

Measuring, Managing, and Enhancing Procedural Justice in Policing: Promise and Pitfalls

Robert E. Worden & Sarah J. McLean
The John F. Finn Institute for Public Safety, Inc.



Prepared for delivery at the 2016 NACOLE Academic Symposium
April 22, 2016
John Jay College of Criminal Justice

This research was supported by Award No. 2010-IJ-CX-0027, awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations in this paper are those of the authors and do not necessarily reflect those of the Department of Justice.

The John F. Finn Institute for Public Safety, Inc., is an independent, not-for-profit and non-partisan corporation, whose work is dedicated to the development of criminal justice strategies, programs, and practices that are effective, lawful, and procedurally fair, through the application of social science findings and methods. The Institute conducts social research on matters of public safety and security – crime, public disorder, and the management of criminal justice agencies and partnerships – in collaboration with municipal, county, state, and federal criminal justice agencies, and for their direct benefit. The findings of the Institute’s research are also disseminated through other media to criminal justice professionals, academicians, elected public officials, and other interested parties, so that those findings may contribute to a broader body of knowledge about criminal justice and to the practical application of those findings in other settings.

The Finn Institute was established in 2007, building on a set of collaborative projects and relationships with criminal justice agencies dating to 1998. The first of those projects, for which we partnered with the Albany Police Department (APD), was initiated by John Finn, who was at that time the sergeant who commanded the APD’s Juvenile Unit. Later promoted to lieutenant and assigned to the department’s Administrative Services Bureau, he spearheaded efforts to implement problem-oriented policing, and to develop an institutional capability for analysis that would support problem-solving. The APD’s capacity for applying social science methods and results thereupon expanded exponentially, based on Lt. Finn’s appreciation for the value of research, his keen aptitude for analysis, and his vision of policing, which entailed the formulation of proactive, data-driven, and – as needed – unconventional strategies to address problems of public safety. Lt. Finn was fatally shot in the line of duty in 2003. The Institute that bears his name honors his life and career by fostering the more effective use of research and analysis within criminal justice agencies, just as Lt. Finn did in the APD.

Abstract

When people have contacts with the police, the fairness with which police are perceived to act affects citizens' trust and confidence in the police and their sense that the police deserve to be obeyed – that is, the procedural justice that citizens subjectively experience affects the legitimacy of the police. The procedural justice with which officers act is typically not measured in police agencies, however, nor is it an outcome for which police managers are held accountable. The primary objective of this NIJ-funded project was to learn whether and how the measurement of procedural justice would lead to its better management. Information on the quality of police-citizen encounters was drawn from surveys of citizens who had contact with the police in each of two cities, Schenectady and Syracuse, NY. Following the accumulation of baseline survey data, survey results on citizens' satisfaction and judgments about procedural justice in their police contacts were summarized and reported to command staffs on a monthly basis through the departments' respective Compstat meetings. Thus the project provided for measures of police performance with respect to procedural justice with sufficient periodicity that the information was potentially useful in managing performance.

We examined the impacts of measuring performance in this way, analyzing citizens' assessments of procedural justice over time, before and after the initiation of monthly reporting. We also developed a second indicator of procedural justice that was independent of citizens' judgment, taking advantage of Schenectady's dash-mounted cameras and procedures for routine video and audio recording of police-citizen encounters. Sampling from among the incidents about which we had completed interviews with citizens, trained observers coded relevant features of the police-citizen interactions. In addition, we interviewed patrol officers and field supervisors in order to learn more about what, from their perspective, the department was doing to manage this dimension of their performance, and also to learn their reactions to this emphasis on the quality of police-citizen interactions. We also compared what we learned through interviews with our own observations made during monthly Compstat meetings.

Neither indicator of police performance – the survey-based indicator nor an observation-based indicator – revealed consistent changes that ensued from the measurement of performance. Overall, the month-to-month changes in measures of citizens' subjective experience were by and large within a range of sampling fluctuation in both sites, and with no change that could be attributed to the introduction of performance measures to monthly Compstat meetings. However, in Schenectady, we found a modest improvement in officers' performance on one platoon, whose supervisors gave regular attention during line-ups to the quality of police-citizen

interaction, and in that context shared survey results that had been delivered at the monthly Compstat meeting. They explained both what procedural justice means and why it is important. On other platoons, commanders and supervisors either attended to the issue only intermittently, alluding to what it means for officers' conduct but not its rationale, or were skeptical or even dismissive of the importance of "customer service."

We discuss the implications for enhancing police legitimacy.

Introduction

When people have contacts with the police, the fairness with which police are perceived to act affects citizens' trust and confidence in the police and their sense that the police deserve to be obeyed – that is, the procedural justice that citizens subjectively experience affects the "legitimacy" of the police. A large body of social psychological research demonstrates the strength and consistency of these empirical relationships. Translating this body of research into police practice is not straightforward, however.

With the voluminous research on procedural justice and legitimacy as a point of departure, Schulhofer, et al. (2011) describe a procedural justice model of policing (also see Tyler, 2004; Meares, 2009). Part of such a model, we suppose, would consist of measuring procedural justice, and making procedural justice an outcome for which police managers are held accountable. Management accountability through administrative mechanisms like the New York City Police Department's "Compstat" is rather widely prevalent, yet in Compstat, the measurement of outcomes is normally confined to crime. The procedural justice of police-citizen interactions is one aspect of policing that Compstat has neglected, as it is neither measured nor an outcome for which police managers are held accountable.

The primary objective of this project was to learn whether and how the measurement of procedural justice would lead to its better management. Information on the quality of police-citizen encounters was drawn from surveys of citizens who had

contact with the police in each of two cities, Schenectady and Syracuse, NY. Following the accumulation of baseline survey data, survey results on citizens' satisfaction and judgments about procedural justice in their police contacts were summarized and reported to command staffs on a monthly basis through the departments' respective Compstat meetings. Thus the project provided for measures of police performance with respect to procedural justice with sufficient periodicity that the information was potentially useful in managing performance. We examined the impacts of measuring performance in this way, analyzing citizens' assessments of procedural justice over time, before and after the initiation of monthly reporting, and in one city analyzing independent measures of officers' behavior. We also interviewed patrol officers and field supervisors in order to learn more about what, from their perspective, the department was doing to manage this dimension of their performance, and also to learn their reactions to this emphasis on the quality of police-citizen interactions.

Analytical Framework

Several elements of procedural justice shape citizens' subjective experience:

- People are more satisfied when they have an opportunity to "tell their side of the story" – to explain their situation or behavior to authorities.
- People are more satisfied when they believe that authorities' decisions are based on facts.

- People are more satisfied when they feel that they have been treated with dignity and respect.
- People are more satisfied when they trust authorities' motives, which is more likely when authorities explain their actions in terms that demonstrate that they have taken account of citizens' concerns and needs.¹

Procedural justice in police-citizen interactions, theory holds, affects more global attitudes toward the police, particularly "legitimacy," and empirical evidence substantiates the relationship between procedural justice and public trust in police. Thus the research has been construed to imply that, in the words of the Committee to Review Research, legitimacy is "created" in individual encounters, and is also created in a more general form by the aggregated actions of police: "When a police officer responds to a call or stops someone on the street, what happens affects general feelings that people have regarding the extent to which authorities are legitimate and entitled to be obeyed" (National Research Council, 2004: 298). Legitimacy, then, appears to comprise a stock that police can either build or deplete through their performance. It is on this foundation that the procedural justice model of policing is prescribed as a police reform.

The procedural justice model is long on the forms that procedurally just policing takes at the street level, and its rationale, but rather short on the managerial steps that police departments should take in order to implement the model. We might suppose that police departments that adopt such a model would establish and enforce

expectations that their officers will exercise their authority with procedural justice. Their chief executives make procedural justice an explicit priority. They embody their expectations in department policies and procedures. They train their officers in proper police-citizen interaction. They treat officers with the same procedural justice that they demand of officers in their encounters with citizens, thereby nurturing officers' trust in the organization and their sense of obligation to obey its rules. And they monitor the available indicators of police performance, such as complaints and uses of force, and recognizing the limits of these indicators, they make supervisors responsible for spot-checking the quality of police-citizen encounters. They might even develop more systematic measures of such performance, conducting periodic surveys of citizens with whom their officers have contact.

Systematic measures of this kind are used by few police agencies for the purposes of day-to-day management. With reference to case studies of six police departments that were, in the 1990s, implementing community policing, Moore (2002: ch. 8) found that only one department accorded high overall importance to performance measurement. More to the object of our concern here, Moore found that three of the six agencies used citizen complaints as a measure of performance with respect to the use of authority, and two used repeated citizen surveys to measure citizen satisfaction. The agencies that tapped these sources of information for performance measures were among the agencies originally selected for study because they "were

judged to be making unusually rapid progress toward community policing” (Moore, 2002: 159), so they are hardly representative.

We should add that the general community surveys that are administered on an annual or biannual basis by some departments are of limited utility for management accountability. Measures of performance that are derived no more often than once every year (or two) are unlikely to either guide police managers or form the basis for holding them individually accountable (Behn, 2008). And general, community-wide perceptions of police performance – e.g., whether police are in general polite or fair – may not reflect officers’ actual performance in police-citizen encounters. We should also add that the procedural propriety of police actions is not measured validly with citizen complaints, which are rarely filed even when citizens are dissatisfied with police service, and which are not infrequently based on misunderstandings of police procedure or on (intentional or unintentional) misrepresentations of police action.

If a police department were to survey the people with whom its officers have contact, and incorporate measures of performance based on those surveys into its management accountability system, theories of organization form two divergent sets of expectations for how and with what effects police managers would use the new measures of performance. Management guru Peter Drucker is reputed to have said that “what gets measured gets managed.” Thus we might suppose that with monthly feedback about officers’ performance in procedural justice terms, managers would pay

more attention to how, and not merely whether, their subordinates used their authority and interacted with citizens. As managers – platoon commanders – pay more attention to these dimensions of police work, we might suppose that field supervisors would likewise pay more attention to it. They might remind patrol officers at roll calls about the virtues of procedural justice: its effects on citizen compliance with police, citizen cooperation with law enforcement, compliance with the law, and the public image of the department – its stock of legitimacy. The department might mount in-service training on the rationale for procedural justice and the actions that comprise it.

The second set of expectations for how police managers would manage procedural justice is derived from an institutional perspective on organizations (see Worden and McLean, 2016a). From this perspective, we might expect to see the management of what is measured only in a market-driven organization whose productive operations apply a well-known technology with well-established connections to productive output, and we would instead expect to see little such effective management in an institutionalized organization, whose technical “core” is only loosely coupled with many organizational structures.

The management of street-level procedural justice confronts structural obstacles in American police departments. As Michael Brown observes, “police administrators and supervisors are caught between demands for loyalty to the men on the street and demands from the public that police power be used in a specific way or even curtailed”

(1981: 91). On the street, police work is performed in an environment marked by uncertainty, ambiguity, and danger, in the face of which officers cope by pulling together. Administrators must depend on officers to perform this arduous work satisfactorily, and as Brown points out, "the pressures for loyalty and solidarity are refracted throughout the police bureaucracy" (1981: 90), with norms that prohibit second-guessing and micro-management.

The implementation of community policing in Chicago hit a cultural "wall" whose foundation is set on these structural conditions. Skogan (2006: 81) describes the reluctance of police officers to perform tasks that are seen as not "real police work," and also their "aversion to civilians playing any role in telling them what to do or evaluating their performance." Officers do not believe that anyone who has not done police work can understand it, and they tend to dismiss police administrators who introduce change as "out of touch" with the street (also see Skogan, 2008).

The intrinsic demands of the work on the street and of cultural norms probably account for the limited success of training that is geared toward shaping how officers relate to police clientele. In her study of the effects of a recruit training curriculum into which the concepts and skills of community and problem-oriented policing had been integrated, Haarr (2001) found positive changes in recruits' attitudes, which subsequently dissipated as the new officers went into the field and were exposed to the work and to cultural norms. More to the point of the procedural justice model, the

Quality Interaction Training Program of the Chicago police had limited and mixed effects in the context of the academy (Schuck and Rosenbaum, 2011; Rosenbaum and Lawrence, n.d.), and modest effects in its in-service form (Skogan, Van Craen, and Hennessy, 2014); we might expect that even these effects would decay over time without consistent reinforcement. Many departments have offered training in “verbal judo,” and although we are aware of no empirical evaluations of the impacts of such training, anecdotal evidence suggests that it is not always well-received by officers. The content of training along these lines – “quality interaction” or “verbal judo” – is for many officers not compatible with the multiple and conflicting demands of the work as they experience it.

Managerial options are, then, limited. Platoon and other unit commanders could exhort their officers, directly and indirectly through first-line supervisors, to be more mindful of the utility and propriety of interacting with citizens with procedural justice. They could explain the benefits in the form of citizen compliance with police direction and citizen cooperation, as well as the standing of the department with the community. Armed with information on citizens’ subjective experience, they could reinforce the exhortation with measures of police performance. Ultimately, however, the efficacy of such exhortation turns on the sense that supervisors and officers make of commanders’ expectations.

Furthermore, the models of public attitudes whose parameters have been estimated in previous research have been with few exceptions predicated on the assumption that subjective procedural justice is a direct reflection of officers' overt behavior and hence an exogenous variable. But citizens' subjective judgments are based on interpretations of ambiguous stimuli, and since those judgments are influenced by citizens' prior and more general attitudes toward the police, they may be subject to confirmation bias. Extant research has not drawn strong connections between citizens' perceptions and judgments, on one hand, and officers' behavior, on the other hand.

Data and Methods

The Schenectady and Syracuse Police Departments are mid-sized agencies, with approximately 150 and 475 sworn officers, respectively. In this respect they resemble many other departments: among the respondents to the 2007 Law Enforcement Management and Administrative Statistics (LEMAS) survey, one can find nearly 500 agencies with 100 to 500 sworn, full-time employees, but only 89 agencies with more than 500 sworn personnel, about half of which have more than 1,000 sworn. No sample of two agencies could possibly be representative of American municipal police departments, but insofar as the external validity of empirical findings about the dynamics of organization and management is circumscribed by the size of the studied departments, Schenectady and Syracuse are propitious sites for research.

The two cities are similar in a number of respects. They are both rustbelt cities that are coping with demographic and economic shifts that have strained governmental capacities with greater demands for services and an eroding tax base. The populations are comparable in their racial and ethnic composition. Both cities have fairly high rates of violent crime, especially for cities of their size. The two departments also share a number of similarities. Their sworn ranks are disproportionately white, relative to the cities' populations, with limited representation of women. Both departments had, at the beginning and through most of the project, a Black chief executive; Syracuse had a female deputy chief over its Uniform Bureau.

However, the two departments had acquired contrasting public images – Schenectady's a poor image acquired through years of extraordinary turmoil and scandal, Syracuse's what we take to be a fairly typical image free of the taint of extraordinary mishaps. The Schenectady Police Department has a long and troubled history with its portrayal in the media and scandals involving the misbehavior of its members. In 2001, the Department became the subject of a probe by the DOJ Civil Rights Division, which followed years of complaints by citizens regarding allegations of use of force and mounting pressure by civil rights activists to address the problem. In March, 2003, DOJ issued a "technical assistance" letter (Cutlar, 2003), which identified a number of deficiencies and made a number of recommendations. The turn-around was slow, as the local media continued to report with some regularity on officers driving

while intoxicated, engaging in domestic assaults, cooping, and worse. Due to the widespread disrepute of the department and its members, the mayor of Schenectady is reported to have considered in 2009 multiple options for the future of City's policing; these options included, but were not limited to, martial law, disbanding the police department, contracting out to the New York State Police or county sheriff's, or using the National Guard. It might not be an exaggeration to say that, in 2009, the Schenectady Police Department suffered a crisis of legitimacy, with the city's mayor publicly contemplating the dismantling of the organization.

In each of these two departments, semi-monthly samples of people who had contact with police were drawn from police records from mid-July, 2011, through mid-January, 2013. Respondents were interviewed by phone within one to five weeks of their contact with police. Following the accumulation of survey data to form a baseline, survey results on citizens' satisfaction and judgments about procedural justice in the contact were summarized and reported to command staffs on a monthly basis through the departments' respective Compstat meetings. Across the 18 months of surveying we completed 3,603 interviews, or approximately 100 per month in each city.² In addition, because the Schenectady Police Department had for a number of years provided for audio and video recordings of its officers' activities, we drew a sample of encounters about which citizens had been surveyed and conducted structured observation to

independently code features of those police-citizen interactions, following long-established practices of systematic social observation (see Worden and McLean, 2014a).

Police Services Survey

The police services survey was designed to capture citizens' subjective experience with police, that is, the quality of police service from citizens' perspective. We sampled from police records of various kinds to represent, as much as possible, the entire population of police contacts with citizens. Thus the design provided for sampling from records of calls for service, stops, and arrests. After a pilot test of the survey in July of 2011, we commenced the survey on August 1, beginning with samples of incidents that occurred in the latter half of July (July 16-31). We continued to draw new samples semi-monthly over 36 waves of surveying, or 18 months. We treated the first 7-10 waves as a baseline, and thereupon began providing monthly summaries of the previous month's performance to each department's command staff in the context of the department's Compstat meeting. The survey also served as an outcome measure, of course, as one month's performance measures were the previous month's outcomes.

Both calls for service and stops are defined by how they begin, either at the behest of a citizen or at the initiative of police. Either type of contact may end in a variety of ways. Calls for service can prompt a wide range of police responses, at the discretion of officers; the dispositions may or may not accord with citizen preferences, and they may or may not resolve the situations satisfactorily. Citizens may or may not

consider the outcomes favorable. Stops also can involve any of a variety of police actions and eventuate in any of a variety of dispositions, though arguably a narrower range of dispositions than calls for service. Arrests might stem from either calls for service or stops. They are a type of contact defined by how the contact ends rather than how it begins. The outcome for the citizen is unambiguously unfavorable, and unfavorable to a degree that far exceeds that of a ticket; the citizen is often booked and at least briefly incarcerated, and may be held pending arraignment. The sample of contacts in each site represented all of these contacts, but we oversampled those in which procedural justice is presumptively more challenging: stops and arrests. In this way we were more likely to achieve subsamples of a size that would support separate analysis of subjectively unfavorable contacts. Results were weighted as necessary in order to represent the entire population of contacts (i.e., calls were weighted more heavily for such analysis). In general, the interviewed sample resembles the eligible population in each site fairly closely (see Worden and McLean, 2014b: chap. 3).

Some previous accounts of procedural justice have distinguished the quality of an authority's decision-making from the quality of their treatment of those on whom they act, while other accounts have drawn distinctions among four dimensions of procedural justice: voice; quality of interpersonal treatment; trustworthy motives; and neutrality. Be all that as it may, empirical analyses of survey items that tap these features of subjective experience tend to find that these various items are so strongly intercorrelated that

these conceptually distinguishable dimensions cannot be discriminated from one another in citizens' perceptions, such that the survey responses form just a single scale of procedural justice. That is what we find in the survey data collected in Schenectady and Syracuse: citizens who rated the police favorably on one aspect also tended to rate police favorably on others. This unidimensional structure holds among respondents in each city and in both combined. Thus we form a single index of procedural justice for further analysis that more economically summarizes citizens' subjective experiences; adding the numerical values assigned to the items' response categories,³ the index ranges from -16 to 16 (with an alpha of 0.93). The individual survey items that comprise this index are shown at top of Table 1, and their means are all in the favorable range. On the overall index, more than 60 percent in each city score in the *most* favorable range (9 and above).

Most other variables used in the analysis of subjective experience are operationalized using survey items, though some (e.g., call for service categories and arrest particulars) are based on police records, and neighborhood disadvantage is based on Census data; descriptive statistics are shown in Table 1.

Table 1 about here

Compstat Feedback

With these survey-based figures, we supplemented the departments' continuing attention to crime as an outcome. The survey measures each month served both as

inputs to Compstat and as the previous month's outcomes. We introduced the project to the command staffs at Compstat meetings in September, 2011; the survey was under way at that time, but we did not report results then. In December, 2011, we appeared at the Schenectady Compstat meeting to present the summary of baseline survey findings, and to illustrate the survey items that we would be charting for them month-to-month. Our corresponding appearance at the Syracuse Compstat meeting was in January, 2012.

Survey-based measures of performance were reported at monthly Compstat meetings through February of 2013. We thought it better to present the counts of citizens' responses to specific items – e.g., whether police were polite, with which respondents could agree or disagree, strongly or somewhat – rather than a summary scale, on the assumption that the command staff would find concrete response categories for specific survey items more readily interpretable than artificial scores on a derivative indicator, and that specific items might offer them some clues about what officers were doing and not doing that could be better managed.

Patrol Interviews

We conducted interviews with patrol sergeants and asked what, if anything, they and their platoon or unit commander had done to direct officers' attention to the importance of customer service. In addition, we asked patrol officers what, if anything, their field supervisors had done to direct attention to the importance of customer service. In both sets of interviews we also sought respondents' views regarding the

emphasis on customer service, how (if at all) administrative expectations were being received, and any sources of resistance to a customer-service orientation. Two waves of interviews were conducted in each department, the first in June of 2012, after 5 to 6 months of survey feedback to command staff, and the second in February of 2014, well after the final feedback. Across two waves we completed a total of eighty-seven interviews with patrol sergeants and patrol officers across the three shifts in the study departments. Wave one yielded thirty-one completed interviews in Syracuse and sixteen in Schenectady. We completed fourteen wave-two interviews in Syracuse and twenty-six in Schenectady. Twenty-five interviewees were patrol supervisors and sixty-two were patrol officers.

Observation

The Schenectady Police Department's use of in-car cameras afforded us an opportunity to collect observational data on police-citizen encounters, and in that way to not rely exclusively on survey data to describe officers' procedural justice. At the conclusion of the police services survey, we sampled from among incidents about which we had completed an interview with the citizen. Our approach to capturing the features of police-citizen interactions in Schenectady, and especially the procedural justice with which officers acted, built on more than four decades of research that has applied the technique of systematic social observation (SSO) to police patrol. SSO has in the past provided for in-person observation of patrol officers as they perform their work in its

natural setting, as researchers accompany selected officers during their regular work shifts. This research has been invaluable in describing and understanding how often and under what circumstances officers use various forms of police authority, but it has been less informative about the procedural justice with which police authority is wielded, because the observation instruments were not designed for that analytical purpose.

We drew from previous research to form observation instruments that are rooted in previous inquiry but also suited to the measurement of procedural justice. Like previous SSO research, we provided for information on the encounter as a whole, e.g., the type of location in which the interaction transpired, and the nature of the problem that was the focus of attention. The instruments departed in some respects from previous SSO instruments, however, insofar as we were particularly interested in the officers' behavior toward one citizen in each encounter – the citizen who was the respondent to our survey, and on whose subjective experience we wanted to estimate the effects of officers' behavior. Hence we designated as the "primary citizen" the citizen whose name appeared in the police record and whom we interviewed after his/her contact with the police, and we instructed observers to try in each incident to identify the primary citizen and code items accordingly. The "primary officer" was the officer who was assigned to the patrol unit that was dispatched to a call, or whose name appeared on the arrest report or field interview card, and whose microphone recording was included with the video; this was the officer who is analogous to the officer to

whom an observer would be assigned in the context of an in-person SSO study. Each sampled incident was assigned to two observers,⁴ who independently watched and listened to the recorded incident, took notes, and worked through the computer-guided data entry process, clicking on selected response options or, in some instances, entering information in a free-field format (see Worden and McLean, 2016b).

Our sample was based on the sample of incidents about which we surveyed citizens, and so it was structured neither spatially nor temporally. Observers coded 539 encounters from among those that we sampled (1,049) and obtained recordings (648) from the Schenectady police. We observed encounters that took place in any of Schenectady's eight patrol zones and on any of the three platoons. We observed many individual officers multiple times – 18 officers at least 10 times each, and one in as many as 21 incidents, as the primary officer. Our sample was not confined to the more active parts of the city. However, among the 1,800 incidents about which citizens were surveyed, we oversampled arrests and field interviews, on the assumption that these are the kinds of incidents in which procedural justice may be less readily practiced, and to ensure as much as possible that the subsamples would support separate analysis. Among the recordings that we received, the sources of case attrition were (1) a mismatched event (i.e., the event captured in the recording was not the sampled incident – 8 cases)⁵; (2) the poor quality of the recording, especially the audio (75 cases);

(3) no detectable interaction between police and a citizen (21 cases); and (4) other idiosyncratic problems (5 cases).

Jonathan-Zamir and her colleagues (2015) argue for the use of formative measures of procedural justice in action. They maintain that although survey items are properly treated as various reflections of an underlying perceptual construct when citizens' subjective experiences are measured, such that the items can be expected to exhibit strong associations, officers' behaviors are not the manifestations or products of an underlying construct. Instead, they contend, officers' behaviors *form* a measure of procedural justice: "because measures of procedural justice are not expected to develop from a single latent variable, and the various procedurally just behaviors are viewed as tapping different facets of the construct, they are not expected to be intercorrelated and are not interchangeable" (2015: 852). We agree with this assessment. However, unlike Jonathan-Zamir, et al., we distinguish behaviors that are procedurally just from behaviors that are procedurally unjust, forming two distinct measures of the procedural justice with which police act. Officers may take only procedurally just actions in their interactions with citizens, only procedurally unjust actions, or both (or neither) just and unjust actions, in any of the domains of procedural justice. Moreover, there is good reason to suspect that procedurally unjust actions have a greater (negative) effect on citizens' subjective experience than procedurally just actions have a (positive) effect. So we believe that it is useful to separate the just and the unjust, and specify two

behavioral constructs: procedurally just action, and procedurally unjust action. Using the four domains of procedural justice as a guide to actions that signify procedural (in)justice, we sorted officers' observed actions accordingly to form subscales, and then combined the subscales to form overall scales (see Worden and McLean, 2016c). The scale of procedurally just action that is formed by summing across the procedurally just subscales has an intraclass correlation of 0.73; it exhibits correlations with individual subscales ranging from 0.50 to 0.85, respectively, with a mean correlation of 0.67. The mean scale score (see Table 2) reflects a moderate level of procedural justice. The scale of procedurally unjust action that is formed by summing across the procedurally unjust subscales has an intraclass correlation of 0.80; it exhibits correlations with individual subscales ranging from 0.4 to 0.86, respectively, with a mean correlation of 0.70. The mean scale score reflects a low level of procedural injustice. Most other variables used in the analysis of observed behavior are operationalized using the observations; neighborhood disadvantage is based on Census data; descriptive statistics are shown in Table 1.

Table 2 about here

Findings

Schenectady command staff first saw a report of the survey-based performance measures at the Compstat meeting of December 21, 2011. If we think of the initiation of procedural justice performance measurement as an intervention or treatment, then the

first post-intervention contacts in Schenectady were in the latter half of December or perhaps the first half of January (survey wave 11 or 12). Since the corresponding meeting in Syracuse was on January 11, 2012, the first post-intervention contacts in Syracuse were in the latter half of January (wave 13).

The Management Continuum

The presumption guiding the project was that police legitimacy can be enhanced when measures of relevant performance are made available to managers. We expected that for the most part, the measurement would affect platoon commanders – mid-level managers. But department administrators have some additional options. In-service training could be offered. Indeed, Schenectady planned to make procedural justice the subject of an in-service training in the fall of 2012, but those tentative plans were derailed when the assistant chief of the Field Services Bureau sustained an injury and was out of work for some time. Syracuse contemplated a podcast by the chief to be played at roll calls, but the podcast was not produced. As we recounted above, however, the content of training and administrative exhortation is filtered through officers' understanding of the requirements of their work.

One other administrative option for managing street-level procedural justice is administrative rule-making: rules could be promulgated that, e.g., require officers to explain to those whom they stop the reason(s) for the stops, and to give citizens an opportunity to explain themselves. The capacity of police administrators to enforce

such rules is directly proportional to the visibility of the conduct to which the rules apply, however, and the procedural justice of officers' actions is of decidedly low visibility.

Of course, simply making the information available is insufficient; managers must believe they are accountable for managing performance and must take steps to communicate the chiefs' expectations and their own expectations to their subordinates. In our interviews with patrol supervisors, we did not detect meaningful differences in the nature of the responses between waves 1 and 2. Nor did we detect meaningful differences in managerial styles between the two departments, so we combine responses, and highlight the exceptions to this rule of interdepartmental congruence.

We identified three patterns that formed a management continuum: at one end of the spectrum fell those supervisors who did nothing to direct attention to the procedural justice of subordinates' contacts with citizens, and at the other end were those who routinely addressed the importance of the quality of police citizen contacts. In the middle of the management continuum were supervisors whose approach was best characterized as intermittently directing attention to the quality of police-citizen contacts. See Figure 1. Through our observations at monthly Compstat meetings and in the interview data, we did not detect meaningful efforts to actively undermine the administrations' desire to inculcate a customer-service orientation within the departments. In both departments, very few supervisors stated that either they or their

commander were not at all communicating expectations about the importance of procedural justice as an outcome for which their subordinates were responsible. Among those who took no steps to direct attention to customer service were those who ignored the departments' push to stress procedurally just policing as well as some who more actively spoke against it. These supervisors saw the customer service emphasis as inappropriate, and these individuals tended to frame the administrations' emphasis as reflecting a deliberate choice to prioritize citizens' needs over officers'. For example, when asked what if anything they had told their subordinates about the importance of customer service, we heard responses like the following: "I tell them officer safety is the goal, not customer service." "It is kind of difficult. I can't go to every call and hold their hand."

Figure 1 about here

Most respondents reported making a regular effort to direct their subordinates' attention to the importance of customer service. Generally this included sharing the survey feedback that was provided at Compsat meetings and mentioning the importance of procedurally just policing during line-up or roll call. In Schenectady, the importance of regularly completing Service Quality Control Reports (SQCR) was emphasized as a means to routinely direct attention to customer service.⁶

Supervisors who made only intermittent efforts reported that they "mentioned" that patrol should do its best to "be respectful" or "watch your tone" when handling

calls or “try” to emphasize customer service “when possible.” “It’s hard to tell adults [patrol officers] what to do. But I say things like don’t swear and treat people with respect. Even if you think it is ridiculous you need to listen and don’t curse.” Their management approach suggested the belief that repeating these simple statements every so often at roll call was sufficient to manage the procedural justice of subordinates’ contacts with citizens. Their message was that customer service was important to command staff so, like it or not, patrol needed to go along with it. While the supervisor did not personally support the emphasis – and made that clear – s/he was still going to monitor subordinates’ performance in these terms because they recognized that their own performance turned on platoon-level measures of customer satisfaction. Their efforts generally reflected a common-sense approach because their own expectations were very straightforward. Most managers operationalized their mandate to promote policing in a procedurally just manner by telling subordinates to: “be nice”, “be polite”, and “explain yourself.” These supervisors communicated that customer service was important, but without reference to *why* it was important.

For the most part, the content of the messages communicated to officers by supervisors who regularly drew attention to the importance of customer service mirrored those who only intermittently addressed this dimension of police performance. Most managers explained that it is part of a supervisor’s job to monitor officer behavior, so they routinely reminded their officers to “be courteous” or “explain what’s

happening." "Treat those you treat as if they were family." You "treat them like your mom should be treated." But in addition, this minority of supervisors sent the message that customer service was a priority to command staff *and* to the field supervisor. They also articulated to their subordinates *why* it was important, connecting positive interactions with citizens with improved outcomes for officers.⁷ And they held officers accountable by reviewing feedback we provided each month or observing officers on calls and using concrete examples to reinforce their directives.

We also asked patrol officers what, if anything, their field supervisors did to direct their attention to the importance of customer service. Their responses corroborated supervisors' descriptions. Patrol responses supported the three management styles we described above and show in Figure 1. Managers who we describe as taking no steps to direct attention to customer service were described by their subordinates as doing "nothing" or "nothing really." Subordinates described the management style that we characterized as intermittent by saying, "I've heard them say watch your attitudes with people. No swearing. Do what you have to, but don't lose your cool right away" or "He touches on it once in awhile." Managers who routinely directed attention to the procedural justice of police-citizen contacts were described by subordinates as regularly going over calls or bringing it up at roll call and in general conversations.

Commanders and supervisors could have engaged in greater direct oversight of officers' interactions with citizens, but we saw no evidence that they did so. This takes

time, of course, and moreover, it carries other risks. Violating the norm of not second-guessing the judgments of the officer who is handling a situation, direct oversight risks antagonizing officers and undermining the routine, day-to-day cooperation of subordinates in performing basic police tasks. Schenectady supervisors are expected to routinely complete a Service Quality Control Report (SQCR) as a means of exercising oversight over the quality of interactions between officers and citizens. This practice did not appear to be resisted by supervisors or to be objectionable to officers. We suspect this could be because sergeants did not appear to use them as a means to prove that an officer had done something wrong or to show them how they might do something better (which would violate the norm of not second-guessing officers' judgments), and the occasions on which officers were the subject of a report were few (policy calls for four SQCRs per sergeant, per month).

Citizens' Subjective Experience

Figures 2 and 3 each show the monthly mean of the procedural justice index, in the red line, the pre- and post-intervention means in the blue line, and the intervention point in the green vertical line.⁸ In both sites the monthly mean fluctuates between 6 and 10, with few exceptions. The post-intervention mean is somewhat higher than the pre-intervention mean in Schenectady, and somewhat lower in Syracuse.

Figures 2 and 3 about here

These simple line charts and means take no account of other factors that affect subjective experience, and whose effects would not necessarily even out over time. We therefore formed a model of subjective experience that controls for other influences, so that we might isolate the difference in subjective experiences that followed the initiation of measuring performance. We add a linear trend variable and a non-linear trend variable to the models to account for temporal variation other than that attributable to the initiation of measurement.

The regression results (see Table 3) by and large replicate what we can see in the line charts. Schenectady exhibits a modest increase in overall subjective experience in the post-intervention period, while a negligible difference can be seen in Syracuse. Across all three platoons together, no improvement over time can be detected. When we allow the pre-/post-intervention difference to vary across the three platoons, we can see some evidence that different platoons followed different trajectories, but none of the differences is so large that it achieves statistical significance. The addition of the controls for the characteristics of individual incidents provides a similarly mixed set of estimated changes over time, none of which is statistically significant. Estimated changes in Syracuse are not all in the same direction, though none of them can be reliably differentiated from zero.

Table 3 about here

Observed Behavior

Observational measures of officers' procedural justice and injustice tap much more directly the outcomes that we might expect police managers could affect. The timing of the observations, which were done after the survey, meant that the measures based on observational data could not be incorporated into Compstat reporting of procedural justice performance measures. But insofar as managerial efforts were made to improve these outcomes, we might expect to find evidence of it in the observation-based measures of officers' procedural justice and injustice. Figure 4 shows the monthly means of justice (the blue line) and injustice (the red line). The pre-intervention levels of procedural justice fluctuated between 6.4 and 7.5, with an overall mean of 7.0, while the post-intervention means fluctuate between 6.2 and 7.7, with an overall mean of 7.0. Procedural injustice varies between 0.3 and 1.3, with pre- and post-intervention means of slightly over or under 0.7.

Figure 4 about here

When we take into account any possible trends over time and the other factors that could be expected to influence levels of procedural justice or injustice, we find only one meaningful difference in the post-intervention period on either measure: procedural justice improved on platoon 3 subsequent to the introduction of measuring citizens' subjective experience (see Table 4). No reliable difference can be detected on the other platoons or in the measure of procedural injustice. Platoon 3 was the platoon with the

lowest pre-intervention level of procedural justice, leaving more room for improvement than that on the other platoons.

Table 4 about here

Discussion

Measuring procedural justice performance did not generally result in detectable improvements over time. Despite the fact that the administrations' push to make their departments more customer service oriented was a top-down initiative developed without input from rank-and file and included civilians in defining their performance – two conditions often associated with thwarted change efforts – we did not sense that overt resistance played a meaningful role in limiting improvements over time. We believe that several other factors explain why improvements in performance overall were not detectable, none of which we presume to be confined to the study departments. First and most simply, both the study departments began with high baseline levels of subjective experience, leaving little room for improvement. Second, monthly measures of police performance were injected into Compstat mechanisms that, as in other police departments, do not heavily emphasize accountability. Third, the idea of procedurally just policing was ambiguous for many officers and supervisors, and their efforts to make sense of the concept and the implications it represented for their daily work may have colored both the extent to which managers embraced more actively managing this aspect of police performance and the extent to which officers altered their behavior in

meaningful ways. Fourth, even had managers directed more attention to this aspect of police performance than they previously had, our data suggest that what officers do and do not do is only weakly related to citizens' subjective experience.

Both of the study departments exhibited high baseline levels of subjective experience, leaving only so much room for improvement. About three-quarters were very or somewhat satisfied with how they were treated (78.9 percent of those with an opinion in Schenectady, and 77.1 percent of those with an opinion in Syracuse); slightly more than one-fifth were very or somewhat dissatisfied. Most people had an opinion about how police treated them, and most of those were at one pole or the other: very – and not merely somewhat – satisfied or dissatisfied. In general, 70 to 80 percent of the citizens reported very or somewhat favorable experiences on each component of procedural justice, and the proportions were remarkably similar across the two sites, seldom with differences greater than 2 percentage points. Whether the judgment was favorable or unfavorable, respondents tended toward the extreme response categories – e.g., with strong agreement or disagreement. For example, among the citizens who had contact with Schenectady police, 82 percent said that police treated them with dignity and respect, and most of those gave police the most favorable rating (i.e., “strongly” agree). About 70 percent in each city said that police considered their views, an indicator of “voice.” About three-quarters said that police tried hard to do the right thing, and made their decision based on facts – reflections of the perceived quality of

decision-making. These high levels of subjective experience are not unique to our study departments, of course, and they raise questions about how much the implementation of a procedural justice model could increase measurable subjective experience.

Compstat as executed in the two study departments did not stress accountability. As in Compstat mechanisms in other departments (Willis, et al., 2007; Weisburd, et al., 2003), platoon commanders and other unit heads did not succeed or fail by results, and we might suppose that as in other departments, Compstat was loosely coupled with street-level performance. We interviewed commanders in the study departments so we could learn more about current expectations for those involved in Compstat. In both departments the perception of platoon commanders was that the assessment of police performance was nearly exclusively numbers-driven (e.g., number of tickets, number of drug buys, number of field contacts, number of arrests, number of crimes). They described expectations for their role as it relates to Compstat in terms of "being on top of the numbers," "identifying patterns," and being prepared to explain during the meeting what they had done to address the patterns or numbers. While the introduction of feedback on citizens' subjective experience with police represented an additional set of numbers, interviewees did not anticipate this would have implications for how they managed their subordinates or for their role in Compstat. Most went on to explain that they already managed this aspect of police performance on an individual basis and they already knew the character and ability of their officers. Independently and systematically

collected information (the survey) was seen as a potentially positive development insofar as it could reinforce or confirm what they already knew (akin to the purpose we see many in law enforcement attribute to crime mapping). Commanders correctly anticipated that feedback on officers' performance would not alter expectations for their role in Compstat. In neither department was Compstat used to hold commanders accountable for achieving results in the ends of policing (crime reduction, disorder control, or improvements in the quality of life), and it was not a mechanism for holding commanders accountable for improvements in outcomes measured through the survey. We seldom heard administrators ask unit commanders to explain what steps they had pursued to manage and promote procedurally just policing.

Employee support or resistance to reform efforts turns, in part, on the meaning actors attribute to the change (George and Jones, 2001; Bartunek, Rosseau, Rudolph, and DePalma, 2006), particularly to the implications of change for improving or reducing the quality of their work life (Bartunek and Moch, 1987). Where there is ambiguity, people interpret and insert their own understanding in order to translate policy into practice. Thus, we found it productive to apply a concept from organization theory – sensemaking – and to understand the interpretive process in which officers and front line supervisors engaged. From our interviews with patrol officers and supervisors, it appears that neither administration's effort to change their organizations to make them more customer service oriented was strongly resisted by uniform personnel. However,

even where managers and officers seemed willing to accept that customer service was an appropriate consideration in assessing police performance, there was some slippage in taking the measures of performance that we provided and actively managing them. Officers had mixed feelings about "customer service," forming a continuum of resistance: some felt it was appropriate; others held that it was "appropriate but with a caveat," amounting to situational resistance; and a third group believed the focus was not appropriate. These judgments shaped the extent to which officers resisted or accepted the departments' decision to measure and direct attention to the quality of the service they provide (see McLean and Worden, 2016).

Most previous research has assumed rather than shown empirically that citizens' subjective experience is strongly related to officers' behavior in police-citizen encounters, because most research has relied exclusively on survey data on the citizens. We found that the effects of officers' procedural (in)justice on citizens' judgments about procedural justice are modest in magnitude, and also that the effects are asymmetrical: procedural injustice has substantially greater negative effects on citizens' judgments than procedural justice has positive effects (see Worden and McLean, 2016d). The procedural justice with which officers act accounts for a rather small fraction – 10 to 12 percent – of the variation in citizens' judgments about procedural justice. Furthermore, officers' procedural justice has very small effects on citizens' judgments about

outcomes, and they are mediated by subjective procedural justice. Similarly, officers' procedural justice has little direct effect on citizen satisfaction.

On one of Schenectady's three patrol platoons, however, we detected an improvement in officers' procedural justice following the introduction of procedural justice performance measures. From the interviews with patrol officers and supervisors on the third platoon, whose descriptions of management efforts were not uniform, we gather that routine efforts were made to direct attention to the importance of procedurally just policing. Sergeants indicated that the platoon commander generally followed up with them to share the survey results after the monthly Compstat meeting. Following that, either they or the lieutenant would share this information at line-ups, in addition to routinely making general reminders to officers to be mindful of the way they interacted with citizens. Officers' descriptions of their supervisors' efforts to manage police performance in these terms corroborated this management style. Some supervisors on the other platoons described themselves, and were described by their subordinates, as taking some of the same steps, but we did not detect as much platoon level consistency in the management approach. And that is an important point: it would probably not be sufficient for the platoon commander to draw subordinates' attention to the virtues of procedural justice (or "customer service"); all or most of the first-line supervisors would also need to be on board, speaking with one voice, and it appears that on the third platoon, they were all on board. We cannot determine, however,

whether supervisors speaking with one voice on the other platoons, whose baseline levels of overt procedural justice were higher, would have had the same impact.

Conclusion

We found that what gets measured does not always get successfully managed. With the introduction of monthly measures of the quality of citizens' subjective experience in their contacts with police reported through Compstat meetings, we detected no substantively significant changes overall in either city. Police performance in these terms was fairly high at the outset in both cities, leaving only a little room for improvement. We nevertheless found that efforts to manage the measured outcomes took various forms, in each police department, which we arrayed on a management continuum. Among patrol officers and field supervisors, we found a mixed reception to the administrative push for better "customer service": some officers were quite receptive; some exhibited a tempered receptivity; others were quite skeptical.

However, on one platoon, whose commander and field supervisors were actively supportive of "customer service," a small improvement in officers' *behavior* was achieved. This was the platoon on which officers' procedural justice behavior left the most room for improvement, but improve it did. It appears that when the managerial oars – from chief to sergeant – are all pulling in the same direction, officers can be brought on board. Whether we can extrapolate this effect to other units, with higher

levels of baseline performance, cannot be determined from this study, and must remain a subject for future inquiry.

That the improvement in officer behavior did not translate into improvements in citizens' judgments, however, should temper our expectations for how police managers can enhance public trust. Many would agree that police performance in the U.S. has improved in the last 20 years, yet public trust and confidence has remained flat.

References

- Bartunek, Jean M., and Michael K. Moch. 1987. "First-Order, Second-Order, and Third-Order Change and Organization Development Interventions: A Cognitive Approach." *The Journal of Applied Behavioral Science* 23(4): 483-500.
- Bartunek, Jean M., Denise M. Rosseau, Jenny W. Rudolph, and Judith A. DePalma. 2006. "On the Receiving End: Sensemaking, Emotion, and Assessments of an Organizational Change Initiated by Others." *The Journal of Applied Behavioral Science* 42(2): 182-206.
- Behn, Robert D. 2008. *The Seven Big Errors of PerformanceStat*. Cambridge, MA: Kennedy School of Government.
- Brown, Michael K. 1981. *Working the Street: Police Discretion and the Dilemmas of Reform*. New York: Russell Sage.
- Cutler, Shanetta Y. Brown. 2003. Correspondence with Michael T. Brockbank re: Investigation of the Schenectady Police Department. U.S. Department of Justice, Civil Rights Division. (March 19).
http://www.justice.gov/crt/about/spl/documents/schenectady_ta.pdf.
- George, Jennifer M. and Gareth R. Jones. 2001. "Towards a Process Model of Individual Change in Organizations." *Human Relations* 54(4): 419-444.
- Haarr, Robin N. 2001. "The Making of a Community Policing Officer: The Impact of Basic Training and Occupational Socialization on Police Recruits." *Police Quarterly* 4(4): 402-433.
- Jonathan-Zamir, Tal, Stephen D. Mastrofski, and Shomron Moyal. 2015. "Measuring Procedural Justice in Police-Citizen Encounters" *Justice Quarterly* 32 (2015): 845-871.
- Lind, E. Allan, and Tom R. Tyler. 1988. *The Social Psychology of Procedural Justice*. New York, NY: Plenum Press.
- McLean, Sarah J., and Robert E. Worden, 2016b. "Procedural Justice at the Street Level: Officers' Sensemaking." Working paper. The John F. Finn Institute for Public Safety, Inc.
- Meares, Tracey. 2009. "The Legitimacy of the Police among Young African-American men." *Marquette Law Review* 92(4): 651-666.
- Moore, Mark H. 2002. *Recognizing Value in Policing: The Challenge of Measuring Police Performance*. Washington, DC: Police Executive Research Forum.
- National Research Council. 2004. *Fairness and Effectiveness in Policing: The Evidence*. Edited by Wesley Skogan and Kathleen Frydl, Committee to Review Research on Police Policy and Practices. Committee on Law and Justice. Washington, DC: National Academies Press.

- Rosenbaum, Dennis P., and Daniel S. Lawrence. N.d. *Teaching Respectful Police-Citizen Encounters and Good Decision Making: Results of a Randomized Control Trial with Police Recruits*. Chicago: National Police Research Platform.
- Schuck, Amie M., and Dennis P. Rosenbaum. 2011. *The Chicago Quality Interaction Training Program: A Randomized Control Trial of Police Innovation*. Washington, DC: National Police Research Platform, National Institute of Justice.
- Schulhofer, Stephen J., Tom R. Tyler, and Aziz Z. Huq. "American Policing at a Crossroads: Unsustainable Policies and the Procedural Justice Alternative." *Journal of Criminal Law and Criminology* 101(2): 335-374.
- Skogan, Wesley G. 2006. *Police and Community in Chicago*. New York, NY: Oxford University Press.
- Skogan, Wesley G. 2008. "Why Reforms Fail." *Policing & Society: An International Journal of Research and Policy* 18(1): 23-34.
- Skogan, Wesley G., Maarten Van Craen, and Cari Hennessy. "Training Police for Procedural Justice." Working paper, Northwestern University, 2014.
- Tyler, Tom R. 1987. "Conditions Leading to Value-Expressive Effects in Judgments of Procedural Justice: A Test of Four Models." *Journal of Personality and Social Psychology* 52(2): 333-344.
- Tyler, Tom R. 1988. "What is Procedural Justice? Criteria Used by Citizens to Assess the Fairness of Legal Procedures." *Law & Society Review* 22(1): 103-135.
- Tyler, Tom R. 1990. *Why People Obey the Law*. New Haven, CT: Yale University Press.
- Tyler, Tom R. 2004. "Enhancing Police Legitimacy." *Annals of the American Academy of Political and Social Science* 593(1): 84-99.
- Tyler, Tom R. 2005. "Policing in Black and White: Ethnic Group Differences in Trust and Confidence in the Police." *Police Quarterly* 8(3): 322-341.
- Tyler, Tom R., and Robert Folger. 1980. "Distributional and Procedural Aspects of Satisfaction with Citizen-Police Encounters." *Basic and Applied Social Psychology* 1(4): 281-292.
- Tyler, Tom R., and Yuen J. Huo. 2002. *Trust in the Law: Encouraging Public Cooperation with the Police and Courts*. New York, NY: Russell Sage.
- Tyler, Tom R., Kenneth A. Rasinski, and Nancy Spodick. 1985. "Influence of Voice on Satisfaction with Leaders: Exploring the Meaning of Process Control." *Journal of Personality and Social Psychology* 48(1): 72-81.
- Weisburd, David, Stephen D. Mastrofski, Ann Marie McNally, Rosann Greenspan, and James J. Willis. 2003. "Reforming to Preserve: Compstat and Strategic Problem Solving in American Policing." *Criminology & Public Policy* 2(3): 421-455.
- Willis, James J., Stephen D. Mastrofski, and David Weisburd. 2007. "Making Sense of Compstat: A Theory-based Analysis of Organizational Change in Three Police Departments." *Law & Society Review* 41(1): 147-188.

- Worden, Robert E., and Sarah J. McLean, 2014a. "Systematic Social Observation of the Police." In *Oxford Handbook on Police and Policing*, edited by Michael D. Reisig and Robert J. Kane. New York: Oxford University Press.
- Worden, Robert E., and Sarah J. McLean, 2014b. *Assessing Police Performance in Citizen Encounters: Police Legitimacy and Management Accountability*. Report to the National Institute of Justice. Albany, NY: John F. Finn Institute for Public Safety, Inc. DOI 10.13140/2.1.2257.3125.
- Worden, Robert E., and Sarah J. McLean, 2016a. "Research on Police Legitimacy: The State of the Art." *Policing: An International Journal of Police Strategies & Management* forthcoming.
- Worden, Robert E., and Sarah J. McLean, 2016b. "Armchair Observation of Police-Citizen Encounters: Using Video Technology to Study Policing." Working paper. The John F. Finn Institute for Public Safety, Inc.
- Worden, Robert E., and Sarah J. McLean, 2016c. "The Procedural Justice of Police Behavior: Measurement and Explanation." Working paper. The John F. Finn Institute for Public Safety, Inc.
- Worden, Robert E., and Sarah J. McLean, 2016d. "Procedural Justice in Police-Citizen Encounters: Police Behavior and Citizens' Subjective Experience." Working paper. The John F. Finn Institute for Public Safety, Inc.

Table 1. Subjective Procedural Justice and Its Predictors.

	Schenectady			Syracuse		
	Mean	St dev	Range	Mean	St dev	Range
treated me with dignity & respect	1.17	1.38	-2/2	1.13	1.41	-2/2
considered my views	0.75	1.60	-2/2	0.73	1.59	-2/2
tried hard to do the right thing	0.94	1.50	-2/2	0.95	1.49	-2/2
made decision based on facts	0.94	1.51	-2/2	0.88	1.50	-2/2
respected my rights	1.14	1.43	-2/2	1.14	1.41	-2/2
paid attention to what I said	0.50	1.56	-1/1	0.44	0.82	-1/1
explained their actions	0.42	0.84	-1/1	0.38	0.85	-1/1
were very/somewhat fair	1.00	1.38	-2/2	0.94	1.41	-2/2
were very/somewhat polite	1.13	1.29	-2/2	1.04	1.35	-2/2
Procedural justice index	7.99	9.71	-16/16	7.64	9.75	-16/16
Platoon 2	0.39	0.49	0/1	0.27	0.45	0/1
Platoon 3	0.42	0.49	0/1	0.49	0.50	0/1
Post-measurement	0.73	0.44	0/1	0.69	0.46	0/1
Call for service	0.77	0.42	0/1	0.85	0.36	0/1
Arrest	0.16	0.36	0/1	0.06	0.24	0/1
Police-initiated	0.11	0.31	0/1	0.11	0.31	0/1
Citizen male	0.48	0.50	0/1	0.46	0.50	0/1
Citizen Black	0.17	0.37	0/1	0.25	0.43	0/1
Citizen Hispanic	0.06	0.25	0/1	0.04	0.20	0/1
Citizen's age	41.0	14.8	18/93	42.4	16.2	18/93
Citizen's education	2.67	0.74	2/4	2.72	0.78	2/4
Citizen employed	0.70	0.46	0/1	0.71	0.45	0/1
Neighborhood disadvantage	0.20	0.97	-1.1/2.1	-0.14	0.92	-1.7/1.9
Perceived response time	0.46	1.03	-1/2	0.56	1.05	-1/2
Call – violent crime	0.03	0.17	0/1	0.12	0.33	0/1
Call – non-violent crime	0.25	0.43	0/1	0.14	0.35	0/1
Call – interpersonal conflict	0.13	0.33	0/1	0.12	0.32	0/1
Call – suspicious circumstance	0.04	0.19	0/1	0.05	0.21	0/1
Call – traffic	0.10	0.30	0/1	0.12	0.33	0/1
Call – dependent person	0.06	0.24	0/1	0.07	0.25	0/1
Call – medical	<0.01	0.03	0/1	0.05	0.22	0/1
Call – other assistance	0.05	0.21	0/1	0.04	0.20	0/1
Call – other	<0.01	0.09	0/1	0.02	0.13	0/1
Call – unknown	0.01	0.11	0/1	0.01	0.10	0/1
Arrest – felony	0.02	0.13	0/1	0.02	0.12	0/1
Arrest – misdemeanor	0.11	0.31	0/1	0.03	0.18	0/1
Arrest – violation	0.02	0.14	0/1	0.01	0.12	0/1
Appearance ticket	0.01	0.09	0/1	--	--	0/1
Arrest – released	0.06	0.24	0/1	--	--	0/1
Arrest – warrant	0.06	0.24	0/1	0.01	0.11	0/1

Arrest – crime in progress	0.04	0.19	0/1	0.02	0.14	0/1
Search/frisk person	0.06	0.23	0/1	0.04	0.20	0/1
Search vehicle	0.03	0.17	0/1	0.02	0.15	0/1
Citizen consent search/frisk	0.03	0.17	0/1	0.02	0.13	0/1
Citizen consent search of vehicle	0.02	0.13	0/1	0.01	0.08	0/1

Table 2. Overt Pocedural Justice and Its Predictors.

	Mean	St dev	Range
Procedural justice scale	6.99	2.96	0/15
Procedural injustice scale	0.68	1.35	0/12
Platoon 2	0.38	0.49	0/1
Platoon 3	0.44	0.50	0/1
Post-measurement	0.73	0.45	0/1
Citizen a suspect	0.41	0.49	0/1
Citizen a third party	0.05	0.21	0/1
Citizen called for service	0.78	0.42	0/1
Citizen arrested	0.15	0.36	0/1
Citizen resistance - passive	0.04	0.20	0/1
Citizen resistance – defensive	0.02	0.13	0/1
Citizen resistance - aggressive	0.01	0.07	0/1
Citizen disrespect	0.11	0.31	0/1
Citizen mentally disordered	0.02	0.12	0/1
Citizen mildly intoxicated	0.05	0.22	0/1
Citizen very intoxicated	0.03	0.16	0/1
Citizen male	0.48	0.50	0/1
Citizen's age	39.9	14.2	18/84
Citizen Black	0.19	0.39	0/1
Citizen Hispanic	0.08	0.27	0/1
Citizen's education	2.60	0.72	2/4
Citizen employed	0.67	0.47	0/1
Other citizen present	0.60	0.49	0/1
Police-initiated	0.13	0.33	0/1
Evidence	0.27	0.70	0/4
Neighborhood disadvantage	0.28	1.00	-1.1/2.1
Call – violent crime	0.05	0.22	0/1
Call – non-violent crime	0.22	0.41	0/1
Call – interpersonal conflict	0.25	0.44	0/1
Call – suspicious circumstance	0.05	0.21	0/1
Call – traffic	0.15	0.36	0/1
Call – dependent person	0.06	0.23	0/1
Call – public nuisance	0.08	0.28	0/1
Call – public morals	0.03	0.16	0/1
Call – assistance	0.04	0.19	0/1

Figure 1. The Management Continuum

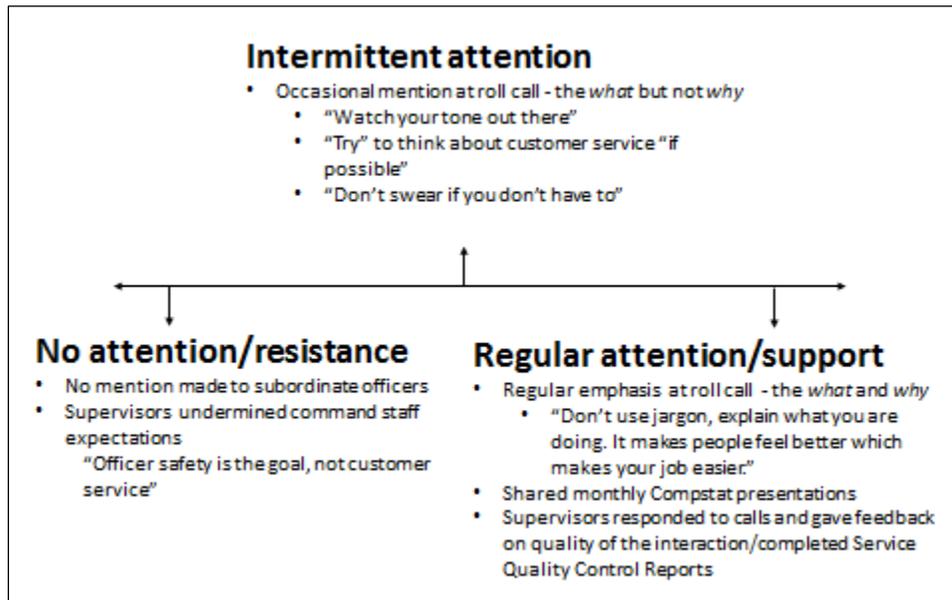


Figure 2. Schenectady Subjective Procedural Justice, Pre-/Post Feedback.

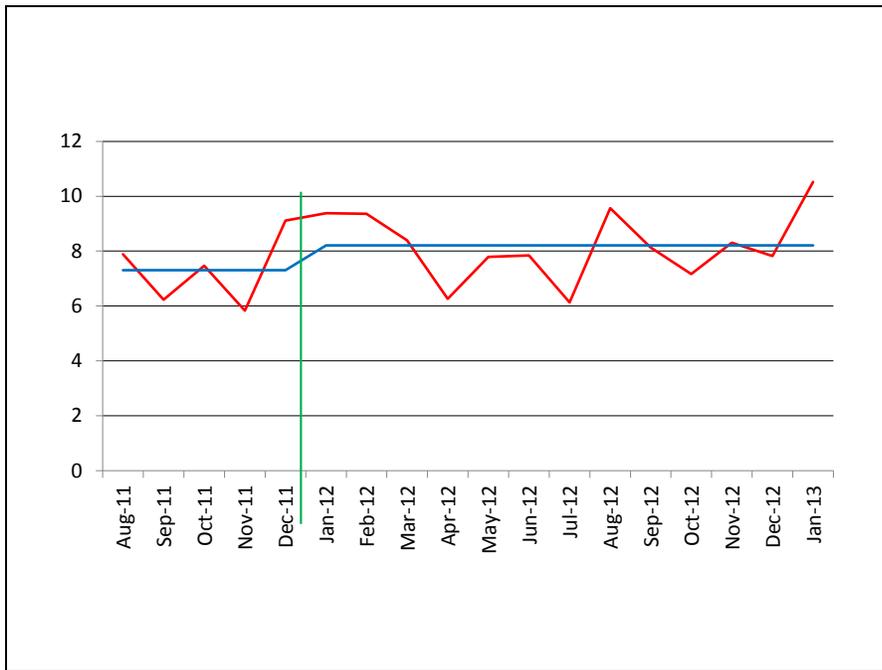


Figure 3. Syracuse Subjective Procedural Justice, Pre-/Post Feedback.

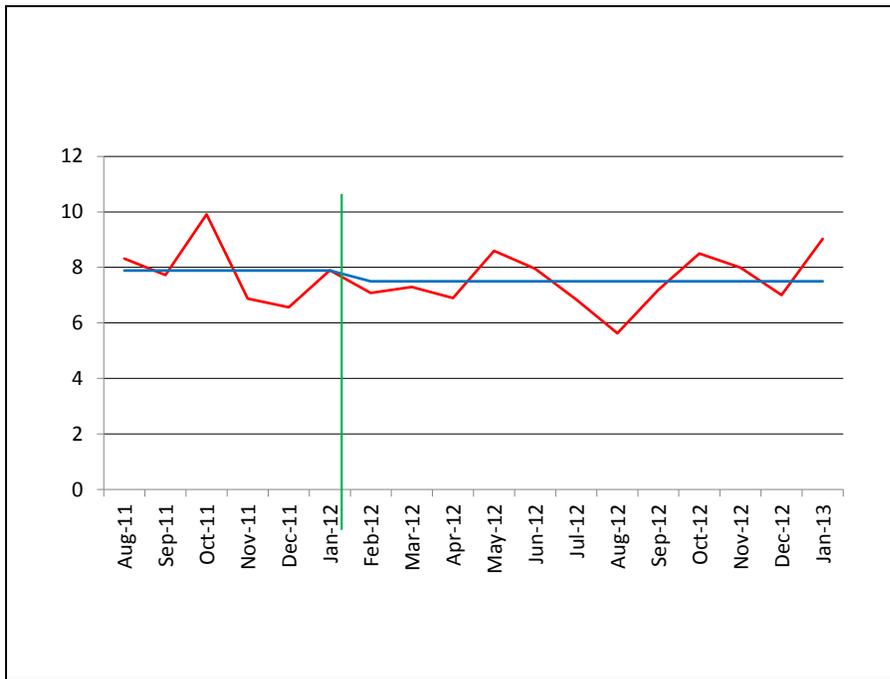


Table 3. Regression Analyses of Subjective Procedural Justice.

	Schenectady			Syracuse		
	I	II	III	I	II	III
Constant	8.10*	7.71*	-1.82	8.76*	7.30*	4.08**
Platoon 2	---	0.44	-1.26	---	1.68	0.08
Platoon 3	---	0.40	-1.66	---	1.95**	0.40
Post-measurement	1.63	1.53	2.23	0.14	-0.93	-1.67
Post-measurement X platoon 2	---	0.62	0.74	---	2.16	2.00
Post-measurement X platoon 3	---	-0.40	0.81	---	0.72	1.13
Linear trend	-0.17	-0.16	-0.24	-0.17	-0.16	0.01
Non-linear trend	0.00	0.00	0.00	0.00	0.00	-0.00
Call for service	---	---	7.19*	---	---	1.95
Arrest	---	---	-1.70	---	---	3.00
Police-initiated	---	---	3.49*	---	---	--0.11
Citizen male	---	---	0.75	---	---	0.86**
Citizen Black	---	---	0.13	---	---	-1.26*
Citizen Hispanic	---	---	-0.66	---	---	2.10**
Citizen's age	---	---	0.05*	---	---	0.02
Citizen's education	---	---	0.13	---	---	-0.14
Citizen employed	---	---	1.56*	---	---	0.60
Neighborhood disadvantage	---	---	-0.20	---	---	0.03
Perceived response time	---	---	2.02*	---	---	2.37*
Call – violent crime	---	---	1.90	---	---	-1.14
Call – non-violent crime	---	---	1.16	---	---	2.54*
Call – interpersonal conflict	---	---	0.60	---	---	-1.53
Call – suspicious circumstance	---	---	-1.18	---	---	-0.42
Call – traffic	---	---	2.49**	---	---	2.46*
Call – dependent person	---	---	1.91**	---	---	-0.44
Call – medical	---	---	-13.04	---	---	-1.33
Call – other assistance	---	---	1.52	---	---	-0.84
Call – other	---	---	3.96**	---	---	-9.27*
Call – unknown	---	---	0.49	---	---	0.71
Arrest – felony	---	---	-1.94	---	---	-10.31**
Arrest – misdemeanor	---	---	-1.55	---	---	-10.30**
Arrest – violation	---	---	-3.28	---	---	-7.88
Appearance ticket	---	---	6.47*	---	---	---
Arrest – released	---	---	4.66*	---	---	---
Arrest – warrant	---	---	3.66*	---	---	4.80**
Arrest – crime in progress	---	---	1.47	---	---	-1.19
Search/frisk person	---	---	-7.43*	---	---	-6.48*
Search vehicle	---	---	-5.78*	---	---	-2.41
Citizen consent search/frisk	---	---	7.86*	---	---	7.02*
Citizen consent search of vehicle	---	---	3.00	---	---	1.64
Adjusted R ²	0.00	0.00	0.25	0.00	0.01	0.22

Figure 4. Overt Procedural Justice and Injustice, Schenectady, Pre-/Post Feedback.

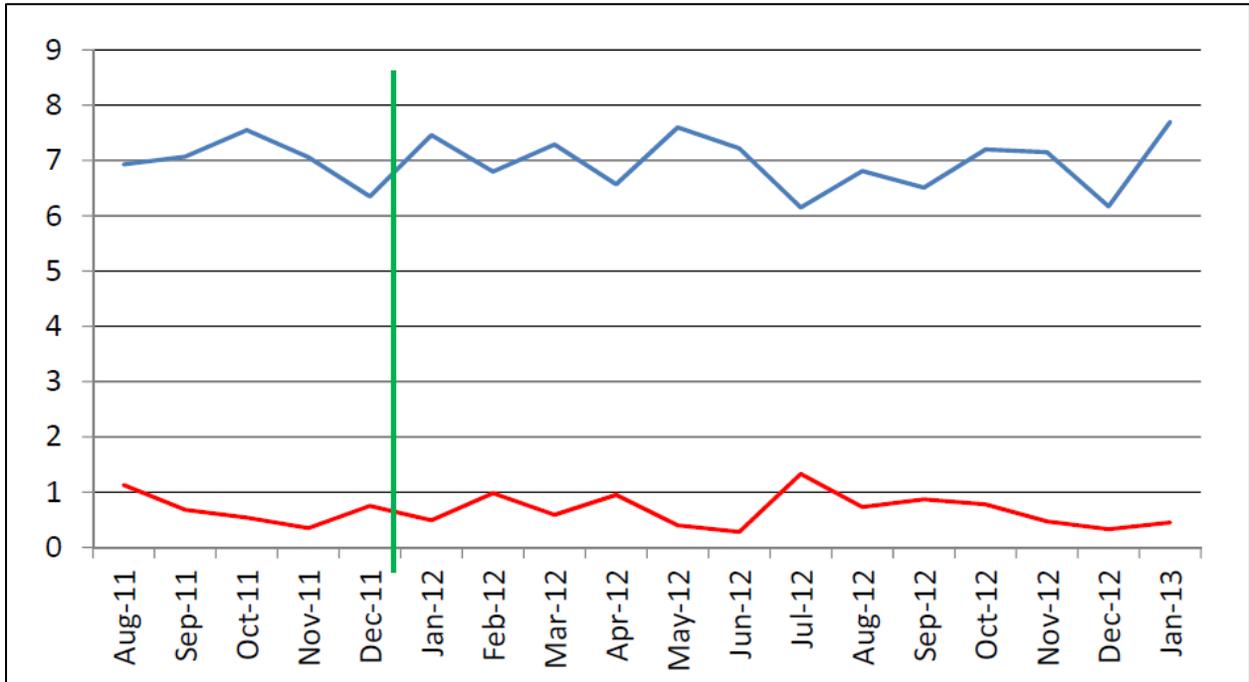


Table 4. Regression Analyses of Overt Procedural Justice.

	Procedurally Just Action Scale			Procedurally Unjust Action Scale		
	I	II	III	I	II	III
Constant	7.25*	7.34*	5.24*	0.83*	0.90*	0.46
Platoon 2	---	0.22	0.20	---	-0.36	0.13
Platoon 3	---	-0.33	-1.00	---	0.06	0.41
Post-measurement	0.44	-0.53	-1.25	0.19	0.35	0.35
Linear trend	-0.06	-0.06	0.02	-0.02	-0.02	-0.04
Non-linear trend	0.00	0.00	0.00	0.00	0.00	0.00
Post-measurement X platoon 2		1.05	0.52		-0.14	-0.19
Post-measurement X platoon 3		1.47	1.83**		-0.33	-0.40
Citizen a suspect			-1.02*			0.64*
Citizen a third party			-4.67*			0.66*
Citizen called for service			0.98**			-0.34
Citizen arrested			-0.00			-0.23
Citizen resistance - passive			-0.99			1.97*
Citizen resistance – defensive			-2.74**			0.27
Citizen resistance - aggressive			-1.08			0.50
Citizen disrespect			0.73			0.76*
Citizen mentally disordered			-1.02			0.68
Citizen mildly intoxicated			0.12			0.60*
Citizen very intoxicated			-0.36			0.01
Citizen male			-0.20			0.21
Citizen's age			0.01			0.00
Citizen Black			0.73**			-0.32*
Citizen Hispanic			-0.73			-0.03
Citizen's education			0.15			-0.09
Citizen employed			0.12			0.06
Other citizen present			0.12			0.09
Police-initiated			0.91			-0.25
Evidence			0.30			0.03
Neighborhood disadvantage			0.06			0.08
Call – violent crime			1.96*			0.53
Call – non-violent crime			0.37			0.23
Call – interpersonal conflict			1.28*			0.22
Call – suspicious circumstance			-1.02			0.36
Call – traffic			0.82			-0.20
Call – dependent person			0.60			0.50
Call – public nuisance			0.29			0.12
Call – public morals			0.77			-0.05
Call – assistance			-0.23			0.30
Adjusted R ²	0.00	0.00	0.14	0.01	0.00	0.26

Endnotes

¹ See, e.g., Lind and Tyler (1988); Tyler (1987, 1988, 1990, 2005); Tyler and Folger (1980); Tyler and Huo (2002); Tyler et al. (1985).

² Sampling procedures and other details about this survey and other methods of our research are explained in Worden and McLean, 2014: chap. 3.

³ 2 = very favorable; 1 = somewhat favorable; -1 = somewhat unfavorable; and -2 = very unfavorable. Don't know and not applicable responses were coded 0. This simple, additive index correlates at 0.99 with the scale formed by weighting the items in proportion with their factor coefficients, and so we use the more readily interpreted additive scale. The scale has a high level of reliability, with an alpha of 0.93.

⁴ Six observers performed this work. Incidents were assigned randomly to observers such that each observer was paired with others across his/her caseload. Ultimately, the individual observers coded 123 to 243 encounters.

⁵ Five of these were the original arrests in the field that eventuated, following the issuance of a bench warrant, in the citizen later turning himself in at the desk; both events are assigned the same incident number in the record management system, but it was the latter included in our sample.

⁶ The SQCR is a departmental form designed to obtain feedback from the public regarding the performance of patrol officers in the field. By policy, patrol sergeants are to generate at least one SQCR per week on one of the officers under their supervision. Platoon commanders are, by policy, responsible for ensuring the quality reviews are conducted and are themselves responsible for conducting one SQCR per month for each of the supervisors under their command.

⁷ We detected one meaningful difference between the two sites in what supervisors emphasized when discussing customer service. Managers in Syracuse were more likely than Schenectady supervisors were to frame their discussion of customer service in terms of monitoring, responding to, and directing subordinates to avoid citizen complaints. This emphasis was also apparent in officers' descriptions of steps supervisors had taken to manage this dimension of police performance.

⁸ The survey items each provide for a rough calibration of citizens' perceptions, with arguably greater differentiation when they are combined, but even so, the procedural justice index is limited in the differences that it can capture. Moreover, a sample size of 50 per wave or even 100 per month limits our capacity to distinguish real change from sampling error.