mentioned above, instrumental approaches encourage competitive interaction. The powerful party—the police officer—initiates interaction by establishing dominance over the weaker party. It is thought that in the face of overwhelming power the weaker party will submit out of fear of the consequences of noncompliance. However, current social science evidence does not support this conclusion. Pruitt and Rubin (1986) argue that when power-based tactics are used by one party, they are imitated by the opposing party. Corroborating that finding, Lawler, Ford, and Blegen (1988) argue that anger and resentment stemming from the imposition of power elicits behavior from the weaker party meant to resist and harm the aggressor. Generally, conflicts based on domination tend to become irrational and quickly escalate as hostility increases (Pruitt 1981).

By contrast, interaction based on fairness and cooperation can defuse a fight over dominance. In fact, Axelrod (1984) argues that the most effective negotiation strategy for both sides is usually (although not always) to begin with cooperation but to respond with competition if an opponent reciprocates with competition. Similarly, a procedural justice-based policing strategy doesn't mean the police should not resort to the use of force when faced with a hostile individual. It simply means that to the extent that the police can elicit compliance without the use of force, the police officers, the institution of policing, and society in general will benefit greatly.

A procedural justice-based approach to policing allows the police to focus on controlling crime without alienating the public. As previously argued, deterrence and other performance-based strategies have not faired well for the police in regard to creating and maintaining a favorable climate of public opinion. Research indicates that evaluations of the police are based more on how the police treat people than how well they perform their job (Tyler 1990; Tyler & Huo 2002; Tyler 2001a). For example, Tyler and Huo (2002) found in a study of Oakland residents living in high crime areas that how the police treated people explained more of the variance in police evaluations than did variations in the quality of police performance. Thus, when police change the way they interact with citizens, moving from a command-and-control orientation to a fair and respectful disposition, public evaluations will eventually become more favorable. Effectively controlling crime and maintaining positive public evaluations is not a tradeoff that the police have to make. In fact, on the contrary, the police can engage in effective crime control and increase public support when they exercise their authority fairly.

Our goal in this analysis is not to test the effectiveness of a particular policing strategy. Rather, we are testing the validity of the underlying psychological model upon which such a strategy is based. Unless that psychological model is a correct description of people's psychological dynamics in dealings with the police, the policing strategy outlined is unlikely to be effective.

Policing Strategies

The recognition of the importance of the relationship between the public and the police toward building police legitimacy has already spawned a trend toward community-oriented policing (Kelling & Moore 1988; Friedman 1992; Skogan et al. 1999; Skolnick & Fyfe 1993). The police have learned that they cannot function effectively without public support, and they are building policing strategies designed to build such support.

Traditionally, police strategies for crime fighting were reactive. Officers would patrol neighborhoods in relative isolation from the surrounding community. Contact with citizens would only be made when officers were called to respond to a specific call. Crime prevention and control were thought to be achieved through the threat of arrest and punishment. This belief manifested itself in a policy of "saturation patrols," traffic stops, and field interrogations.

Over the past few decades, it has become clear that this approach to policing alienated citizens and the police from one another (Reiss 1992; Moore 1992). Police could not rely on the public's support for their efforts, and the public lost faith in the ability of the police to provide safety. Community policing quickly became a policy buzzword for numerous strategies aimed at mending the relationship between the police and the public while at the same time improving crime control. Fighting crime and police/community relations were now viewed as intimately related (Friedman 1992).

Many police departments, in response to their problematic relationship with the public, altered the way they policed neighborhoods. Officers were taken out of the squad car and shifted to foot patrols, new posts were constructed to enlist the cooperation of community leaders, and many other initiatives were taken to engage with the community and ultimately rebuild the relationship between citizens and police. This new police/community outreach is a distinct departure from traditional policing methods. However, the premise that increased police interaction with citizens (i.e., more foot patrols, police/community meetings) will lead to improved public opinion has not been thoroughly tested (see Skogan & Hartnett 1997).

What these efforts show is that many police departments are already acting based upon many elements of the psychological model being tested in this study. However, they are doing so without the benefit of a clearly articulated and empirically tested model of the psychological dynamics of the public's reactions to policing activities. Without such a model, efforts to control crime tend to vary depending on the political climate and personal philosophies of community leaders (Blumstein & Wallman 2000; Brodeur 1998; Gest 2000; Wilson & Petersilia 2002).

Policing After September 11, 2001

We have presented the various models of public evaluation as if they were context-free. However, it is clear that public views about law enforcement have changed in the era of counterterrorism that has followed the attack on the World Trade Center towers. How might that influence views about policing? Research suggests that during times of strife and difficulty, people become more focused on the effectiveness of police performance and less concerned about issues of process and rights (Deutsch 1990; Nagata 1993; Sullivan, Piereson, & Marcus 1982). This study tests the role of context by considering public views before and following this important public event.

The Public and the Police: Majority and Minority Perspectives

It is also important to consider whether the models being evaluated apply equally well to everyone in a community. In particular, do the members of majority and minority groups consider the same issues when evaluating the police? The nature of the relationship between the police and the public has a serious impact on the effectiveness of crime control strategies, the welfare of community residents, and the institution of policing, suggesting the importance of maintaining favorable policy/community relations among all the communities dealing with the police.

Numerous surveys explore public views toward the police and confidence in their abilities to fight crime and maintain public safety (Huang & Vaughn 1996). These studies suggest that there is considerable variation between different ethnic groups. For example, Huang and Vaughn (1996) found that 67% of African Americans felt the police were fair (the lowest of all groups surveyed), compared to 87% of whites. When questioning people about the police use of force, they found that 67% of African

Americans thought of police use of force as a problem, compared to 40% of whites.

Other studies, conducted in a variety of American cities (Cole 1999; Worden 1995; Sullivan, Dunham, & Alpert 1987), found that minority citizens were especially likely to report being mistreated by police. This is not surprising because it is minority citizens who are more likely to be subject to police regulatory actions. For example, in New York City between 1998 and 2000,[1] 84% of those stopped and frisked were African American or Hispanic. In addition, minority group members are more likely to need police help—73% of victims of violent crime were African American or Hispanic.

A second type of study does not look at objective differences in the experiences of the members of different ethnic groups but at ethnic group differences in attitudes toward the police. Studies of this type typically consider the three primary ethnic groups in New York: whites, African Americans, and Hispanics. Considerable evidence suggests that minority group members have less trust and confidence in the police, the courts, and the legal system. However, it is not clear whether minority group members base their evaluations of the police on different criteria than do whites. Tyler and associates (Tyler et al. 1997; Tyler & Huo 2002) argue that the members of all ethnic groups evaluate legal authorities in similar ways. We test that argument here by comparing the criteria used by both white and minority community residents to evaluate the legitimacy of the police.

Testing Procedural Justice-Based Strategies of Policing

Procedural justice-based policing rests on four key assumptions. First, people's judgments of police legitimacy are as important or more important than people's calculations of the risk of being caught and punished in predicting compliance with law. In order for policing linked to procedural justice to be a viable alternative to policing based on instrumental judgments, authorities have to be able to rely on people's internal motivations for obeying the law. As described earlier, legitimacy represents this internal motivation. Procedural justice-based policing is based on the expectation that, when people view legal authority as legitimate, they voluntarily follow the law.

Second, legitimacy is also more important than instrumental judgments about issues such as performance for predicting

---

[1] Taken from New York City Police Department Citywide Stop and Frisk Data 1998, 1999, and 2000 (NYPD 2001).

whether the police will experience cooperative behavior, such as helping the police to solve crimes, on the part of community residents. The literature reviewed earlier suggests that deterrence was not an effective strategy for gaining long-term compliance with the law or for eliciting cooperative behavior from community residents. In fact, research on conflict situations suggests that deterrence strategies were likely to be met with resistance. By contrast, legitimacy is connected with people's internal sense of obligation to authority and therefore promotes voluntary, co-operative behavior. When people view the police as legitimate, they are more likely to call them to report crimes or volunteer their time to work with them in their communities.

Third, legitimacy is more important than instrumental judg-ments in shaping public deference to police activities. In other words, when the public views the police as legitimate, they are more likely to empower the police to perform their policing duties and less likely to try to circumscribe police activity or limit police discretion. Thus, public evaluations of legitimacy influence the degree to which the police have discretionary authority that they can use to function more effectively because the public is likely to give them more leeway to use their expertise.

Finally, evaluations of legitimacy are based on procedural fairness more so than on judgments about distributive fairness or other instrumental indicators. Policymakers and police officials often assume that the police are judged by how effective they are in controlling crime. It is believed that the legitimacy of the police is based on how well they perform, whether they effectively sanction rule-breakers, and/or whether police services are dis-tributed fairly across society. By contrast, policing based on the process judgment of procedural justice rests on the assumption that people form assessments of legitimacy based more on how the police exercise their authority than on their effectiveness or on how equally police provide assistance to the various communities where they work.

This latter aspect of the procedural justice-based model, i.e., the role of procedural justice in shaping legitimacy, is crucial because more often than not, the police cannot provide people with what they want, nor can they control the crime rate. Though they are charged with the responsibility of controlling crime, they only partially control the factors that lead people to become criminals, and the resources may or may not exist for the police to engage in what they think will be effective strategies of crime control. Thus, the police cannot rely on effectiveness defined in terms of performance. They do, however, have some degree of control over how they exercise their authority when dealing with members of the public. According to the procedural justice-based model of

regulation, it is through procedurally just interactions with the public that the police can impact their own legitimacy (Tyler & Huo 2002).

Method

The First New York City Sample—Pre-September 11, 2001

To test the assumptions of the process-based model of policing, a self-report survey was mailed to a random sample of registered voters in New York City. The questions used to operationalize each of the variables in the study are shown in Appendix A. The study was conducted during spring and summer 2001 during a period of poor police/community relations but before the September 2001 World Trade Center terrorist attack.

Of the questionnaires sent, a sample of 586 was returned. This reflects a response rate of 22%. Respondent age ranged from 19 to 88 (mean of 48). Gender was 62% female, 75.2% had at least some college education, and income averaged between $40,000 and $60,000 per year. The ethnic breakdown was 56.8% white and 43.5% nonwhite (14.8% Hispanic or Latino; 22.4% African American; 6.3% other ethnicities).

The response rate in this study was typical of mailed questionnaires. However, it was low and raises concerns about potential sample bias. In considering these findings, we need to be aware that there are potential biases in the results that are linked to who chose to respond to the questionnaire. To correct for such biases, we weighted the respondents' answers to adjust for their ethnicity, income, and education. This adjustment first involved removing "other" ethnicities (6.3%) and focusing on those whites, African Americans, and Hispanics who provided complete income and education information. We then weighted this remaining sample of 483 from a total of 576 returned interviews to represent the population of New York City, as measured in the 1990 U.S. Census. This weighting resulted in an adjusted sample of 483 (55% white, 19% African American, 26% Hispanic). For this analysis, we collapsed ethnicity further into a white/minority dichotomous variable.

Results

The Consequences of Legitimacy

The first question is whether legitimacy influences public support for the police. We performed regression analysis using the indexes of legitimacy, risk, distributive justice, instrumental

evaluations, and demographic variables to predict compliance with the law, cooperation with police, and the empowerment of law enforcement. Demographic variables included in the analysis were ethnicity, education, age, sex, and education. The purpose of the regression analysis was twofold. First, the results would enable us to determine the relative impact each independent variable has on each dependent variable. Second, regression allowed us to conclude that the impact of any significant variable in the equation was independent of the impact of any other variable in the equation.

The results indicated that both legitimacy (beta = 0.22, $p < 0.001$) and risk estimates (beta = 0.18, $p < 0.001$) influenced compliance (overall $R^2 = 9\%$, $p < 0.001$). No effect was found for distributive justice or other instrumental judgments. Compliance was also found to be influenced by ethnicity, income, and gender, with whites, the more well off, and female respondents more likely to comply with the law. In addition, because the compliance scale was skewed, a Tobit analysis was performed. The results of that analysis supported those already noted. In that analysis, legitimacy (beta = 0.14, $p < 0.001$) and risk (beta = 0.07, $p < 0.05$) influenced compliance. In addition, whites and women were more likely to obey the law.

Perceptions of police legitimacy (beta = 0.30, $p < 0.001$) and evaluations of police performance (beta = 0.11, $p < 0.05$) predicted citizen cooperation with the police (overall $R^2 = 14\%$, $p < 0.001$). Estimates of risk and distributive justice had no impact on cooperation. Ethnicity also impacted cooperation, with minority respondents more likely to cooperate with the police.

Finally, empowerment was predicted by perceptions of legitimacy (beta = 0.40, $p < 0.001$) and distributive justice (beta = 0.21, $p < 0.001$) (overall $R^2 = 40\%$, $p < 0.001$). Those with higher incomes were less likely to support the empowerment of the police.

What Determines Legitimacy?

The second question is which judgments about the police determine legitimacy. We performed a regression analysis using indexes of procedural justice, distributive justice, performance evaluations, risk estimates, and demographic variables to predict legitimacy. The resulting model accounted for 73% of the variance in legitimacy. The results indicated that legitimacy was based predominantly on procedural justice (beta = 0.62, $p < 0.001$), and to a lesser extent on performance evaluations (beta = 0.20, $p < 0.001$) and distributive justice judgments (beta = 0.11, $p < 0.001$), but not on estimates of risk. Significant effects were

also found regarding education. More highly educated respondents were likely to indicate lower levels of legitimacy.

Procedural Justice-Based Policing: A Statistical Model

We constructed a latent structural equation incorporating all the variables measured in this study into a single model. This procedure has numerous advantages over standard regression analysis. First, all assumptions of the process-based model of policing could be tested simultaneously, accounting for all variance at once. Second, latent structures correct for measurement inaccuracy, providing a more accurate picture of underlying relationships. Third, intermediate effects can be observed directly (see Joreskog and Sorbom [1986] for review of latent structured equation models).

Figure 1 represents the final model produced using this latent structure approach. The model fit the data well (CFI = 0.90, IFI = 0.90, RMSEA = 0.060, chi-square = 1222.6, df = 411).[2] Thus, this model represents a stringent test of the assumptions upon which a process-based model of regulation rests. In estimating the model shown, all possible paths were allowed. Figure 1 shows only the paths that emerged as significant.

As in the regression equation performed earlier, procedural fairness was the primary driver of perceptions of legitimacy (beta = 0.74). Distributive fairness and estimates of risk had no effect on legitimacy, while performance evaluations had a relatively larger effect than that revealed by the previous regression analysis (beta = 0.15). Finally, confirming the earlier regression equations, legitimacy had a substantial impact on empowerment (beta = 0.47), cooperation (beta = 0.28), and compliance (beta = 0.25). Cooperation was also influenced by performance (beta = 0.16), and compliance by risk (beta = 0.23).

Unlike the earlier regression equations, we found no direct effects on cooperation for procedural justice when legitimacy was in the equation. In other words, the influence of this variable flows through legitimacy. Procedural justice was represented by a "latent" variable reflecting indexes of the quality of treatment, quality of decisionmaking, and a general procedural fairness index.[3]

---

[2] Large numbers of items increase the parameters to be estimated, which increases the chi-square, thereby making it more difficult to fit a model. This model fit well despite the number of items used.

[3] We included items measuring what Tyler and Huo (2002) describe as "trust" in the motives of the authorities in the two studies reported here as aspects of quality of interpersonal treatment.

Figure 1. Study One. Structural Equation Model: Testing the Assumptions of Procedural Justice-Based Regulation.
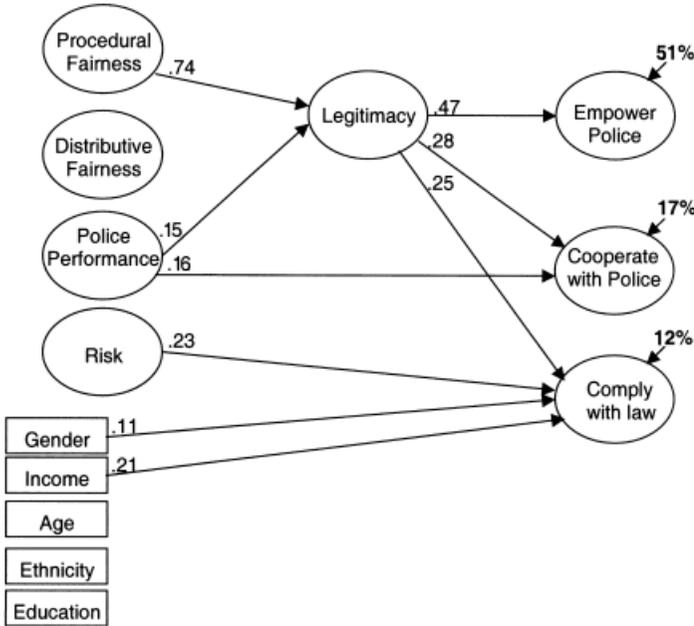
Of course, we need to keep in mind that the model tested was linked to people's judgments about police fairness, rather than to actual police behavior itself. We have no way of knowing what the police are actually doing as they patrol the streets of New York and respond to calls. In other words, the beginning point of our analysis is the self-reports of community residents—policing as they experience it. People's judgments about police fairness may or may not reflect objective police behavior and may or may not be linked to the actual congruity between police behavior and the law.

Method

The Second New York City Sample: Post-September 11, 2001

The second study used to test the assumptions of the process-based policing model was based on telephone interviews with a stratified sample of the residents of the City of New York.[4] In the study, 1,653 interviews were conducted during summer 2002 in both English and Spanish. Appendix B shows the questions used to operationalize each of the variables in the study.

---

[4] The collection of these data was supported by a grant from the National Institute of Justice (No. 2001IJCX0029).

The response rate of for the survey was 64%, a response rate typical of telephone questionnaires. However, to correct for possible biases, we weighted the respondents' answers. This weighting took account of the sampling procedure and corrected for variations away from random sampling. It also corrected for differences in the proportion of minority group members in the sample vis-à-vis the proportion in each borough in the city (according to U.S. Census figures).

In this analysis, respondents of "other" ethnicities ($n = 210$) were excluded, and the study focused on whites, African Americans, and Hispanics (weighted $n = 1,422$). In this weighted sample, 41% of respondents were ages 18–34, 55% were female; 63% had at least some college education, and 43% had an income of $40,000 per year or less. The ethnic breakdown was 44% white ($n = 628$), 28% Hispanic or Latino ($n = 394$), and 28% African American ($n = 400$).

Results

The Consequences of Legitimacy

The first question is again whether legitimacy influences public support for the police. We performed regression analysis using the indexes of legitimacy, risk, distributive justice, performance evaluations, and demographic variables to predict compliance with the law, cooperation with police, and empowerment of law enforcement authorities. Demographic variables included in the analysis were ethnicity, education, age, sex, and education. The purpose of the regression analysis was twofold. First, the results examined the relative impact each independent variable had on each dependent variable. Second, regression examined the independent impact of any significant variable in the equation.

Results indicated that both legitimacy (beta $= 0.14$, $p < 0.001$) and risk estimates (beta $= 0.06$, $p < 0.01$) influenced compliance (overall $R^2 = 8\%$, $p < 0.001$). No effect was found for distributive justice or performance evaluations. We also found that compliance was influenced by age, education, and gender, with older, better-educated, and female respondents more likely to comply with the law. In addition, because the compliance scale was again skewed, we performed a Tobit analysis again. The results of that analysis again supported those already noted, with legitimacy shaping compliance.

Perceptions of police legitimacy (beta $= 0.26$, $p < 0.001$) and evaluations of risk (beta $= 0.16$, $p < 0.001$) predicted citizen cooperation with the police (overall $R^2 = 16\%$, $p < 0.001$). Estimates of performance and distributive justice had no impact on

cooperation. Age, education, and income also impacted cooperation, with older, higher-education, and higher-income respondents more likely to cooperate with the police.

Finally, empowerment was predicted by perceptions of legitimacy (beta = 0.35, $p < 0.001$), distributive justice (beta = 0.09, $p < 0.001$), risk (beta = 0.07, $p < 0.01$), and neighborhood conditions (beta = 0.06, $p < 0.05$) (overall $R^2 = 22\%$, $p < 0.001$). Those higher in education and income were also less likely to support the empowerment of the police, as were African Americans and older respondents.

What Determines Legitimacy?

The second question is what determines legitimacy. We performed a regression analysis using the indexes of procedural justice, distributive justice, performance evaluations, risk estimates, and demographic variables to predict legitimacy.

The resulting model accounted for 33% of the variance in legitimacy. The results indicated that legitimacy is based predominantly on procedural justice (beta = 0.35, $p < 0.001$), and to a lesser extent on distributive justice (beta = 0.21, $p < 0.001$) and police performance, as indexed by assessments of neighborhood conditions (beta = $-.07$, $p < 0.01$), but not on estimates of risk. Significant effects were also found regarding education. African Americans, older respondents, higher-income respondents, and women were likely to indicate lower levels of legitimacy.

### Procedural Justice-Based Policing: A Statistical Model

We again constructed a latent structural equation incorporating all the variables measured into a single model. It was similar to that used with the first study data. The model treated police performance, neighborhood conditions, and fear of crime as three indicators of overall police performance (using a latent variable approach).

Figure 2 represents the final model produced using this latent structure approach. The model fit the data well (CFI = 0.98, IFI = 0.98, RMSEA = 0.09, chi-square = 830, df = 80).[5] Thus, this model represents a stringent test of the assumptions upon which the process-based model of regulation rests. In the model shown, all paths were allowed to occur, while Figure 2 shows only the paths that emerged as significant ($p < 0.001$).

---

[5] Large numbers of items increase the parameters to be estimated, which increases the chi-square, thereby making it more difficult to fit a model. This model fit well despite the number of items used.

Figure 2. Study Two. Structural Equation Model: Testing the Assumptions of Procedural Justice-Based Regulation.
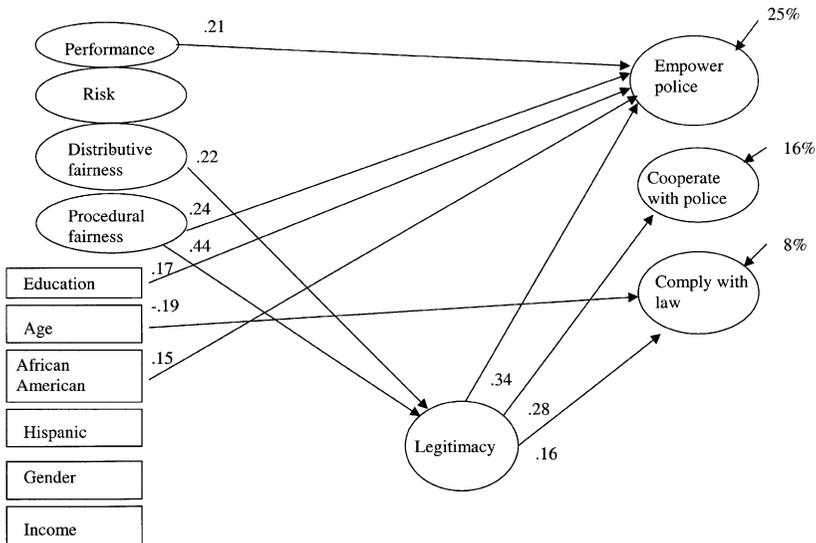
Procedural fairness, a "latent variable" reflecting quality of decisionmaking, quality of treatment, and overall assessments of procedural justice, was the primary driver of perceptions of legitimacy (beta = 0.44). Distributive fairness also had an effect on legitimacy (beta = 0.22). Finally, confirming the earlier regression equations, legitimacy had a substantial impact on empowerment (beta = 0.34), cooperation (beta = 0.28), and compliance (beta = 0.16). Only one direct effect was found for procedural justice when legitimacy was in the equation, and that was on empowerment (beta = 0.24). In other words, the influence of procedural justice generally flowed through legitimacy.

Of course, we need to keep in mind that the model tested was again linked to people's judgments about police fairness, rather than to actual police behavior itself. We have no way of knowing what the police are actually doing as they patrol the streets of New York and respond to calls. In other words, our analysis is about policing as community residents experience it.

Ethnic Group Differences: Study Two

To examine the differences among ethnic groups, we divided respondents into three groups: whites, African Americans, and Hispanics. We then examined the antecedents of compliance,

cooperation, and empowerment within each group. Since a more detailed analysis within each of these three dependent variables suggested similar ethnic group effects for each variable, we combined the three measures of cooperation into a single dependent variable. Table 1 shows a separate analysis within each ethnic group for that combined dependent variable. The results shown in Table 1 suggest that legitimacy is the key to cooperation among all ethnic groups. Within each group, legitimacy was the primary factor shaping cooperation with the police.

The second question is whether procedural justice is an antecedent of legitimacy. Again, separate regression analyses within each ethnic group, shown in Table 2, suggested that procedural justice is always a key antecedent of legitimacy. This is true regardless of each respondent's ethnic group background. In addition, whites and African Americans were significantly influenced by their distributive justice judgments, while Hispanics were not. Again, the three ethnic groups were generally similar in the basis upon which they determined how legitimate they viewed police authorities as being.

Finally, we can separate procedural justice into three components: overall evaluations of procedural fairness, evaluations of the quality of decisionmaking, and evaluations of the quality of interpersonal treatment. We can then look at the influence of judgments about decisionmaking and interpersonal treatment on overall procedural justice judgments. Table 3 shows this analysis. In addition, Table 4 shows a similar analysis for legitimacy.

Table 1. Cooperation With the Police (compliance, cooperation, empowerment): Study Two

Beta Weights	All Respondents	Whites	African Americans	Hispanics
Legitimacy	.40***	.41***	.45***	.48***
Performance	−.01	.02	.01	−.03
Crime Problem	.01	.02	.06	−.02
Risk	.17***	.09*	.19***	.23***
Distributive Fairness	.06*	.09*	.06	−.06
Sex	−.01	−.01	.03	.00
Age	−.19***	−.17***	−.21***	−.14**
Income	−.01	−.04	−.02	.03
Education	−.02	.08	−.01	−.04
Af. Am./White	.11***	—	—	—
Hisp./White	−.03	—	—	—
Adj. R^2	29%	26%	31%	28%

NOTE: The three aspects of cooperation were combined into a single dependent variable after separate analysis suggested that this overall combined analysis did not obscure distinct ethnic group effects within the three dependent variables.

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

Table 2. The Antecedents of Legitimacy: Study Two

Beta Weights	All Respondents	Whites	African Americans	Hispanics
Procedural Justice	.35***	.30***	.37***	.46***
Distributive Fairness	.20***	.26***	.23***	.10
Performance	.03	.05	.03	.00
Crime Problem	− .06*	− .09*	− .09*	.02
Risk	− .01	.04	− .05	− .05
Sex	− .06	− .05	− .05	− .12*
Age	− .09**	− .08*	− .12*	− .11*
Income	− .06*	− .09*	− .01	− .06
Education	− .03	− .03	− .05	− .01
Af. Am./White	.16***	—	—	—
Hisp./White	.09**	—	—	—
Adj. R^2	34%	30%	28%	24%

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

Table 3. The Antecedents of Procedural Justice: Study Two

Beta Weights	All Respondents	Whites	African Americans	Hispanics
Quality of Decisionmaking	.20***	.20***	.29***	.16***
Quality of Treatment	.36***	.37***	.23***	.43***
Distributive Fairness	.05*	.05	.06	− .02
Performance	.15***	.20***	.03	.06
Crime Problem	.10***	.06	.10*	.10*
Risk	.04	.03	.04	.05
Sex	− .02	− .04	− .02	− .03
Age	.03	.03	.05	.06
Income	− .04	.04	− .06	− .08
Education	− .07*	− .11*	− .02	− .07
Af. Am./White	.04	—	—	—
Hisp./White	.00	—	—	—
Adj. R^2	41%	46%	36%	34%

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

The results of this analysis of the meaning of procedural fairness suggest that whites are especially sensitive to issues of interpersonal treatment. Those issues dominated their procedural justice judgments and were the only factor influencing their legitimacy judgments. In contrast, minority group members were more balanced and considered both issues—quality of decisionmaking and quality of interpersonal treatment—more equally. However, like whites, Hispanics gave considerable weight to interpersonal treatment when evaluating procedural justice. In this respect, Hispanics seem intermediate, falling between whites and African Americans. However, white and African American assessments of legitimacy were influenced by distributive justice, while Hispanic assessments were not. Overall, these findings reinforce those already outlined in pointing to the importance of process-based judgments in shaping reactions to the police and to policing activities.

Table 4. The Antecedents of Legitimacy: Study Two

Beta Weights	All Respondents	Whites	African Americans	Hispanics
Quality of Decisionmaking	.14***	.06	.19**	.24***
Quality of Treatment	.24***	.28***	.23**	.27***
Distributive Fairness	.21***	.26***	.22***	.09
Performance	.04	.05	.02	−.01
Crime Problem	−.06*	−.08*	−.08	.04
Risk	−.01	.05	−.05	−.05
Sex	−.06*	−.05	−.05	−.12*
Age	−.09**	−.07*	−.11*	−.10
Income	−.07**	−.08*	−.02	−.07
Education	−.04	−.04	−.05	−.02
Af. Am./White	.11***	—	—	—
Hisp./White	.04	—	—	—
Adj. R^2	33%	31%	29%	25%

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

Discussion

The results of this analysis provide support for the underlying assumptions about psychology upon which procedural justice-based policing rests. The first assumption is that public evaluations of police legitimacy impact people's compliance with law, their willingness to cooperate with and assist the police, and whether the public will empower the police. In both studies, no other independent variable measured had such a sweeping influence on police/community relations. This broad impact of legitimacy explains why, in the final models, it was by far the dominant predictor of orientation toward the police. The other independent variables only influenced particular aspects of community residents' orientation toward police, while legitimacy was important for each component.

These findings support the argument that legitimacy is a social value that is distinct from performance evaluations. They show that such values have an important and distinct influence on people's support for the police, suggesting that there is a strong normative basis of public support for the police that is distinct from police performance. More generally, it is clear that ethical judgments about obligation and responsibility are an important element of public support for the police.

People are *not* primarily instrumental in their reactions to the police—in other words, judging the police in instrumental terms. Instead, their reactions to the police are linked to their basic social values. This finding supports the arguments of Weber (1968) about the normative basis of public reactions to authority. It extends prior research findings (Tyler 1990) by showing that cooperation and empowerment, in addition to compliance, are influenced by

legitimacy. These findings oppose the notion that if they are effectively fighting crime the police will inevitably alienate the public. By focusing on the psychology underlying views about their legitimacy among members of the public, the police can enhance their image in the eyes of the public, be objectively more effective in enforcing the law, and gain greater discretion in performing their regulatory duties. This suggests the value of focusing on an understanding of the determinants of legitimacy.

Further, these findings reinforce the argument that over time, the police can best regulate public behavior by focusing on engaging the social values, such as legitimacy, that lead to self-regulation on the part of most of the public, most of the time. If the public generally view the police as legitimate, much of their everyday behavior will conform to the law, freeing the police up to deal with problematic people and situations. Further, the efforts of the police to manage such problematic people and situations will be aided by cooperation from the public. Finally, when the police need discretionary authority, their use of such authority will be supported by the public. Hence, a procedural justice-based approach to regulation creates social order by engaging public cooperation with law and legal authority. Such cooperation is engaged when people in the communities being policed experience the police as exercising their authority fairly.

Of course, it is important to recognize that not all possible instrumental judgments, or even all possible indexes of police performance, are considered in these studies. An important task for future research is to develop and examine a broader range of instrumental issues that might potentially be important to people in their evaluations of the police. Further, we might consider a broader set of philosophical issues, such as people's conceptions of social contracts, their views of democratic theory, and/or their responsibility to the state and state authorities when thinking of alternatives to procedural justice as an antecedent of legitimacy. Legitimacy may also derive from philosophical or political perspectives and is not simply a reflection of police behavior. All of these issues point to directions for future research.

The key assumption upon which procedural justice-based policing is based is that evaluations of legitimacy are primarily based on procedural fairness. That assumption is supported by the findings of these surveys, which identify procedural justice as the primary antecedent of legitimacy among the samples of New Yorkers interviewed. In fact, the strength of the dominance of procedural justice judgments is striking and is clearly the primary factor shaping legitimacy.

This finding is very important from the perspective of policing, since the police have more control over how they treat people than

they do over the crime rate. The incidence of crime will fluctuate due to factors beyond police control. Procedural fairness, or treating people with respect and in an unbiased fashion, does not depend on crime rate fluctuations. Rather, it depends on the behavior of the police themselves. Thus, by becoming procedurally sensitive, the police develop a way they are viewed by the public that is to some degree insulated from societal forces, such as demographics or economic conditions, which shape crime rates but are beyond police control. Tyler and Huo (2002) refer to governance based on procedural justice as process-based regulation and argue that it offers many advantages to the police.

The message that authorities need to acknowledge the basic dignity and rights of citizens, to account for decisions that affect them, and to make their decisions in a neutral and objective way is consistent with the work of Sherman on defiance theory (1993) and with the reintegrative shaming model of Braithwaite (1989). Defiance theory argues that without such an acknowledgment of their dignity and rights, people are likely to feel angry and be resistant to the police, while models of reintegrative shaming emphasize the potential for increasing future deference to authority by the respectful treatment of offenders. Here too, the message is that people are more accepting of and cooperative with authorities when they are treated with fairness and respect.

Terrorism and Policing

The two studies reported differ in many ways, including their method of sampling and some of the questions asked. Study Two was improved based upon the problems encountered in Study One. As a result, we need to use caution in comparing the findings of these two studies. However, they do represent a naturally occurring quasi-experiment, in that the first survey was conducted before the World Trade Center attack and the second survey was conducted after that attack. Comparison of the two results, therefore, allows us to address the question of whether procedural concerns are less important when concerns about national security are higher.

A comparison of Figures 1 and 2 suggests that legitimacy plays a similarly important role in judgments about the police and police empowerment both before and following the World Trade Center attack. In both cases, empowerment flows primarily from legitimacy. However, instrumental issues do matter in the second study, where performance directly shaped empowerment. This may be because people feel more threatened, or because performance was better measured in the second study. In the first study, performance mattered because it shaped legitimacy, but performance did

not directly shape empowerment. Further, in both studies procedural justice was the key antecedent of legitimacy.

While these findings suggest that the atmosphere of terror and threat following the World Trade Center attack does not strongly alter people's reactions to policing activities, it is important to emphasize that this study is focused on neighborhood policing activities. We might find greater shifts if we focused directly on national-level issues of civil liberties.

Ethnic Group Differences

Tyler and Huo (2002) argue that while the members of different ethnic groups differ in their views about the legitimacy of the law, the courts, and the police, the psychological basis of legitimacy is similar within each group. The findings of Study Two provide strong support for this argument. Regardless of ethnicity, people cooperate with the police when they view the police as legitimate. Further, legitimacy is linked to fairness in the exercise of authority. This is not to say that the views of the various ethnic groups are identical. They are not. But the similarities are striking, and the differences are small.

This finding, based upon general evaluations of the police, is consistent with Tyler and Huo's finding in their study of personal experiences with the police and courts (Tyler & Huo 2002). That study found that the members of different ethnic groups evaluated their personal experiences with the police and the courts using a common psychological model that emphasized fairness of treatment. Hence, on both the personal and the general levels, the evidence suggests that a general psychological model explains the reactions of the members of the three major ethnic groups considered—whites, African Americans, and Hispanics. That model is the procedural justice-based model of policing.

References

Axelrod, Robert (1984) *The Evolution of Cooperation*. New York: Basic.

Beetham, David (1991) *The Legitimation of Power*. Atlantic Highlands, NJ: Humanites Press International, Inc.

Blumstein, Albert, & Joel Wallman, eds. (2000) *The Crime Drop in America*. Cambridge: Cambridge Univ. Press.

Braithwaite, John (1989) *Crime, Shame, and Reintegration*. Cambridge: Cambridge Univ. Press.

Brodeur, Jean-Paul (1998) *How to Recognize Good Policing*. Thousand Oaks, CA: Sage.

Casper, Jonathan D., Tom R. Tyler, & Bonnie Fisher (1988) "Procedural Justice in Felony Cases," 22 *Law & Society Rev.* 483–507.

Citrin, Jack, & Christopher Muste (1999) "Trust in Government," in J. P. Robinson, P. R. Shaver, & L. S. Wrightsman, eds., *Measures of Political Attitudes*. New York: Academic Press.

Cole, David (1999) *No Equal Justice: Race and Class in the American Criminal Justice System.* New York: W. W. Norton.

Deutsch, Morton (1990) "Psychological Roots of Moral Exclusion," 46 *J. of Social Issues* 21–6.

Friedman, Robert R. (1992) *Community Policing: Comparative Perspectives and Prospects.* New York: St. Martin's Press.

Gest, Ted (2000) *Crime and Politics: Big Government's Erratic Campaign for Law and Order.* Oxford: Oxford Univ. Press.

Harcourt, Bernard E. (2001) *The Illusion of Order: The False Promise of Broken Windows Policing.* Cambridge: Harvard Univ. Press.

Huang, Wilson S., & Michael S. Vaughn (1996) "Support and Confidence: Public Attitudes Toward the Police," in T. Flanagan & D. Longmire, eds., *Americans View Crime and Justice: A National Public Opinion Survey.* Thousand Oaks, CA: Sage Publications.

Joreskog, Karl G., & Dag Sorbom (1986) *LISREL: Analysis of Linear Structural Relationships by the Method of Maximum Likelihood.* Uppsala, Sweden: University of Uppsala, Department of Statistics.

Kelling, George L., & Catherine M. Coles (1996) *Fixing Broken Windows.* New York: Touchstone.

Kelling, George L., & Mark K. Moore (1988) *"The Evolving Strategy of Policing. Perspectives on Policing,"* No. 4, 1–15. Washington, DC: National Institute of Justice.

Kelman, Herbert C., & V. Lee Hamilton (1989) *Crimes of Obedience.* New Haven: Yale Univ. Press.

Lawler, Edward J., Rebecca Ford, & Mary Blegen (1988) "Coercive Capability in Conflict: A Test of Bilateral Versus Conflict Spiral Theory," 51 *Social Psychology Q.* 93–107.

McArdle, Andrea, & Tanya T. Erzen (2001) *Zero Tolerance: Quality of Life and the New Police Brutality in New York City.* New York: New York Univ. Press.

Moore, Mark H. (1992) "Problem-Solving and Community Policing," in M. Tonry & N. Morris, eds., *Modern Policing: Crime and Justice, A Review of Research,* Vol. 15. Chicago: Univ. of Chicago Press.

Nagata, Donna K. (1993) *Legacy of Injustice.* New York: Plenum.

New York City Police Department (2001) "New York City Police Department Citywide Stop and Frisk Data, 1998, 1999, and 2000." http://www.nyc.gov/html/nypd/pdf/pap/stopandfrisk_0501.pdf.

Pruitt, Dean (1981) *Negotiation Behavior.* New York: Academic Press.

Pruitt, Dean, & Jeff Z. Rubin (1986) *Social Conflict: Escalation, Stalemate, and Settlement.* New York: McGraw-Hill.

Pruitt, Dean, Robert S. Peirce, Neil B. McGillicuddy, Gary L. Welton, & Lynn M. Castrianno (1993) "Long-Term Success in Mediation," 17 *Law and Human Behavior* 313–30.

Reiss, Albert J. Jr. (1992) "Police Organization in the Twentieth Century," in M. Tonry & N. Morris, eds., *Modern Policing: Crime and Justice, A Review of Research,* Vol. 15. Chicago: Univ. of Chicago Press.

Sampson, Robert J., Stephen W. Raudenbush, & Felton Earls (1997) "Neighborhoods and Violent Crime," 277 *Science* 918–24.

Sarat, Austin (1977) "Studying American Legal Culture," 11 *Law & Society Rev.* 427–88.

Sherman, Lawrence W. (1993) "Defiance, Deterrence, and Irrelevance: A Theory of the Criminal Sanction," 30 *J. of Research in Crime and Delinquency* 445–73.

Silverman, Eli B. (1999) *NYPD Battles Crime: Innovative Strategies in Policing.* Evanston, IL: Northwestern Univ. Press.

Skogan, Wesley G. (1990) *Disorder and Decline.* New York: Free Press.

Skogan, Wesley G., & Susan M. Hartnett (1997) *Community Policing, Chicago Style.* New York: Oxford Univ. Press.

Skogan, Wesley G., Susan M. Hartnett, Jill DuBois, Jennifer T. Comey, Marianne Kaiser, & Justine H. Lovig (1999) *On the Beat: Police and Community Problem Solving.* Boulder, CO: Westview Press.

Skolnick, Jerome, & James Fyfe (1993) *Above the Law: Police and the Excessive Use of Force.* New York: Free Press.

Sparks, J. Richard, Anthony Bottoms, & Will Hay (1996) *Prisons and the Problem of Order.* Cambridge: Cambridge Univ. Press.

Sullivan, John L., James E. Pierson, & Gregory E. Marcus (1982) *Political Tolerance and American Democracy.* Chicago: Univ. of Chicago Press.

Sullivan, Peggy S., Roger G. Dunham, & Geoffrey P. Alpert (1987) "Attitude Structures of Different Ethnic and Age Groups Concerning Police," 78 *J. of Criminal Law and Criminology* 177–96.

Tyler, Tom R. (1990) *Why People Obey the Law.* New Haven: Yale Univ. Press.

——— (2001a) "Trust and Law Abidingness: A Proactive Model of Social Regulation," 81 *Boston University Law Rev.* 361–406.

——— (2001b) "Public Trust and Confidence in Legal Authorities: What Do Majority and Minority Group Members Want from the Law and Legal Institutions?," 19 *Behavioral Sciences and the Law* 215–35.

Tyler, Tom R., & Steven L. Blader (2000) *Cooperation in Groups.* Philadelphia: Psychology Press.

Tyler, Tom R., & Yuen J. Huo (2002) *Trust in the Law: Encouraging Public Cooperation With the Police and Courts.* New York: Russell-Sage.

Tyler, Tom R., & E. Allan Lind (1992) "A Relational Model of Authority in groups," 25 *Advances in Experimental Social Psychology* 115–91.

Tyler, Tom R., Robert J. Boeckmann, Heather J. Smith, & Yuen J. Huo (1997) *Social Justice in a Diverse Society.* Boulder, CO: Westview Press.

Weber, Max (1968) *Economy and Society: An Outline of Interpretive Sociology,* G. Roth & C. Wittich, eds. New York: Bedminster Press.

Wilson, James Q., & Joan Petersilia (2002) *Crime: Public Policies for Crime Control.* Oakland, CA: Institute for Contemporary Studies.

Worden, Robert E. (1995) "The 'Causes' of Police Brutality: Theory and Evidence on Police Use of Force," in W. A. Geller, & H. Toch, eds., *And Justice for All: Understanding and Controlling Police Abuse of Force.* Washington, DC: Police Executive Research Forum.

Appendix A: Measures, Study One

Legitimacy

Legitimacy is operationalized as the perceived obligation to obey the directives of a legal authority, trust in the institution of policing and in individual police officers in one's neighborhood, and affective feelings toward the police. We asked respondents to indicate the extent of their agreement to nineteen items on six-point Likert scales ranging from "agree strongly" to "disagree strongly." The overall scale had a mean of 3.9 (3.5 was neutral, with low scores indicating high legitimacy, s.d. = 0.97, alpha = 0.94).

For obligation, we asked respondents to agree/disagree that: (1) "You should accept the decisions made by police, even if you think they are wrong," (2) "Communities work best when people follow the directives of the police," (3) "Disobeying the police is seldom justified," and (4) "It would be difficult for you to break the law and keep your self-respect."

For trust in the institution of policing, we asked people to agree/disagree that (5) "The police can be trusted to make decisions that are right for the people in your neighborhood," (6) "People's basic rights are well protected by the police in your neighborhood," (7) "The police in your neighborhood are generally honest," (8) "New York City has one of the best police forces in the United States," (9) "I am proud of the work of the NYPD," (10) "I am happy to defend the work of the NYPD when talking to my friends," (11) "I agree with many of the values that define what the NYPD stands for," (12) "I cannot think of another police force that I respect more than the NYPD," and (13) "The work of the NYPD encourages me to feel good about our city."

Finally, to measure the emotional component of legitimacy, we asked respondents to rate the extent of their feelings about the NYPD on six six-point scales. The feelings included (14) respect, (15) trust, (16) appreciation, (17) fear, (18) contempt, and (19) anger.

Instrumental Judgments

Risk

We defined risk as the perceived likelihood of being caught and punished for breaking the law. We created an index using three questions based on a six-point Likert scale. We presented respondents with six common types of law-breaking behavior (noted under "compliance") and asked them how likely it was that [they] would be caught and punished if they broke these laws, how much the police would care, and how severely [they] would be punished. We combined these items into a scale of risk (alpha = 0.78, mean = 3.5, s.d. = 1.3).

Performance in Fighting Crime

We measured performance evaluations by nine questions on a six-point Likert scale. Items included questions asking (1–5) "How effective have the police been at controlling violent crime, gang violence, drugs, gun violence, and burglary?" Other items included (6) "How quickly do the police respond when they are called for help?," (7) "How quickly do the police respond when people in your neighborhood call the police for help?," (8) "Are the police effective at providing help?," and (9) "Do the police try to be of assistance?" We combined these items into a performance index (alpha = 0.91; mean = 4.1, s.d. = 0.99).

Distributive Fairness

We measured distributive fairness by five questions on the same six-point scale used for procedural justice. Items included

(1) "How often do people receive the outcomes they deserve under the law when they deal with the police?," (2) "Are the outcomes that people receive from the police better than they deserve, worse than they deserve, or about what they deserve under the law?," (3) "How often do the police give people in your neighborhood less help than they give others due to their race?," (4) "The police do not provide the same quality of service to people living in all areas of the city," and (5) "Minority residents of the city receive a lower quality of service from the NYPD than do whites." We combined these items into a scale of distributive fairness (alpha = 0.76; mean = 3.4, s.d. = 1.04).

Consequences of Legitimacy

Compliance

We assessed compliance by asking respondents to indicate on six-point Likert scales how often they followed rules about seven types of behavior: (1) where to park a car legally, (2) how to legally dispose of trash and litter, (3) not making noise at night, (4) not speeding or breaking traffic laws, (5) not buying possible stolen items on the street, (6) not taking inexpensive items from stores or restaurants without paying, and (7) not using drugs such as marijuana. We initially combined these items into a compliance index (alpha = 0.88). Respondents indicated very high levels of compliance (mean = 5.3, s.d. = 0.94), yielding a highly skewed distribution (skew = −2.2, s.e. = 0.12). In order to remove this skewness, we collapsed the compliance index into a three-point scale by trichotomizing the original items (alpha = 0.85 for the new scale, mean = 2.5, s.d. = 0.56).

Cooperation

We assessed cooperation by ten questions, on six-point scales similar to previous questions, which asked respondents how likely they would be to (1) "Call the police to report a crime occurring in your neighborhood," (2) "Call the police to report an accident," (3) "Help the police to find someone suspected of committing a crime," (4) "Call and give the police information to help the police solve a crime," (5) "Report dangerous or suspicious activities in your neighborhood to the police," (6) "Voluntarily work as a police-community liaison worker at night or during weekends," (7) "Spend some of your time helping new police officers by showing them around your neighborhood," (8) "Volunteer to attend a community meeting to discuss crime in your neighborhood," (9) "Work with others in your neighborhood on neighborhood watch activities designed to lower crime," and (10) "Be willing to serve on a neighborhood committee to discuss problems

in your neighborhood with the police." We combined these items into a single index (alpha = 0.87, mean = 4.38, s.d. = 0.93).

Empowerment

We assessed empowerment by five questions on a six-point Likert type scale. Questions asked the extent to which the subject agreed or disagreed that (1) "The police should have the right to stop and question people on the street," (2) "The police should have the power to decide which areas of the city should receive the most police protection," (3) "Because of their training and experience, the police are best able to decide how to deal with crime in your neighborhood," (4) "The police should have the power to do whatever they think is needed to fight crime," and (5) "If we give enough power to the police, they will be able to effectively control crime." We combined these items into an overall index (alpha = 0.83, mean = 3.26, s.d. = 1.23).

Antecedents of Legitimacy

Procedural Fairness

We measured procedural fairness using questions reflecting three aspects of procedural justice. We combined all the items to create a summary index of procedural fairness (alpha = 0.98; mean = 3.61; s.d. = 1.18).

In the items, we asked respondents to indicate the frequency with which the police engaged in behavior consistent with procedural justice in their neighborhood. Measured on a six-point Likert-type scale, a range was given from "almost always" to "almost never."

The items included two overall assessments of procedural justice: (1) "Make decisions about how to handle problems in fair ways" and (2) "Treat people fairly." The alpha for this subscale was 0.92.

Respondents also evaluated the fairness of police decisionmaking. The items asked if the police (3) "Treat everyone in your neighborhood with dignity and respect," (4) "Treat everyone in your community equally," (5) "Accurately understand and apply the law," and (6) "Make their decisions based upon facts, not their personal biases or opinions." In addition, the index had four items asking about how fairly the police make decisions. These items included how fairly the police decide (7) "Who to stop and question on the street," (8) "Who to stop for traffic violations," (9) "Who to arrest and take to jail," and (10) "How much they will help people with problems." The alpha for this subscale was 0.96.

They also evaluated the quality of treatment people received. The items asked whether the police (11) "Clearly explain the

reasons for their actions," (12) "Give honest explanations for their actions," (13) "Give people a chance to express their views before making decisions," (14) "Consider people's opinions when deciding what to do," (15) "Take account of people's needs and concerns," (16) "Treat people with dignity and respect," (17) "Respect people's rights," (18) "Sincerely try to help people with their problems," (19) "Try to find the best solutions for people's problems," and (20) "The NYPD treats citizens with courtesy and respect." The alpha for this subscale was 0.93.

Appendix B: Measures, Study Two

Legitimacy

Legitimacy is operationalized as the perceived obligation to obey the directives of a legal authority and trust in the institution of policing and in individual police officers in one's neighborhood. We asked respondents to indicate the extent of their agreement to 19 items on Likert scales. In the overall scale, low scores indicated high legitimacy (alpha = 0.84, mean = 2.36, s.d. = 0.53).

For obligation, we asked respondents to agree/disagree that (1) "You should accept the decisions made by police, even if you think they are wrong," (2) "You should do what the police tell you to do even when you do not understand the reasons for their decisions," (3) "You should do what the police tell you to do, even when you disagree with their decisions," (4) "You should do what the police tell you to do even when you do not like the way they treat you," (5) "There are times when it is ok for you to ignore what the police tell you (reversed)," (6) "Sometimes you have to bend the law for things to come out right (reversed)," (7) "The law represents the values of the people in power, rather than the values of people like you (reversed)," (8) "People in power use the law to try to control people like you (reversed)," and (9) "The law does not protect your interests (reversed)."

For trust in the institution of policing, we asked people to agree/disagree that (10) "Overall, the NYPD is a legitimate authority and people should obey the decisions that NYPD officers make," (11) "I have confidence that the NYPD can do its job well," (12) "I trust the leaders of the NYPD to make decisions that are good for everyone in the city," (13) "People's basic rights are well protected by the police," (14) "The police care about the well-being of everyone they deal with," (15) "I am proud of the work of the NYPD," (16) "I agree with many of the values that define what the NYPD stands for," (17) "The police are often dishonest (reversed)," (18) "Some of the things the police do embarrass our city (reversed)," and (19) "There are many things about the NYPD and its policies that need to be changed (reversed)."

Instrumental Judgments

Risk

We defined risk as the perceived likelihood of being caught and punished for breaking the law. We presented respondents with seven common types of law-breaking behavior (noted under "compliance") and asked how likely it was that [they] would be caught and punished if [they] broke these laws. The seven behaviors were "parking your car illegally," "disposing of trash illegally," "making too much noise at night," "breaking traffic laws or speeding," "buying stolen items on the street," "taking inexpensive items from stores without paying," and "using drugs such as marijuana in public places." We combined these items into a scale of risk (low scores meant high perceived risk; alpha = 0.87, mean = 2.36, s.d. = 0.95).

Performance in Fighting Crime

We measured performance evaluations in three ways: by asking how effective the police were, by reports about neighborhood conditions, and by reports of fear of victimization.

To assess police effectiveness, we asked respondents: (1) "How effective are the police in fighting crime in your neighborhood?," (2) "When people call the police for help, how quickly do they respond?," and (3) "How effective are the police at helping people who ask for help?" We combined these items into an overall scale, with low scores indicating high effectiveness (alpha = 0.63; mean = 2.01; s.d. = 0.93).

We assessed neighborhood conditions by asking respondents eight questions, including (1) "How often do you see garbage in the streets," (2) "How often do you see empty beer bottles on the streets," (3) "How often do you see graffiti on the walls," (4) "How often do you see gangs hanging out on the streets," (5) "How often do you see people buying beer, wine, or liquor on the street," (6) "How often do you see people buying or selling drugs on the street," (7) "How high is the crime rate in your neighborhood?," and (8) "In the past year, has the crime rate been increasing?" We formed an overall scale, with low scores indicating poor neighborhood conditions (alpha = 0.81; mean = 2.89, s.d. = 0.70).

We assessed fear of victimization using a four-item scale. Items included: (1) "How much do you worry about your home being burglarized?," (2) "How much do you worry about being robbed, assaulted, or mugged on the street?," (3) "How safe is your neighborhood during the day?," and (4) "How safe is your neighborhood in the evening?" We created a single indicator of fear (alpha = 0.75; mean = 3.13, s.d. = 0.72).

Distributive Fairness

We measured distributive fairness by eleven questions. We first asked respondents whether eight groups received the quality of service they deserved from the police: people like the respondent, people in their neighborhood, minorities in their neighborhood, whites, African Americans, Hispanics, poor people, and wealthy people. Respondents could indicate that each group received what they deserved, too much, or too little. Responses for each group were coded as either fair or unfair (too much or too little). Respondents were also asked whether (1) "The police treat everyone equally regardless of their race," (2) "The police provide better services to the wealthy (reversed)," and (3) "They sometimes give minorities less help due to their race (reversed)." We combined these items to form a single scale, with low scores indicating unfairness (alpha = 0.67; mean = 2.37; s.d. = 0.66).

Consequences of Legitimacy

Compliance

We assessed compliance by asking respondents to indicate on six-point Likert scales how often they followed rules about seven types of behavior: (1) where you can legally park your car, (2) how to dispose of trash and litter, (3) against making too much noise at night, (4) against speeding or breaking other traffic laws, (5) against buying possibly stolen items on the street, (6) against taking inexpensive items from stores without paying, and (7) against using drugs such as marijuana in public places. These items formed a compliance scale (alpha = 0.80). Respondents indicated very high levels of compliance, yielding a highly skewed distribution (skew = 2.07, s.e. = 0.07). In order to remove this skewness, we performed a square root transformation, leading to a less skewed scale (skew = 1.55, s.e. = 0.07, with an alpha of 0.80, mean = 1.21, s.d. = 0.25).

Cooperation

We assessed cooperation by three questions, on scales that asked respondents how likely they would be to (1) "Call the police to report a crime occurring in your neighborhood," (2) "Help the police to find someone suspected of committing a crime by providing them with information," and (3) "Report dangerous or suspicious activities in your neighborhood to the police." We combined these items into a single index, with low scores indicating being helpful to the police (alpha = 0.68, mean = 1.43, s.d. = 0.60).

Empowerment

We assessed empowerment by six questions on a six-point Likert-type scale. Questions asked the extent to which the subject agreed or disagreed that (1) "The police should have the right to stop and question people on the street," (2) "The police should have the power to decide how much police protection each area of the city receives," (3) "The police should have the power to decide which laws are the most important for them to enforce," (4) "The police should be able to search people's homes without having to get permission from a judge if they think stolen property or drugs are inside," (5) "Community residents need to be equal partners with the police in making decisions about how to fight crime (reversed)," and (6) "There need to be clear limits on what the police are allowed to do in fighting crime (reversed)." We combined these items into an overall index in which low scores indicated empowering the police (alpha = 0.56, mean = 3.10, s.d. = 0.57).

Antecedents of Legitimacy

Procedural Fairness

We measured procedural fairness using questions reflecting three aspects of procedural justice. We combined all the items to create a summary index of procedural fairness (alpha = 0.98; mean = 3.61; s.d. = 1.18).

In the items, we asked respondents to indicate the frequency with which the police engaged in behavior consistent with procedural justice in their neighborhood. Three subscales were used: overall fairness, fairness of decisionmaking, and fairness of treatment. The total scale had 11 items, and low scores indicated fairness (alpha = 0.91, mean = 2.17, s.d. = 0.92).

The items for overall assessments of procedural justice were (1) "Do the police make decisions about how to handle problems in fair ways?" and (2) "Do the police treat people fairly?" Low scores indicated fairness, and the alpha for this subscale was 0.73 (mean = 1.98, s.d. = 1.24).

Respondents also evaluated the fairness of police decisionmaking. The items asked if the police (3) "Usually accurately understand and apply the law," (4) "Make their decisions based upon facts, not their personal biases or opinions," (5) "Try to get the facts in a situation before deciding how to act," (6) "Give honest explanations for their actions to the people they deal with," and (7) "Apply the rules consistently to different people." The alpha for this subscale was 0.84 (mean = 2.27, s.d. = 1.02).

They also evaluated the quality of treatment people received. The items asked whether the police (8) "Consider the views of the people involved when deciding what to do," (9) "Take account of

the needs and concerns of the people they deal with,'' (10) ''Treat people with dignity and respect,'' and (11) ''Respect people's rights.'' The alpha for this subscale was 0.82 (mean = 2.14, s.d. = 0.97).