Patrol Officer Responses to Citizen Feedback: An Experimental Analysis

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Police organizations that implement community policing often seek new ways to measure officer performance. One important way to measure officer and organizational performance is through surveys of citizens. Although many police departments survey citizens, research has generally overlooked the manner in which this information is used and the effects of citizen feedback. This research describes one program that provides citizen feedback to patrol officers in hopes of increasing the quality of service that they provide. Using a randomized design, the authors test the effects of providing citizen feedback to officers on their job performance and attitudes. Results show that citizen feedback does not alter officers' performance, attitudes toward the communities they serve, and activities that put them in close contact with those communities. The authors discuss potential explanations for finding no effects of the feedback intervention and pose directions for future research.

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Concern with measuring the performance of organizations and their employees has peaked over the past decade in both the public and private

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sectors. Performance measurement has played a key role in nearly all of the *au courant* organizational change strategies of recent years, from reinventing government (Osborne & Gaebler, 1992) to reengineering the corporation (Hammer & Stanton, 1995). Performance measurement provides the kind of information that is crucial for "organizational learning," a perspective that has taken root among both reformers and scholars (Argyris, 1992; Morgan, 1997; Senge, 1990). Organizational learning is based on the notion that organizations are like brains: cognitive systems capable of self-learning. Collecting and processing feedback about their performance plays a key role in the ability of organizations to learn. One of the primary means used by organizations to collect information about their performance is to survey their clients, customers, or citizens. Using an experimental design, this article examines whether one police organization's gathering of feedback from citizens involved in official contact with officers induced attitudinal and behavioral change in police patrol officers.

Measures of Police Performance

A number of police scholars and reformers have suggested that police agencies need to develop and implement nontraditional measures of police performance to meet customer demands and provide better service, increase their accountability to citizens, demonstrate their effectiveness, and measure the broad range of services that are part of the police function (Bayley, 1996; Carter, 1996; Eck & Rosenbaum, 1994; Langworthy, 1999a; Mastrofski, 1981, 1996; Oettmeier & Wycoff, 1998; Stephens, 1996; Trojanowicz & Bucqueroux, 1990). Alternative measures of police performance play a key role in the community policing philosophy, which reinforces the democratic nature of policing, recognizes the importance of police-community relations, and seeks to involve the community in the evaluation process (Bayley, 1994). Although there has been much talk about the need to use alternative performance measures, little is known about the nature and effectiveness of the nontraditional measures that have been implemented by police agencies in the United States.

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Despite the significant attention given to the variety of ways that the police can measure their work and performance (Hoover, 1996; Langworthy, 1999a), empirical research has largely ignored the effects that using alternative police performance measures can have on officers and agencies. Police agencies and evaluation research continue to place a premium on traditional quantitative measures, such as crime rates, arrests, response time, numbers of calls handled, clearance rates, and numbers of citizen complaints. Although these traditional measures of police performance are easily quantified and compared, Mastrofski (1996) argued that they are fundamentally limited. The community policing philosophy explicitly recognizes that the police role extends beyond traditional crime-fighting strategies and that fostering partnerships with the community is an important police function. Numerous commentators have suggested that performance criteria should reflect the full breadth of the police role, not just their ability to generate arrests, write citations, and clear cases.

The activities that police organizations value will often determine the variables they use to measure the performance of their employees. Police departments that believe officers should primarily be making arrests, investigating crimes, and handing out citations will rely on performance measures that reflect this mission. These might include the number of arrests made per month or the number of citations issued. Police organizations that want their officers to solve substantive problems and form relationships with the communities they serve will rely on performance measures that reflect these functions. These might include their efforts to organize or attend community meetings, solve or ameliorate community problems, improve citizen satisfaction, or mobilize the community to take part in crime prevention efforts.

This portrayal of performance measures illustrates what Scheingold (1999) has termed “product” and “process” measures. Product measures are variables that result from police activities, such as the number of arrests an officer made in a specific period of time, the number of tickets the officer issued, and the crime rate in a given geographic area. Although product measures are concerned with ends, process measures are indicative of means. Process measures are variables that describe police activities, such as establishing citizen groups or giving presentations to businesses about how to prevent shoplifting. Reformers suggest that if police departments are truly placing greater value on the ideals of community policing and making themselves accountable for the manner in which they achieve their ends

(Langworthy & Morris, 1998; Mastrofski, 1996), then they need to expand their performance measures to include process variables.

There are currently few theoretical standards on which the police or researchers can rely to measure the processes of policing. However, research on service quality in the private sector has been helpful for delineating some of the dimensions that citizens, consumers, and clients associate with quality service more generally (Parasuraman, Zeithaml, & Berry, 1988). Based on this research, Mastrofski (1999) has outlined six characteristics that Americans associate with quality service delivery from their police: attentiveness, reliability, responsiveness, competence, manners, and fairness. He characterizes these dimensions as constituting a style of policing known as "policing for people." No research to date has examined how the American police are performing on all six of these dimensions. One recent study examined evidence available in published research and national public opinion polls on the public image of policing processes. It relied on these six generic dimensions, adding two other police-specific dimensions that span these categories: use of force and stops and searches (Gallagher, Maguire, Mastrofski, & Reisig, 2001).

Citizen Satisfaction as a Performance Measure

A prominent development in policing, and public service agencies in general, is the notion that citizens are consumers of government services whose satisfaction is important to gauge (Osborne & Gaebler, 1992, pp. 166-169). Scholars consistently identify citizen satisfaction with police service as a meaningful performance measure of the police process (Bayley, 1996; Carter, 1996; Couper & Lobitz, 1991; Mastrofski, 1981, 1996; Stephens, 1996; Wycoff & Oettmeier, 1994). Bayley (1996) explained that the police are only "as good as the public thinks they are, and that public opinion is the best measure of performance" (p. 42).

Quality relationships between communities and the police are the cornerstone of the community policing philosophy. Although research in this area is sparse, it is plausible that the level of citizen satisfaction will have an important effect on a police department's ability to form partnerships and work with the community to solve problems and prevent crime (Gallagher et al., 2001). Citizens who are satisfied with police services might be more likely to work in cooperation with the police (Stephens, 1996, p. 112). Police may also find it easier to engage communities and work more closely with them when there is a solid foundation built on good relations.

In addition to the utility that consumer surveys have for a police organization, citizen surveys are also relevant at the level of the individual officer. Measuring citizen satisfaction presumably communicates a message that how citizens view the police is important. Whether the measurement process itself delivers the message that officers need to be concerned with the quality of service they are providing (Wycoff & Oettmeier, 1994) is a testable hypothesis. It is one example of an idea that students of organizational behavior have recognized for years: features of an organization's structure serve as important signals to constituents about what the organization values, independent of their actual function (Meyer, 1979). For instance, in a system in which traditional performance measures are emphasized, officers may get the message, either implicitly or explicitly, that those are the activities that are important. Officers may pay attention to these easily quantified behaviors at the expense of less-quantifiable, quality-oriented activities. Performance evaluations that include quality-oriented measures can assist departments in redefining goals and reinforcing the notion that quality is something to be valued (Wycoff & Oettmeier, 1994). As Osborne and Gaebler (1992) noted in their discussion of reinventing government, "What gets measured gets done" (p. 146).

Research in both policing (Brandl, Frank, Worden, & Bynum, 1994) and in the service industries more generally (Bitner & Hubbert, 1994) has demonstrated the important difference between overall (or general or diffuse) satisfaction and encounter-level or transaction-specific satisfaction. Mastrofski (1981) argued that citizen satisfaction with police should be assessed at the level of the police-citizen encounter. National studies have shown that the majority of citizens (about 79% in 1999) have not had any contact with the police within the previous year. Of those experiencing a police contact in the previous year, about half did so in the context of a motor vehicle stop (Langan, Greenfeld, Smith, Durose, & Levin, 2001). With the general public experiencing such limited exposure to police in their daily lives, the public image of the police is most likely formed through a potpourri of other sources: fictitious renditions of police work in novels, television shows, or movies that have little connection to the reality of policing; media accounts of the police; vicarious knowledge of the police learned from family members and friends; or widely held beliefs about the police endemic in the subcultures in which citizens are immersed (Gallagher et al., 2001). Yet little is known about the relative weight of these influences or more generally about the cognitive processes through which citizens develop their image of the police. Therefore, data collected using

generic surveys of the public may not reflect the actual performance of the police. In fact, Gormley and Weimer (1999, p. 204) reported that across industry types, generic surveys of customer and client satisfaction routinely show "strikingly positive" findings. The police-citizen encounter is an important unit of measurement because this is the level at which police services are provided. Measuring citizen satisfaction at the encounter level allows the police to gather specific information about citizen satisfaction that cannot be gleaned from general surveys measuring global satisfaction with the police and their services. Several scholars have suggested that police agencies should conduct surveys of citizens who have had contact with officers (Langworthy, 1999b; Mastrofski, 1981).

Furthermore, specific questions about citizen satisfaction have an advantage over more general survey items. When citizen satisfaction with police service is assessed using global questions, the conceptual foundation of the resulting measure is vague, or as Worrall (1999) wrote, it is "fuzzy" (Brandl, et al., 1994; Mastrofski, 1981; White & Menke, 1982). Although some firms and agencies use such global measures of satisfaction as evidence of their success, Gormley and Weimer (1999) argued that an organization relying solely on "easily inflated customer satisfaction measures of quality may be limiting its potential to induce significant organizational change" (p. 111). Asking citizens questions to evaluate their experiences in specific encounters or transactions allows the police to develop a more intuitive appreciation for the sources of citizen satisfaction and dissatisfaction. These measures provide the police with information quite different than they could obtain using more traditional measures like general satisfaction surveys administered to the public at large or citizen complaint files. The former is based on a diffuse and poorly understood set of causal forces, and the latter represents the views of only those with the strongest sentiments: those so dissatisfied that they were willing to file a complaint. Encounter-level surveys offer the additional benefit of identifying those officers who routinely generate the greatest levels of citizen satisfaction.

Asking more specific, encounter-related questions permits the agency to focus on particular areas that need attention. Similarly, it is useful for agencies to measure citizen satisfaction across different types of encounters because citizen perceptions might be conditioned by the occasion for the contact (Dean, 1980; Mastrofski, 1981). For instance, crime victims may have different perceptions of their encounter than arrestees or those on whom the police used force.

The act of surveying citizens about their satisfaction with police services is certainly not new (Bordua & Tift, 1971; Couper & Lobitz, 1991; Wycoff & Oettmeier, 1994). In a nationally representative sample, approximately 25% of local police agencies reported in 1999 that they had surveyed their citizens within the previous year about satisfaction with the police (Hickman & Reaves, 2001, p. 12), down from 26% in 1997 (Reaves & Goldberg, 2000, p. 18). In addition, a handful of police departments are known to have administered surveys to citizens about their face-to-face contacts with officers, though there are presumably others that have not been publicized. Agencies known to have surveyed citizens include, for instance, Houston, Texas (Wycoff & Oettmeier, 1994); Madison, Wisconsin (Couper & Lobitz, 1991); Charlotte-Mecklenburg, North Carolina (Moore & Poethig, 1999); and Plainsboro, New Jersey (Bondurant, 1991). In Houston, police sergeants administered a citizen survey and used the information to understand the nature and quality of officer-citizen interactions. The survey asked citizens eight questions about aspects of their encounters with Houston police officers. Questions included, for example, "Did the officer discuss with you what is likely to happen with your case?" and "How much information did the officer give you about what might happen next with your case?" and "To what extent did the officer answer your questions about this case?" (Wycoff & Oettmeier, 1994, pp. 11-12).

Similarly, the Madison Police Department mailed surveys to citizens listed in police reports and asked them to rate their satisfaction with seven aspects of the police contact: concern, helpfulness, knowledge, quality of service, problem solving, putting the citizen respondent at ease, and professional conduct. Respondents included victims, witnesses, and complainants. The department provided the results of the citizen satisfaction survey to employees via the department's newsletter and a semiannual report. The survey was not intended to locate rules violations; its purpose was to assess the quality of service that customers were receiving (Couper & Lobitz, 1991). Despite providing basic descriptions of the varied manners in which agencies survey customers, research projects have given little attention to the goals, uses, and effects of the citizen surveys that are being conducted by (or for) police organizations across the nation. This article expands our knowledge of the effects of citizen feedback on individual officers' attitudes and behaviors by describing and evaluating the effects of a citizen satisfaction survey in one police agency.

CURRENT PROJECT

The Lincoln, Nebraska Police Department (LPD) Quality Service Audit (QSA) is an ongoing survey of citizens who have had contact with LPD patrol officers. The audit seeks to provide a consistent and continuous method for giving police officers feedback about their contacts with citizens and for providing managers with strategic information that can be used to implement and refine quality-improvement practices. Student interns working at the LPD attempt to complete telephone surveys with citizens.

The QSA originated in a partnership between the LPD and Gallup, Inc., which has its corporate offices in Lincoln. The original survey instrument used for the QSA was designed in the spring of 1993. Two focus groups, one composed of Lincoln police officers and a second composed of citizens of Lincoln, were empanelled to identify important components of customer satisfaction with police services. A 10-item questionnaire resulted from this process (see appendix).

The LPD decided to survey three groups of citizens who had contact with officers: victims of crimes, drivers involved in traffic accidents, and persons who had received citations. These groups were chosen due to the substantial numbers available for sampling and the interest of LPD and Gallup in contrasting the responses of these groups based on the type of contact. The original survey process, as designed by Gallup, Inc., involved a written invitation to citizens to participate. This survey was relatively inexpensive but produced only an 8% to 12% participation rate. Because LPD desired more representative results and administrators wanted to be able to provide feedback to individual officers, a decision was made to attempt telephone interviews with all citizens in the three target groups. A computer-assisted interviewing program was developed, and student interns were trained to serve as interviewers. Interviews have been ongoing since the summer of 1994. Survey results are tabulated continuously by Gallup, Inc., which prepares both aggregate and individual citizen feedback reports each month. Like the results of citizen surveys reported elsewhere (Dunham & Alpert, 1988; Klockars, 1999; Maguire & Pastore, 1998; Moore & Poethig, 1999), citizen responses to the QSA have been overwhelmingly positive.

The unique aspect of the QSA is that disaggregated citizen survey results are given to participating individual officers on a monthly basis. An officer sees the survey results from citizens with whom he or she had contact in addition to the aggregated, department-wide results. The individual reports are not intended to be used for personnel decisions. Rather, they are meant

to be used as a professional development tool for individual officers. In fact, the disaggregated survey results are never seen by any police personnel other than the individual officers involved in the contacts. Results are provided so that individual citizen respondents cannot be identified.

The QSA represents a form of multisource performance feedback in the LPD. Multisource feedback involves gathering evidence about job performance from "the full circle of relevant viewpoints" including supervisors, peers, and consumers of services (London, 1997; London & Smither, 1995, p. 803). Rather than competing with other performance assessment mechanisms in the department, the QSA acts as one of multiple performance appraisal devices. A value in multisource feedback is that it provides employees with the opportunity to compare different pieces of information about performance and to thus maintain or improve their performance. Multisource feedback is useful for organizations because it facilitates measuring dimensions of performance that are not easily captured with objective indicators (London & Smither, 1995). Like the QSA, one function of multisource feedback is professional development. When used in this manner, responsibility is placed on the feedback recipient "for interpreting their results and using the information to guide their development and performance improvement" (London, 1997, p. 45).

HYPOTHESES

Through surveying citizens and providing feedback to police officers, the LPD is expecting that officers will improve the quality of services they provide. A diverse body of theory and empirical evidence shows that feedback interventions have variable effects on performance (see Kluger & DeNisi, 1996; London, 1997). Kluger and DeNisi's (1996, p. 258) meta-analysis of 131 research papers found that feedback interventions have "a moderate positive effect on performance." Theoretically, multisource feedback is believed to change behavior and improve work performance by (a) increasing employees' understanding of the degree to which they are meeting goals and (b) identifying areas in which employees can improve their performance (London & Smither, 1995).

Based on historical results of the QSA and research on citizen perceptions of the police, we expected LPD officers would receive mostly positive citizen feedback. This was indeed the case, as described below. Positive feedback from citizens provides officers with concrete evidence that shows the public values their work and their job performance. Kluger and DeNisi

(1996) explained that positive feedback can enhance motivation to continue performing at an existing, satisfactory level or to improve performance. Positive citizen feedback is hypothesized to improve officer performance, officers' attitudes about their work, and attitudes about their interactions with community members. We use two indirect measures of patrol officer job performance: supervisor ratings of officers and citizen ratings of officers. Our measures assume, among other things, that improved officer performance will be reflected by improved citizen and supervisor ratings. We test whether supervisor ratings for officers who received citizen feedback became more positive and whether average citizen ratings of officers who received citizen feedback became more positive over time. The last test is perhaps most important because it addresses the central question of whether feedback can affect the quality of services. We might expect such improvement because receiving citizen feedback illustrates to officers how they can improve.

We assess the effects of citizen feedback on officer attitudes because feedback interventions elicit emotional responses. Kluger and DeNisi (1996, p. 266) explained that feedback may lead an individual to consider the information in terms of their broader self goals, which can, in turn, "activate affective reactions." If feedback information challenges an aspect of the self, a potential response is to avoid the threatening tasks. On the other hand, the recipient of positive feedback may recognize the beneficial aspects of the tasks and place value on them. Receiving positive feedback from citizens will show officers the value of interacting with citizens and will improve their attitudes about and perceptions of working closely with communities. Specifically, we predict that positive citizen evaluations will improve four sets of officer attitudes: attitudes toward police activities that put them in closer contact with communities; beliefs that the police play a broad, rather than narrow, role in attending to community affairs; perceptions of patrol environments; and stress associated with community interactions. If this prediction is correct, officers who receive citizen feedback will hold more favorable attitudes and report less stress than officers who do not receive citizen feedback.

RESEARCH DESIGN

In 1995, the Lincoln Police Department and researchers from the University of Nebraska at Omaha formed a partnership to evaluate the impact of giving QSA feedback to individual police officers. A research team

consisting of LPD officers and a union representative, UNO faculty and students, and a representative of the Gallup corporation met throughout the summer of 1995 to determine the key questions to be asked, the research design to be employed, and the measures to be used to assess the impact of the QSA.

A randomized experiment was used to evaluate the effect that providing citizen feedback to patrol officers had on their attitudes and the quality of services that they provided. All officers who gave their informed consent to participate in the evaluation project were part of the QSA program (i.e., all of the citizens they had contact with were surveyed by the phone). Officers in the evaluation group received monthly feedback reports from the QSA, whereas officers in the control group received no feedback until the end of the 9-month evaluation period.

Officer Participants

When the QSA program originated, the LPD made the decision not to require any officers besides new recruits to participate in the program. Veteran officers were offered the opportunity for participation and 44 volunteered. Along with 21 recruits, the total of 65 original participants represented 33% of the LPD patrol officers at that time. When the evaluation project was started, only officers who had not yet been involved in the QSA were solicited for participation. The decision to exclude officers who were already participating in the QSA program was motivated by two primary concerns. First, any impact of the QSA on attitudes and behavior might have already occurred for these officers, and their inclusion would make it more difficult to observe program effects. Second, LPD administrators and managers expressed concern about withholding citizen feedback from original QSA participants if they were assigned to the control group. Members of the police department indicated that current participants liked receiving their citizen evaluations and would be unhappy if those results were withheld. On the other hand, the LPD is a small department and eliminating original participants from the evaluation would leave a small pool of officers from which to recruit participants. In addition, the existing pool of officers, with the exception of newly hired officers, could hold a less favorable view of the QSA because they declined to participate when the program was implemented. We concluded that the drawbacks associated with including officers already participating in the QSA dominated, so these officers were excluded from the experiment.

We met with 106 officers assigned to patrol duty in small groups of 4 to 5 to explain the study. Fifty-seven (54%) officers agreed to participate in the evaluation. The volunteers were informed that they would be assigned to one of two groups and that their group assignment would determine whether or not they received monthly feedback. All volunteers were informed that the citizens with whom they interacted would be surveyed about those interactions.

Design

We used a pretest-posttest control group design to assess officer attitudes and a posttest-only control group design to assess performance (Campbell & Stanley, 1963). Due to the small number of participants, a blocking design was used to improve the power of the experiment. Participating officers were divided into blocks based on their gender and their length of service with the department (2 years or less, 2 years to 5 years, and more than 5 years). From within each of the six blocks, officers were randomly assigned to either the experimental or control group. All participants in the experiment were given pre- and postintervention surveys that assessed their attitudes about the role of police in society and about aspects of their jobs. In addition, participating officers' supervisors were given pre- and posttest surveys about officers' performance.

Procedures

Our test examines two general outcomes: officer behaviors and officer attitudes. The two measures of officer behavior include supervisor ratings of officer performance and the results of QSA citizen surveys. To assess officer attitudes, we administered a survey to participating officers before the beginning of the study and at the end of the study, 9 months later. The officer attitudinal survey was adapted from an instrument used by Winfree, Bartku, and Seibel (1996) and tapped a variety of attitudes, including the importance of various police activities, job-related stress, and officer perceptions of their working environment. To facilitate confidentiality, we mailed surveys and follow-up surveys to officers' homes. Fifty officers returned pretest surveys, and 49 officers returned posttest surveys. Cases were excluded from analyses if they failed to return either a pretest or a posttest survey. This produced a sample of 48 officers, 24 in each of the experimental conditions, with usable attitudinal survey data. Cases with missing data on individual survey items were excluded when scales were constructed and individual items were analyzed.

To measure officer behavior, we surveyed supervisors about participating officers' performance before and after the period during which officers in the experimental group received citizen feedback. In addition, we gathered all citizen feedback for all participating officers (those in the experimental and control groups) during the 9 months of the experiment. Although citizen feedback is only given to participating officers in the experimental condition, we use all citizen feedback to assess officer performance. We predict that citizen feedback will grow more positive over time for the group of officers that receive feedback than the group that does not.

Measures

Officer attitudes. We measure four sets of officer attitudes: support for nontraditional police activities that put them in closer contact with communities, beliefs about the breadth of the police role in attending to community problems, perceptions of patrol environments, and stress associated with community interactions. A summated scale of 11 items was created to measure officers' support for specific policing activities not ordinarily captured in traditional police performance measures. Officers rated the importance of each of the following activities on a 4-point scale ranging from *very unimportant* to *very important*.

1. Patrolling on bikes
2. Patrolling on foot
3. Communicating police services to the public
4. Assisting persons in emergencies
5. Helping settle family disputes
6. Getting to know juveniles
7. Understanding problems of minority groups
8. Explaining crime prevention techniques to citizens
9. Working with citizen groups to resolve local problems
10. Checking buildings and residences
11. Solving community problems in my area

Individual item scores were summed so that low scale scores reflect weak support for nontraditional policing activities and high scores reflect strong support for nontraditional policing activities. The pretest scale reliability was .87 and the posttest scale reliability was .85. Forty-five cases had complete data on all pre- and posttest items used to create these scales.

A set of 12 survey items was used to create an index of officers' attitudes about the role of police. Officers reported their degree of disagreement and

agreement using a 4-point scale ranging from *strongly agree* to *strongly disagree*.

1. Police should be involved in all aspects of community life.
2. Police must protect the rights of all citizens at all times.
3. Settling problems between citizens is just as important as catching criminals.
4. To be effective, the police should be involved in all aspects of community problems, not just crime problems.
5. Police efforts would be more effective if we were not forced to deal with so many noncriminal events. (Responses were reverse coded.)
6. Preventing crime is just as important as catching criminals.
7. Making an arrest is not always the best way to solve a problem.
8. It is very important for the safety of a community that people be in close contact with the police.
9. You can't be an effective police officer if you do not know your area or beat well.
10. Too much police time is wasted on dealing with the petty problems of citizens. (Responses were reverse coded.)
11. Field interrogation of suspects is a more important patrol function than walking the beat. (Responses were reverse coded.)
12. Spending time talking to ordinary citizens is good police work.

Individual item scores were summed so that low scale scores reflect weak support for a broad police role, whereas higher scores reflect strong support for a broad police role. The pretest scale reliability was .74 and the posttest scale reliability .75. Forty-three cases had complete data on all pretest and posttest items used to create the police role scales.

We also wanted to examine the impact of citizen feedback on officers' ratings of their patrol environments. Using 4-point scales, officers were asked to rate their patrol environment on the following four dimensions:

1. Relaxing to stressful
2. Friendly to hostile
3. Satisfying to frustrating
4. Safe to dangerous

Forty-four cases with complete data on the relaxing, satisfying, and safe dimensions and 45 cases with complete data on the friendly-hostile dimension are used in the analysis of these items. Officers were also asked to rate their stress from working in the community. Using 4-point scales (from *always stressful* to *never stressful*), they were asked to rate stress from citizen contact on the job and from giving community presentations. Forty-eight cases with complete data on the citizen contact item are used in the analysis of this question, and 47 cases with complete data on the community presentation item are used in the analysis of this question.

Officer performance: supervisor ratings. Three supervisor survey items are of primary interest: officers' attitudes toward the job, officers' attitudes toward citizens, and officers' overall job performance over the last 6 months. Supervisors rated officers' attitudes toward the job and toward citizens on a 5-point, Likert-type scale: 1 = *very positive*, 2 = *positive*, 3 = *neutral*, 4 = *negative*, 5 = *very negative*. Supervisors rated the overall performance of the officer during the previous 6 months with a 5-point scale: 1 = *outstanding*, 2 = *above average*, 3 = *average*, 4 = *below average*, 5 = *poor.* Complete data from supervisors are available for 50 officers on the first two items (officers' attitudes toward the job and toward citizens) and for 48 officers on the third item (officers' overall job performance).

Officer performance: citizen ratings of officers. Citizen responses to the telephone interviews were gathered during each of the 9 months of the evaluation project. The original QSA items were used plus an additional item asking citizens to rate the overall performance of the officer on a 5-point scale ranging from outstanding to unsatisfactory. A total of 2,228 interviews with citizen respondents were completed out of 2,369 attempted interviews (94%). Of these completed interviews, 1,094 provided ratings of officers in the experimental condition and 1,134 provided ratings of officers in the control condition.

RESULTS

OFFICER ATTITUDES

Regression models were used to compare the experimental and control groups on their attitudes toward policing functions, the police role, their patrol environment, and toward stress associated with community interaction. Using this method, the posttest attitude measures serve as dependent variables, whereas the pretest measures are entered as control variables, thus producing an analysis of change in attitudes. A dummy variable for group membership (experimental versus control) provides an assessment of the impact of the citizen feedback.

We hypothesized that receiving citizen feedback would lead officers to hold more favorable attitudes toward nontraditional police activities. Results for the scale measuring these attitudes are presented in Table 1. As would be expected, the pretest score on attitudes about nontraditional activities is significantly related to the posttest score. The experimental

TABLE 1. OLS Regression of Posttest Officer Attitudes on Experimental Condition and Pretest Attitudes

	Nontraditional Policing Activities	*Police Role*
	b	b
Constant	4.00* (1.28)	4.32* (1.17)
Pretest attitude	0.56* (.12)	0.69* (.10)
Feedback[a]	–0.09 (.86)	0.01 (.73)
R^2	0.37*	0.53*

Note: Standard errors are presented in parentheses.
a. The control group is the reference category.
*$p < .05$.

manipulation (giving QSA feedback), however, had no significant effect on the posttest score for this scale. In other words, those officers who received QSA feedback, after pre-experiment attitudes were taken into account, expressed attitudes toward nontraditional police functions that were not different from officers who did not receive the feedback.

We predicted that officers who received feedback from citizens would report a greater level of support for a broad conception of the police role than officers who did not receive feedback from citizens. The results for this attitudinal scale are also presented in Table 1. Controlling for pretest attitudes about the police role, we were unable to detect an effect of citizen feedback on perceptions of the police role. Receiving QSA feedback did not apparently affect officers' attitudes about the police role.

We also hypothesized that, as a result of obtaining feedback from citizens, officers in the experimental group would report that their patrol environments were more relaxing, friendly, satisfying, and safe than their counterparts in the control group. We collapsed the four response options into two categories because responses clustered toward the middle of the Likert-type scale. At least 75% of the cases clustered in the middle two response categories of each of these four items. The categories of the friendly-hostile scale are, for instance, 1 (*a lot* and *somewhat friendly*) versus 2 (*a lot* and *somewhat hostile*). Logistic regression models were used to assess the treatment effect on these attitudes, and the results are presented in Table 2. Again we see that, once pretest attitudes were controlled, receiving the QSA feedback had no significant impact on officer ratings of their patrol environment.

The two groups were also compared on their level of stress resulting from contacts with citizens and giving community presentations. We anticipated

TABLE 2. Logistic Regression of Officer Posttest Attitude About Their Patrol Environment and About Contact With Citizens on the Job on Experimental Condition and Pretest Attitudes

	Dependent Variables					
	Relaxing-Stressful	*Friendly-Hostile*	*Satisfying-Frustrating*	*Safe-Dangerous*	*Citizen Contact*	*Community Presentations*
Constant	0.23	–1.65*	–0.43	0.45	–0.38	–0.88
Pretest attitude	0.71	2.24*	0.75	0.21	1.64*	1.76*
Feedback[a]	–0.08	–0.005	–0.47	–0.22	–0.44	0.36
Model χ^2	1.12	10.16*	1.43	0.20	6.31*	8.32*

Note: Unstandardized logit coefficients are presented in the table.
a. The control group is the reference category
*$p < .05$.

that officers receiving positive evaluations from the community would perceive their interactions with the community to be less stressful. At least 65% of cases clustered in the middle two response categories on each of these items. Therefore, we aggregated responses into two categories: 1 (*seldom* and *never stressful*) and 2 (*always* and *sometimes stressful*). The results in the last two columns of Table 2 indicate that with pretest scores controlled, receiving QSA feedback did not have a statistically significant effect on the officers' stress associated with their contacts with citizens and with giving community presentations. In sum, we were unable to detect any effect of the QSA feedback on the attitudes of patrol officers.

Supervisor Ratings

Supervisor ratings both before and after the experimental period were used to measure officer attitudes and performance. Even though we attempted to increase variation in responses by using a 5-point scale, supervisor ratings of officer attitudes toward the job and attitudes toward citizens tended to cluster toward the positive end. We collapsed the five potential responses into two categories: 1 (*very positive* and *positive*) and 2 (*neutral*, *negative*, and *very negative*). Similarly, supervisors' ratings of the performance of officers over the previous 9-month period clustered at the positive end of the scale. We aggregated response categories into a dichotomy: 1 (*outstanding* and *above average*) and 2 (*average*, *below average*, and *poor*).[1] Table 3 shows that, after controlling for pretest ratings, we did not

TABLE 3. Logistic Regression of Posttest Supervisor Ratings of Officers on Experimental Condition and Pretest Ratings

	Dependent Variables		
	Officer's Attitude Toward the Job	*Officer's Attitude Toward Citizens*	*Officer's Overall Performance*
Constant	0.91	0.06	0.04
Pretest rating	1.99*	3.47*	2.42*
Feedback[a]	–1.06	–1.84	–0.39
Model χ^2	5.69	13.52*	11.01*

Note: Unstandardized logit coefficients are presented in the table.
a. The control group is the reference category
*$p < .05$.

detect effects of receiving citizen feedback on supervisors' assessment of officers' attitudes toward the job, attitudes toward citizens, or officers' overall performance in the previous 9 months.

CITIZEN RATINGS

The final prediction was that receiving feedback from citizens about how they could improve would induce officers to improve their performance. Citizen responses to QSA items provide a measure of how officers behaved during their contacts with citizens over the course of the study. Although only the experimental group received citizen feedback during the study period, both groups were evaluated by the audit. If receiving feedback had an effect on the officers' behaviors in the field, then this effect should result in different citizen ratings between the two groups. Three specific QSA questionnaire items were examined: two regarding specific treatment and one asking citizens for an overall rating of the officer.

There is no relationship between the experimental condition and whether citizens reported that the officer behaved professionally and whether the officer treated them fairly. Table 4 shows that most citizens reported that officers acted professionally and treated them fairly, regardless of whether the officer had been receiving citizen feedback. Similarly, there was no difference (t = .28, p = .79) between the experimental and control groups in terms of how citizens rated the officer's overall performance during the encounter. The experimental and control groups received nearly identical mean ratings, 3.97 and 3.96, respectively.

TABLE 4. Relationship Between the Experimental Condition and Citizens' Reports of Officer Performance During the Study Period

	Experimental Condition	
	Citizen Feedback	*No Citizen Feedback*
Were the officer's actions professional?		
Yes	1,040 (96%)	1,086 (97%)
No	45 (4%)	38 (3%)
Did the officer treat you fairly?		
Yes	998 (92%)	1,053 (93.5%)
No	86 (8%)	73 (6.5%)

Note: Figures in parentheses reflect column percentages.

There is no evidence to suggest that officers who received individualized citizen feedback received more positive ratings overall during the study period. An examination of the overall differences, however, does not allow for the possibility that differences might have grown larger over the course of the study. In other words, the experimental group may have received more favorable citizen feedback across the study period that does not appear to be significant in the aggregate. If receiving feedback changed officers' behaviors toward citizens, a divergence in the ratings of the two groups across the course of the study should emerge. The experimental group is expected to receive more positive feedback by the end of the study because they were given information about behaviors with which citizens were not satisfied and thus could change to increase citizen satisfaction. Figures 1 through 3 illustrate the pattern of results for the three QSA items of interest. None of these figures shows the predicted pattern of results; the trends associated with both groups are similar. The figures indicate, surprisingly, that the ratings of both groups tended to become less favorable over the course of the evaluation period.

Because citizen responses may vary by the nature of the contact (Brandl et al., 1994; Langan et al., 2001; Mastrofski, 1981), responses were disaggregated by the type of incident. Figures 4 through 6 show citizen response patterns for all officers in the study disaggregated by the type of officer-citizen contact. It is clear that the pattern of less favorable ratings over time is largely due to interactions with citizens who were cited. Crime victims and citizens involved in accidents provided favorable responses across the different questions and over time.

(text continues on p. 193)

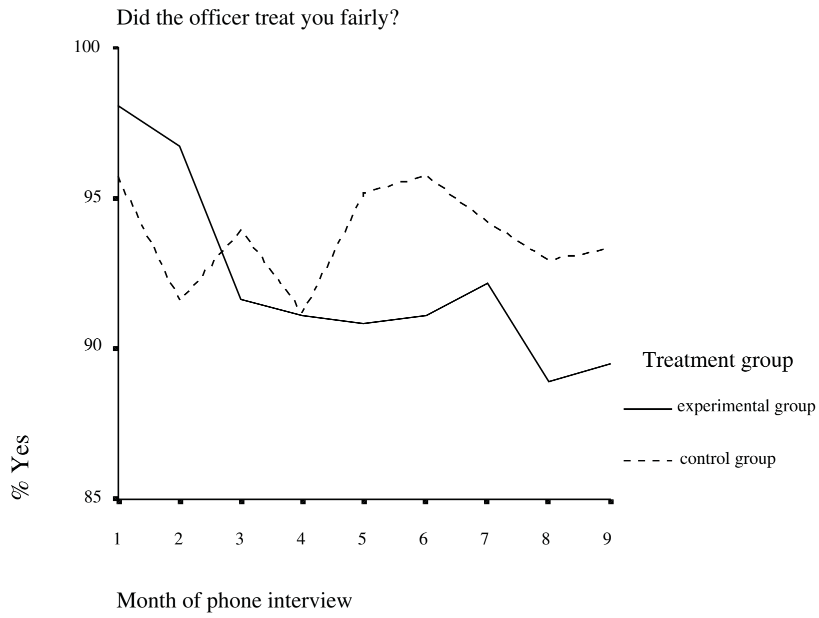

FIGURE 1: Percentage of Respondents Who Report Being Treated Fairly by Treatment Group

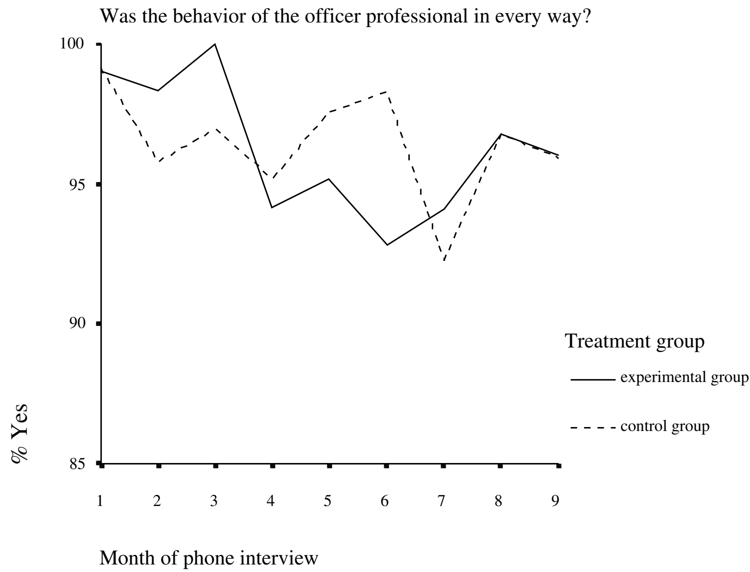

FIGURE 2: Percentage of Respondents Who Report Officers Behaved Professionally by Treatment Group

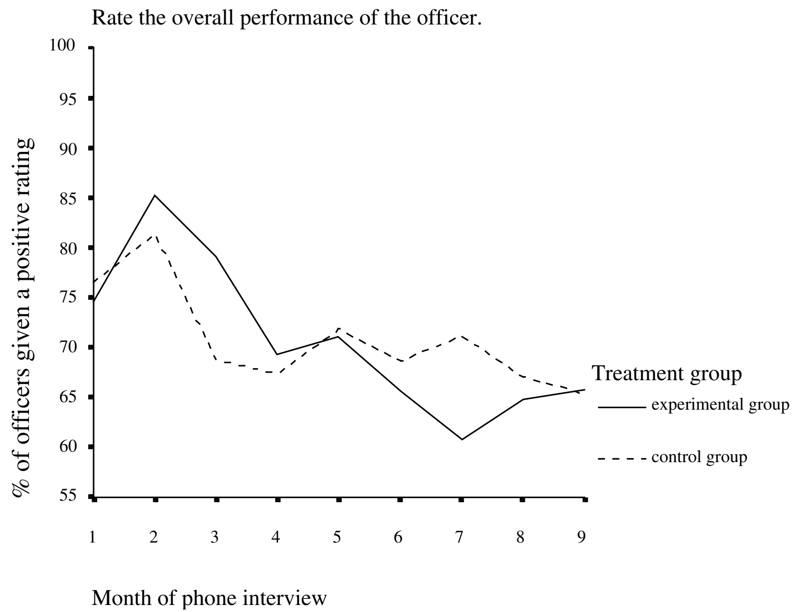

FIGURE 3: Percentage of Respondents Who Provided a Positive Rating of Overall Officer Performance by Treatment Group

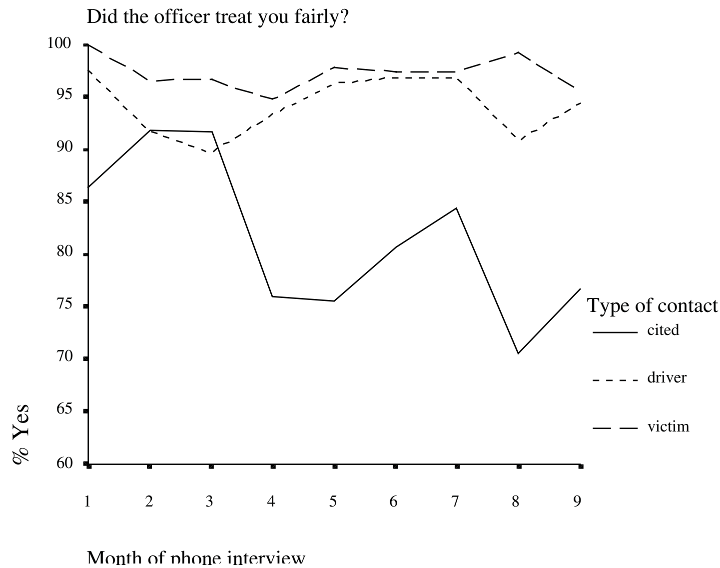

FIGURE 4: Percentage of Respondents Who Report Being Treated Fairly by Type of Contact

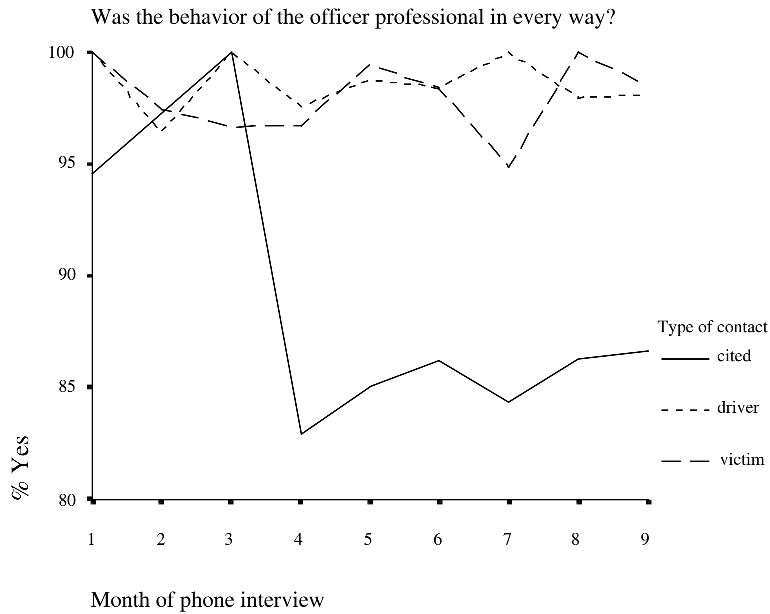

FIGURE 5: Percentage of Respondents Who Report Officers Behaved Professionally by Type of Contact

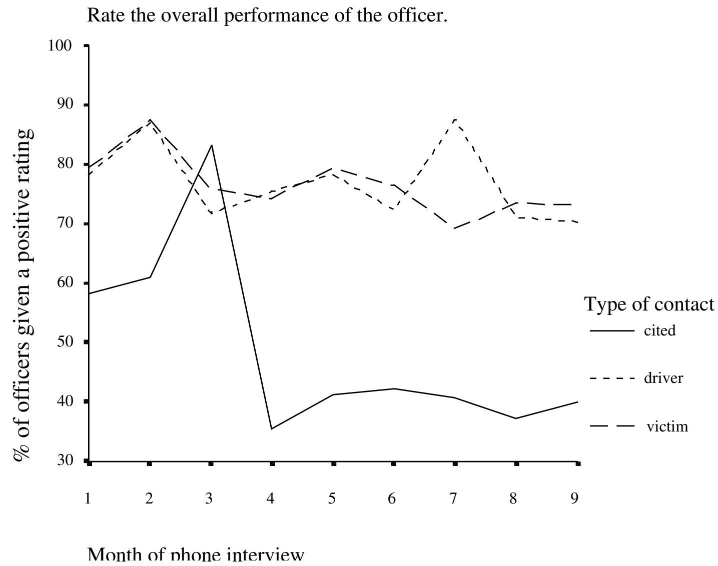

FIGURE 6: Percentage of Respondents Who Provided a Positive Rating of Overall Officer Performance by Type of Contact

One explanation for the downward trend in ratings from citizens who were cited is that officers may have reacted to participating in the experiment. If there was a Hawthorne-like effect operating in this study, then the officers' awareness of being studied may have led officers in both the experimental and control groups to initially behave more pleasantly toward citizens they cited than they ordinarily would have behaved. The decline in positive ratings might represent a return to "business as usual" as their participation in the study became less salient.

To assess this explanation for the pattern of results, the QSA ratings of officers in the evaluation study were compared, for the same time period, to the QSA ratings of officers who had been participating since the initiation of the QSA program. The police department continued to survey citizens who had contact with this latter group of officers during the study period. If the decline in ratings observed for evaluation participants reflected reactive effects at the beginning of the study, the same pattern should not be seen for those officers who began their participation in the QSA a year or more earlier.

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Figures 7 through 9 show the patterns of QSA feedback from citizens who were given citations, both for officers participating in the evaluation and those who had been QSA participants since the inception of the program.[2] The patterns are remarkably similar for the original participants and the evaluation officers. Whatever caused the decline in citizen ratings apparently had little to do with the reactive effects of study participation. Police administrators suggested that the time period of the decline was one in which departmental cutbacks meant more work and greater stress on patrol officers and that this may have had a negative influence on their interactions with citizens receiving citations. It should be noted that citizen ratings continued to be quite favorable even though they were lower than the ratings in the early months.

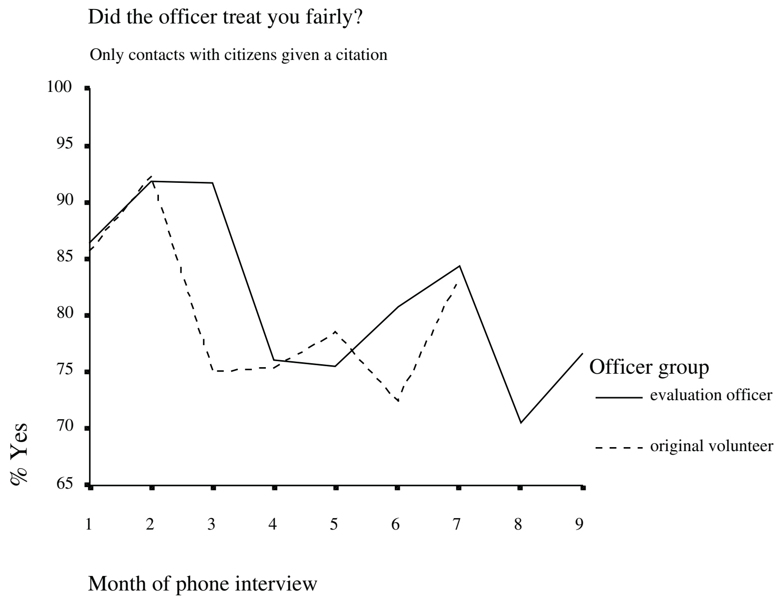

FIGURE 7: Percentage of Respondents Who Received a Citation and Who Report Being Treated Fairly by Time of Treatment

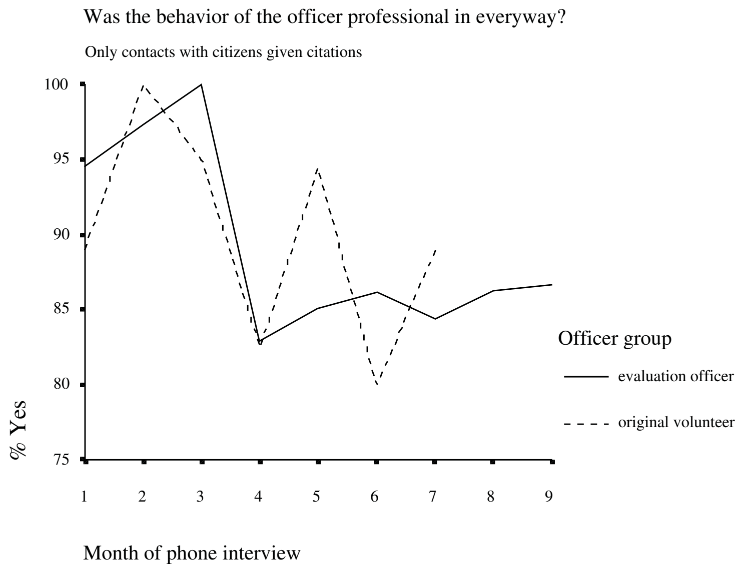

FIGURE 8: Percentage of Respondents Who Received a Citation and Who Report Officers Behaved Professionally by Time of Treatment

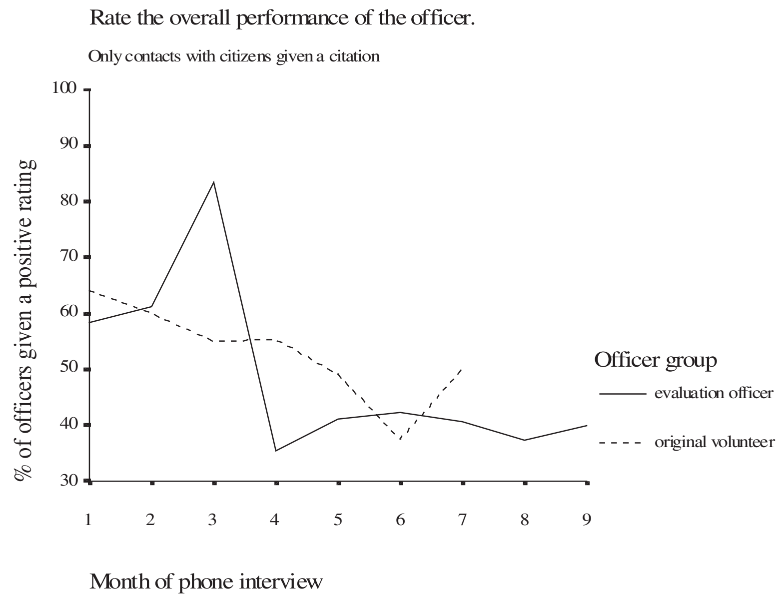

FIGURE 9: Percentage of Respondents Who Received a Citation and Who Provided a Positive Rating of Overall Officer Performance by Time of Treatment

It may be easy to ignore ratings from citizens who were cited because of a belief that people who receive negative outcomes will automatically give less favorable ratings to the officer. Nevertheless, police organizations, and the criminal justice system in general, should remain interested in the perceptions of fairness held by this group of citizens. Beliefs about legitimacy are linked to perceptions of fairness and procedural justice. In turn, beliefs in a legitimate authority are expected to enhance compliance with the law (Paternoster, Brame, Bachman, & Sherman, 1997; Tyler, 1990). Thus, the manner in which suspects are cited and arrested is likely to affect future behavior, independent of the encounter outcome (see Paternoster et al., 1997).

DISCUSSION

Even though police practitioners and scholars recognize the need to develop and implement nontraditional measures of police performance, little empirical research has documented or evaluated these efforts.

Anecdotes from police managers suggest that organizations striving to implement community policing often struggle to find and use appropriate methods for evaluating employees.[3] Citizen surveys are a valuable source of information about how citizens perceive the police. This information is particularly valuable for police agencies that value quality relationships with their citizens or clients. The mere act of surveying citizens can be viewed as part of a larger effort to improve the relationships between police and communities.[4] This study, however, was not able to detect statistically significant effects of citizen feedback on individual officers' attitudes and behaviors.

There are several reasons why this study may not be a fair test of the effects of citizen feedback. First, a fairly small group of officers participated in the experiment. This small number of participants may not have provided sufficient statistical power to detect small treatment effects. Although a blocking design was used to increase statistical power, it is still possible that small effects were not detected. In addition, the participants may represent a group of officers who were less amenable to change. Most study participants had declined earlier invitations to participate in the QSA program. A group apparently less interested than others in receiving citizen feedback, they may also represent a group less amenable to attitudinal changes as a result of receiving information about how their actions are perceived by citizens in the community.

Furthermore, because of data limitations, the demographic characteristics of participants could not be compared to the characteristics of those who were asked to participate but refused. For the same reason, study participants cannot be compared to the original group of volunteers. This is clearly not a random sample of participants. These officers decided to participate in the study and decided to return the attitudinal surveys that were mailed to them. Thus, the experimental results could portray an accurate picture but one that might not be generalizable to all officers.

It is also possible that participants in the study had been "contaminated" by earlier exposure to department-wide feedback from the QSA. Although the officers in the experiment did not receive feedback about their individual citizen contacts until the experiment began, they may have already been influenced by the general results that were posted and discussed in the previous year of the QSA program. Police administrators indicated that early findings from the QSA had been incorporated into training and supervision. If this were the case, it would suggest that the impact of the QSA may be found primarily at the department level rather than at the individual level

and may have occurred in the program's infancy. The QSA can thus be viewed as an individual-level intervention as well as an organization-level intervention. The mere act of surveying citizens and soliciting their comments on officer behavior communicates to officers that the organization values citizen perceptions. This message may induce a degree of behavioral change in all officers, regardless of whether they receive individual feedback. Future research might assess performance differences between police organizations that solicit customer feedback and those that do not or between organizations that use such information in different ways.

Although effects on individual officers might have been found under different study conditions, we also have to consider the possibility that our hypotheses were unrealistic in expecting citizen feedback to produce real change. Decades of research have shown that changing the attitudes and behaviors of police officers is no easy task. Consider Mastrofski's (1999) comments on the ability of police training to change officer attitudes.

> Much of what passes for training today is really an attempt to impart a new belief system or a new faith . . . a few days of indoctrination in the new values espoused in these types of courses will not alter fundamental beliefs that have been percolating over a lifetime and beliefs annealed in the work environment of the police. (pp. 6-7)

If, like some police training, feedback from citizens provides only a temporary distraction from the daily realities of police patrol, then it is unlikely to produce the kinds of change for which we tested.

Theories of information processing in organizations, such as cybernetics, offer an insightful perspective for interpreting the findings. Although cybernetic principles have been applied in the study of organizations more generally (Cadwallader, 1959; Morgan, 1997), they have only rarely been applied to the study of police organizations (see Duncan, 1972). The core principles of cybernetics suggest that systems regulate themselves by gathering and reacting to feedback about their performance. The core elements of a self-regulating system are the mechanisms that are set into place for perception, decision making, and action. The cybernetic perspective holds that each of these elements is conceptually and functionally distinct (Dechert, 1969). Ideally, each of these elements will work together so that perceptor elements detect a shift in equilibrium, control elements process the information and determine the proper solution, and effector elements implement the necessary corrective response. In essence, this decision-making perspective views systems, including organizations, as

similar to organic brains, continually detecting, processing, and reacting to information.

If we view the QSA through a cybernetic lens, the citizen surveys are the perceptor element; they provide information about the performance of the system. The officers in this case are the control element; they interpret the feedback and decide the appropriate response (which may in fact be no response at all). The officers also constitute the effector element in that they are responsible for implementing the response. Recall that the purpose of the QSA was professional development, with officers responsible for interpreting and using the feedback. Observe that this arrangement is at odds with Dechert's (1969) warning that the three elements must be structurally distinct in order for the system to work. Furthermore, this structure violates Morgan's (1986) view that the system must contain a mechanism for detecting whether the feedback deviates from the norm, deciding on a corrective response, and implementing that response. Thus, from a cybernetic perspective, it is not surprising that the feedback failed to produce the intended changes. Under these conditions, the feedback alone may not be powerful enough to effect behavioral or attitudinal change.

If the cybernetic perspective is appropriate in this instance, then the next hypothesis to be tested is whether the feedback changes attitudes and behaviors if it is routed through managers who decide on appropriate remedies and assign supervisors the task of ensuring that those remedies are carried out. Department policy specified that the feedback was seen only by the individual officers; thus, the feedback was not associated with any formal consequences. Expecting officers to change their behavior based only on their own altruistic motivation with doing a good job may not accurately capture the reality of police officers and the factors that motivate them. In short, in the absence of positive or negative reinforcement, it may not be reasonable to expect officers to change. This is just one potential interpretation for the results we obtained in this study but one that provides fertile ground for further experimental research on the effect of citizen feedback on the attitudes and behaviors of police patrol officers and other public service agents.

Future research should also consider recent theoretical advancements in the relationship between feedback interventions and task performance (Kluger & DeNisi, 1996; London, 1997). These advancements enhance our understanding of the conditions under which performance feedback can induce positive behavioral change. London (1997) explained that feedback, in conjunction with goal setting, increases the chances that performance

feedback will be effective. Feedback can enhance motivation when it is considered in light of established goals. Furthermore, the coupling of feedback with some accountability mechanism can enhance performance outcomes (London, 1997). Such a mechanism might hold an officer accountable for at least considering citizen feedback and explaining how the information will be used.

Our experiment only assessed the impact of QSA feedback on individual officers participating in the program. To understand its more general impact in the department, we surveyed all QSA participants and a number of LPD administrators. In responses to a mail survey sent to all 94 officers participating in the QSA program, we received completed responses from 55 officers. Although this relatively low response rate makes it difficult to generalize the results, respondents reported quite positive attitudes toward the QSA. Sixty-six percent felt the QSA was personally useful, more than 75% felt it is useful for the organization, and 82% believed it is good for the citizens of Lincoln. Seventy-three percent indicated that they like receiving the individualized QSA feedback.

We also interviewed seven police administrators (the chief of police, the training commander in charge of implementing the QSA, a deputy chief, and four team captains) and found that they held consistently positive views of the QSA. All believed the department should continue the program. They viewed the program as an important tool for tapping community perceptions of the police and as a means of indicating that the department cares about those perceptions.

None of the administrators interviewed felt that the QSA results should become part of the official evaluation process for officers. One indicated that receiving generally positive feedback gives an important morale boost to officers and that if the program were used to evaluate officers, it would instead be viewed negatively. Another stated his belief that, although the department is trying to move the organizational culture from one that emphasizes internal measures of success to one that uses external measures, any move to use the QSA as a formal evaluation tool would have to come from the rank and file if it were to be successful.

Several administrators believed that departmental training and officer behavior had changed as a result of citizen feedback. They reported that one of the early findings from the aggregate QSA results was that many officers who told citizens they would follow-up on the initial contact were not doing so. After department-wide discussion of the finding, QSA results in the following months indicated that officers were less likely to promise additional

contact but were more likely to follow through when they did make such a promise. One administrator said that QSA results led officers to give citizens more realistic expectations regarding future police action. This finding fits with prior research demonstrating that citizens are less satisfied when their expectations about how the police will behave are incongruent with actual police behavior (Gallagher et al., 2001; Reisig & Chandek, 2001).

Such a result suggests that feedback may be most effective when it addresses very specific behaviors. For instance, it may be easier for an officer to know how to change if he is told that he is not following up on initial contacts as promised than if he is told that he is not considerate of citizens' feelings. The result also indicates that change may be more likely to occur through departmental action in response to the aggregate citizen feedback than through providing individualized, but private, feedback to officers. Most of the administrators saw the program as having great potential for identifying and addressing problems and for assessing hiring and training practices. Specific questions could easily be added to the QSA to assess officer behavior and the impact of departmental training as particular issues arise.

CONCLUSION

Reformers have argued for several decades that surveying citizens about their interactions with police officers is a valuable tool for providing feedback about how to improve their quality of service (Bordua & Tifft, 1971; Mastrofski, 1981). The police are not alone in their efforts to collect feedback from citizens. Throughout the service industries, both public and private, reformers are calling for organizations to collect feedback from their customers, clients, constituents, or citizens (Bitner & Hubbert, 1994). Feedback is an important element of most major organizational change strategies popular in the last decade, from reinventing government (Osborne & Gaebler, 1992) and total quality management (Gormley & Weimer, 1999, p. 110) to the reengineering movement in the corporate world (Hammer & Stanton, 1995). The idea of using feedback to fuel organizational change efforts is part of a larger movement toward the development of organizations capable of self-learning. As Morgan (1997) wrote, "A learning organization . . . has to become skilled in breaking the boundaries separating it

from its environment, to engage and experience the environment as fully as possible" (pp. 91-92).

Collecting feedback from citizens in different kinds of encounters or transactions can be viewed as one part of a larger movement that seeks to drive the culture of policing further away from an "us versus them" perspective. The winds of change in policing are blowing in multiple directions, however, with the community policing movement seeking to erode the barriers between police and citizens and the zero tolerance movement re-erecting the barriers (Eck & Maguire, 2001). The use of citizen surveys can be part of a larger reform effort in which the processes of policing get as much attention as the outcomes and in which meaningful measures of police performance are developed that account for not only what the police do but how they do it (Mastrofski, 1999). Implementing citizen surveys can be one step toward transforming police agencies into learning organizations. As we have shown here, however, merely collecting feedback from citizens is not enough. Methods for processing the feedback and using it to implement meaningful change need to be developed and tested. This is one area offering fruitful opportunities for collaboration between police agencies and researchers, both to test theories and hopefully improve the practice of policing.

APPENDIX

1. Did the officer seem to know what he or she was doing? Yes or No
2. Did the officer listen to your point of view—your side of the story? Yes or No
3. Were you treated with dignity when the officer approached you? Yes or No
4. Did the officer deal with you fairly? Yes or No
5. Was the behavior of the officer who contacted you professional in every way? Yes or No
6. Was the officer considerate of your feelings during the contact? Yes or No
7. Did the officer say he or she would contact you or do something to follow up with you? Yes or No
8. If yes to 7, did he or she follow up as promised? Yes or No
9. On a scale of 1 to 5, how safe and secure do you feel in the neighborhood where you live? (1 = *always feel unsafe* and 5 = *always feel safe*)
10. Did you learn something from the officer that will help you be more secure in the future? Yes or No

NOTES

1. Substantive findings do not change when the categories of the dependent variable are not aggregated in this way.

2. QSA data from the original volunteer officers were unavailable for months 8 and 9. This is not problematic, however, because the early months are those in which there was a decline and where reactive measurement effects are expected to operate.

3. This evidence comes from a national study of community policing being conducted by the authors.

4. Although it is plausible that citizen surveys might improve relationships between police and citizens, one recent study found evidence to the contrary. Travis, Novak, Winston, and Hurley (2000) found that when officers did unannounced face-to-face surveys in the community, it lowered citizen satisfaction with police.

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