

The Effect of Sanctions on Police Misconduct

Crime & Delinquency
2014, Vol. 60(8) 1258–1288
© The Author(s) 2012
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0011128712466933
cad.sagepub.com



Christopher J. Harris¹ and Robert E. Worden^{2,3}

Abstract

Police disciplinary systems are predicated on the notion of deterrence, particularly that officers more severely sanctioned for misconduct will be less likely to repeat those behaviors compared with less severely or unsanctioned officers. Using retrospective, longitudinal data from a large police department in the northeastern United States, we explore whether this fundamental assumption of police disciplinary systems is supported. Specifically, we examine both the likelihood and timing of complaints filed against officers who had obtained at least one complaint in their career that was sustained (i.e., upheld in an investigation), and compare outcomes of sanction severity on future sustained complaints. The results demonstrate that while a few demographic and complaint characteristics significantly affect the likelihood and timing of future misconduct in expected ways, officers who received more severe sanctions were actually more likely to obtain an additional sustained complaint when compared with nonsanctioned officers. Why this is the case is unclear from the data, but the most plausible explanation is that the perceived injustice of the disciplinary system may actually promote officer deviance.

Keywords

police discipline, police misconduct, deterrence, defiance theory, procedural justice

¹University of Massachusetts Lowell, USA

²University at Albany, State University of New York, USA

³The John F. Finn Institute for Public Safety, Inc., Albany, NY, USA

Corresponding Author:

Christopher J. Harris, University of Massachusetts Lowell, 218 Mahoney Hall, 870 Broadway Street, Lowell, MA 10854, USA.

Email: Christopher_harris@uml.edu

Police misconduct has not only immediate consequences for its victims but also broader implications for police legitimacy, public support for and cooperation with the police, and even public compliance with the law (National Research Council, 2004; Tyler, 2004).¹ A number of organizational mechanisms may be used to control misconduct, including personnel screening and training, but police departments have relied heavily on police disciplinary systems to deter misconduct. Presumably, the imposition of sanctions to the officers who violate administrative regulations or the law will deter them from further violations and deter others also (Stephens, 2011).

There are several prominent examples of police organizations that have failed to maintain officer discipline, and where subsequent investigations revealed that the disciplinary systems of these agencies were weak or nonexistent in a variety of respects, ranging from failures to properly investigate complaints, to failures to actually sanction officers found guilty of misconduct (Walker, 2005). Other inquiries have raised questions about the fairness with which discipline is applied. While much has been written about the failures of police disciplinary systems, to date no research has examined the effects of the routine functioning of a police disciplinary system, particularly whether officers who are formally sanctioned for misconduct are less likely as a result to engage in further misconduct. Using retrospective longitudinal data from a large cohort of police officers, we examine both the probability and timing of future personnel complaints following the imposition of different sanctions. Such research is important in that it examines a fundamental assumption underlying police disciplinary systems: that officers who are more severely sanctioned for misconduct are less likely, net of other important considerations, to engage in future misconduct, a proposition of specific deterrence.

Review of Relevant Literature

Police disciplinary systems operate much like the criminal justice system. Indeed, just as the criminal justice system threatens punishment to lawbreakers through the power to arrest, investigate, adjudicate, and sentence offenders, internal affairs (IA) units within police agencies have responsibility for investigating and adjudicating claims of improper conduct by officers. Also like the criminal justice system, most of the functioning of police disciplinary systems is reactive. IA receives information alleging officer misconduct, usually in the form of personnel complaints from either citizens or supervisors, and then investigates to determine whether misconduct has occurred. As well, both systems are predicated on the notion of deterrence. Under

deterrence theory, an increase in the certainty, celerity, and severity of potential punishment increases the perceived costliness of a contemplated behavior, and can thereby discourage it. For both offenders and police officers, judgments about the potential for punishment are based partly on their own and others' experiences, and whether certain acts were avoided or punished. While this theory acknowledges that deterrence will not work on certain groups of incorrigible offenders (e.g., the mentally ill; Pogarsky, 2002), given that police officers are carefully selected and screened, and given that they have a stake—their job—in conformity, it seems reasonable to posit that officers should be responsive to the threat of discipline for their inappropriate behaviors and are therefore deterrable.²

Yet there is reason to believe that police disciplinary systems, even when they function adequately, do not uphold the three principles of deterrence. First, sanctions are far from certain for several reasons. Most citizens who believe they have grounds to complain in fact do not (Walker & Bumphus, 1992; Walker & Graham, 1998), and while citizens sometimes file illegitimate complaints against officers based on misunderstanding, calculations of legal advantage, or malice (Lersch, 2002), recorded complaints on balance almost surely underrepresent misconduct. Internally generated complaints may be even less likely than citizen complaints, as officers rarely complain against one another, and even supervisors are reluctant to file complaints against subordinates, understanding that doing so puts their subordinates' future chances of promotion at risk and likely reflects poorly on the supervisor (Goldstein, 1977). For example, Lersch and Mieczkowski (2000) found that internal complaints represent only one fifth of all personnel complaints.

Even when citizens do formally complain, most are not sustained by police (or civilian) investigators, usually due to a lack of independent witnesses or forensic evidence (Skolnick & Fyfe, 1993; Walker, 2005). It is far more likely that a complaint results in a finding of exonerated (the allegation is verified, but the act was proper), unfounded (the evidence indicates that the alleged act[s] was not taken by police), or not sustained (the evidence was not sufficient to validate or discredit the allegation). Internal complaints, despite their infrequent occurrence, do appear to be sustained at much greater rates than citizen complaints (Griswold, 1994; Liederbach, Boyd, Taylor, & Kawucha, 2007). This is likely due to the kinds of allegations made, which are often administrative conduct issues (e.g., showing up late to work) that occur in the presence of supervisors or peers and so are easy to prove. It is also likely supervisors will only file complaints which they are confident will result in sanction.

Given the low probability that citizens and supervisors will actually file complaints and that these complaints will be both sustained and sanctioned, the certainty of punishment following any act of misconduct is very low. Walker and Bumphus (1992) estimated that only about one third of citizens who feel they have reason to complain against the police in fact do so. Our research also indicates that only about one eighth of citizen complaints are sustained on investigation (see below). While these are rough estimates, such data imply that at best a sanction is imposed in only 1 of 24 instances of misconduct.

Second, some reports of long delays in closing complaint investigations show that celerity is not uniformly achieved, although we know of no systematic data on the average time it takes from a complaint being logged until its adjudication, and so it is not known whether police disciplinary systems operate swiftly. Some police departments specify the maximum time that an internal investigation of alleged misconduct may take, and while most range between 30 and 90 days, many police departments fail to meet their own established deadlines. For example, in the Albuquerque Police Department, the city contract specifies complaint investigations to be completed within 90 days, but an investigation found that the department failed to meet the time deadlines for about half of the complaints they received (Jerome, 2002). Along similar lines, a city auditor's report for the Portland, Oregon Police Department found that citizen complaints took a median of 70 days to complete in 1993, but several cases took more than 100 days, and some as long as 2 years (Blackmer, 2001).

Third, while there is no research on the current "going rate" among police agencies in terms of their sanctions for various acts of misconduct, investigations into agencies in the wake of highly publicized misconduct have often revealed that sanctions were not commensurate with officers' actions, which may or may not be representative of other agencies. Often, when complaints were sustained, the sanctions were either far too lenient or nonexistent. For example, in San Francisco between 1984 and 1990, 129 sustained complaints were sent to the chief for disciplinary action; of those, in only 47 cases (36%) was any discipline at all handed out by the chief (Perez, 1994).

Be all that as it may, individual officers who are actually sanctioned may nevertheless revise upward their judgment about the likelihood that misconduct will be detected and punished, and will be less likely to commit such acts in the future. Here, sanctions can produce specific deterrence, even if the conditions for general deterrence are not favorable.

However, we might speculate that to a large degree, the specific deterrent effect of sanctions for police misconduct turns on the formal sanction alone,

and is not reinforced by informal (extralegal) sanctions, such as the possible guilt, shame, or stigma officers feel following a sanctioned complaint. The deterrence literature has shown that the effect of informal sanctions often exceeds that of legal sanctions (Paternoster, 2010), and so officers who experience higher levels of informal sanction may be less apt to engage in future misconduct (Pogarsky & Piquero, 2004). However, we might suppose that for the garden varieties of misconduct that prompts a large proportion of personnel complaints, there is little to no stigma associated with them in the police culture, and so only the formal sanction is operative.

Based on available evidence, what little we know about the functioning of police disciplinary systems would appear to suggest that sanctions would have no deterrent effect or at most a very modest effect on future police misconduct. Yet there is also reason to suspect that sanctions could make matters worse. While decades of research on deterrence suggests that punishment lowers the reoccurrence of crime (see Nagin, 1998, for a review), a growing body of more recent studies suggests the opposite effect—that punishment can positively affect recidivism (Pogarsky & Piquero, 2003). Such counterintuitive relationships can be explained via three alternative hypotheses. The first is *selection*, which posits that the more individuals engage in crime, the more likely they are to be detected by authorities. As such, punishment simply serves as an indicator of the most active or committed offenders, and are those least likely to be deterred. The second is *resetting*, which suggests that those caught and punished for crimes believe their likelihood for future apprehension is thereby lowered, and are therefore more likely to engage in crime because they (mistakenly) believe their punishment experience “insulates them from apprehension of subsequent offenses” (Pogarsky & Piquero, 2003, p. 100). To the extent that either of these mechanisms hold true for police officers, one would expect to find a positive effect of sanctions on future misconduct, either because sanctions serve as an indicator for the most problematic officers, or that officers “reset” their estimations of the probability of future sanctions following a current one.

Procedural Justice, Sanctions, and Defiance

The third hypothesis, that of *defiance*, may be the most likely of the three alternative hypotheses in the police context and so it warrants a somewhat more extended discussion. Social-psychological research has repeatedly found that people evaluate the authorities with whom they interact not only in terms of the outcomes that they receive but also the procedural justice with which they are treated. They are often satisfied with their interactions, even

in spite of unfavorable outcomes, when they are treated with dignity and respect, are given an opportunity to tell their side of the story, and believe that the authorities are basing their decisions on facts and in consideration of their well-being (see generally Tyler, 2006). Moreover, such procedural justice has implications for the legitimacy of the authorities and hence people's support for and cooperation with the authorities and their compliance with the authority's rules. These patterns hold for citizens' interactions with police and courts, subordinates' interactions with organizations and organizational superiors, and—some research indicates—police officers' interactions with their departments' administrations.

Tyler, Callahan, and Frost (2007) found among officers in one city police department and a federal law enforcement agency that the procedural justice with which the organization was perceived to operate shaped officers' views of its legitimacy, and legitimacy in turn shaped officers' conformity to organizational regulations. Wolfe and Piquero (2011) also found evidence of such patterns in their analysis of the Philadelphia Police Department. Their survey-based measure of "organizational justice" tapped officers' perceptions of the fairness with which organizational rewards and sanctions are distributed, the fairness of rules and disciplinary procedures, and the fairness with which officers are treated. Organizational justice bore a substantively and statistically significant relationship to misconduct in the form of citizen complaints, IA investigations, and disciplinary charges. As their study is cross-sectional and the indicators of misconduct are retrospective, we cannot say whether perceptions of organizational justice were a determinant of misconduct or an effect of officers' experiences with the disciplinary system, but we can say that the evidence is consistent with the procedural justice perspective.

Both sets of findings are also consistent with the other fragments of evidence on officers' perceptions of police bureaucracies. In officers' views, their work on the street cannot be guided by, or properly performed within, bureaucratic regulations (see, for example, Brown, 1981; Manning, 1978). Moreover, they see supervisors' and administrators' efforts to enforce rules as arbitrary, capricious, unpredictable, and uneven (Crank, 2004; Curry, 2004). "Inconsistent discipline and enforcement of rules" is one reason that it is the organization, rather than the hard realities of the street, that is the greater source of police stress (Finn & Tomz, 1997; also see Crank & Caldero, 1991; Toch, 2002) and an object of police cynicism (Niederhoffer, 1969). A deep distrust of management has been found in "street-cop" culture (Reuss-Ianni & Ianni, 1983).

If procedural justice promotes compliance, procedural *in*justice promotes organizational deviance, and when sanctions or the administration of sanctions

are perceived as unfair, then the sanctions could be expected to prompt “defiance” and with it increased rather than diminished offending. Applying Sherman’s (1993) theory of defiance to misconduct, we would expect that a sanction for misconduct will increase the likelihood of future misconduct when (a) the sanction is perceived as unfair, either because the process by which it was administered was procedurally unjust or it is “substantively arbitrary, discriminatory, excessive, undeserved, or otherwise objectively unjust” (p. 461); (b) the officer is alienated from the department; (c) the officer defines the sanction as stigmatizing; and (d) the officer denies the shame that the sanction causes. Paternoster and Piquero (1995) interpreted as defiance a positive sanction effect on substance use among high school students, who—they speculated—perceived the sanction as unfair: “When so many others ‘get away with it,’ their own apprehension for offending may have been a bitter enough experience for the infrequently punished to become defiant” (p. 271; also see Bouffard & Piquero, 2010). From the previous research on police, we would surmise that defiance is a quite plausible outcome of police discipline in many instances, distrustful of and alienated from their departments as many officers appear to be (even as they may be strongly bonded to the peer group).

Analyzing Deterrence

In principle, the deterrent effects of police disciplinary systems could be empirically estimated through various research designs, paralleling the analytic strategies used in deterrence research more generally. For example, agency counts of complaints could be correlated with aggregate measures of certainty (such as rates at which complaints are sustained) and severity (mean or median sanction seriousness); though such analyses would be subject to the same kinds of methodological issues that have bedeviled cross-sectional analyses of crime at the city or state level. In practice, however, such data are not compiled in anything resembling the Uniform Crime Reports, and no such analysis has been performed to our knowledge.

Research on deterrence has benefitted immensely from studies of perceptual deterrence, and so too could research on police misconduct. The only such inquiry to date is that of Pogarsky and Piquero (2004), who investigated whether the perceived certainty, severity, and celerity of punishment is related to police misconduct. Based on a survey of 210 officers in a midsized southeastern police department, and who responded to questions regarding their intention to commit two hypothesized acts of police misconduct, the authors find that legal sanction threats can potentially deter such behavior. Particularly, the authors find that while sanction severity had no effect, the certainty and

celerity of a sanction was negatively associated with misconduct, but these effects were mitigated by officer impulsivity and prior experience with the disciplinary system.

We adopt a third approach to addressing questions about deterring misconduct: We estimate the specific deterrent effects of sanctions of varying severity on “recidivism,” or repeat complaints, among officers in a single, large police agency. Focusing on officers against whom personnel complaints were filed and sustained by investigation, we estimate the likelihood and timing of a subsequent complaint, and particularly we examine whether officers who received sanctions of greater or lesser severity differ with respect to repeat misconduct.³

In examining the effects of sanction severity on future misconduct, four hypotheses could be posed. First, it could be expected that the more severely sanctioned officers will be most likely to be deterred when compared with officers who received lighter sanctions. After all, for these officers, the threat of sanction has been realized, the penalty was severe, and as such they may revise upward their estimations of the pain of punishment, and therefore would be less likely to engage in misconduct in the future.

Second, one might expect sanction severity to have little-to-no deterrent effect, due to the lack of certainty and celerity in complaint systems mentioned above. No matter the severity, sanctioned officers may either believe they are not apt to face sanction again or determine that the sanction experience is not nearly as aversive as originally anticipated. Pogarsky and Piquero (2004) found that deterrent effects were larger among officers without prior experience of department discipline, indicating punishment experiences may erode the deterrence process, a finding which they note is similar to deterrence studies using other populations. Insofar as a police agency resembles those that are notorious for lenient punishments of substantiated misconduct, then this expectation is all the more plausible.

Third, one might expect that whether sanction severity affects the likelihood of another complaint, it may be that officers who are sanctioned more severely take longer to engage in misconduct again. While the first two hypotheses deal with the *likelihood* of future misconduct, the third is concerned with its *timing*. This is a crucial difference, as one might reasonably expect more severe sanctions to have a relatively immediate deterrent effect, which then decays over time (Sherman, 1990). To capture this notion, it would be essential to examine the time that elapses between a sanctioned complaint and any subsequent complaint.

Fourth, insofar as officers believe that the sanctions are unfair, or if they experience the disciplinary system as procedurally unjust, or if officers

“reset” the estimations of sanction threats, then we might expect that sanctions would make misconduct more rather than less likely, and that sanctioned officers might more quickly violate agency regulations.

Risk and Protective Factors

In addition to the lack of deterrent principles found in the functioning of police disciplinary systems, several other factors are related to an elevated risk of repeated incidents of misconduct, and so should be controlled in analysis. For instance, males are complained against by citizens almost twice as much as females (Walker, 2005), and younger, more inexperienced officers are more frequently complained against when compared with older, more seasoned veterans (Harris, 2009). Research has also shown that officers with prior military service are more likely to get complaints when compared with nonmilitary officers (Cohen & Chaiken, 1972), and minority officers are complained against more frequently than their White colleagues (Lersch & Mieczkowski, 1996).

As well, officers' rank and their overall productivity appear to affect their likelihood of complaints. Research has demonstrated that patrol officers have much more face time with citizens, which increases their likelihood of complaint when compared with supervisors; also most internal complaints are filed by supervisors against subordinates, and so complaints of any type tend to be concentrated at the rank of patrol officer (Worden, Harris, Pratte, Catlin, & Schlieff, 2003). In addition, there is evidence that rates of officers' arrests, citations, and the like also affect their likelihood of complaint, with more productive officers receiving more citizen complaints (Brandl, Stroshine, & Frank, 2001; Hassell & Archbold, 2010; Lersch, 2002; Lersch, Bazley, & Mieczkowski, 2006). It is unclear, however, whether complaints are a by-product of officer activity (i.e., as a consequence of the frequency and/or nature of their contacts with citizens, especially when these contacts involve enforcement action) or whether the more productive officers also tend to act poorly in police-citizen encounters (see Terrill & McCluskey, 2002).

While some factors place officers at an increased risk of misconduct, others serve to protect against that risk. In addition to the converse of the risk factors mentioned above (e.g., being female or an experienced officer), research has generally found that officers with a college education receive fewer complaints compared with officers without a college degree (Kappeler, Sapp, & Carter, 1992; Manis, Archbold, & Hassell, 2008).

The purpose of this research is to investigate the deterrent effect of sanctions for misconduct. Specifically, two research questions are proposed:

Research Question 1: Does a more severe sanction following a sustained personnel complaint affect the likelihood of a future sustained complaint, net of other factors?

Research Question 2: Does a more severe sanction following a sustained personnel complaint affect the length of time, net of other factors, until a next complaint?

An empirical investigation into these questions is important in that they test a fundamental assumption of police disciplinary systems which to date remains largely unexplored.

Data and Method

Data

The data utilized for this research were collected in a large, full-service police department in the northeastern United States.⁴ These data contain several indicators of police behavior (e.g., personnel complaints, on-duty vehicle crashes) for all sworn officers who were employed by this agency from January 1, 1987 through June 30, 2001. Information on these officers was retrieved from computerized records from various offices within the agency's headquarters. For this analysis, we concentrate on personnel complaints.

The database that includes complaint information is maintained by the agency's IA unit, and contains fields for the date of the incident, the source of the complaint (citizen or police), the nature of the allegations, the dates of the investigation, and the complaint's final disposition and sanction. This agency takes personnel complaints in person, by mail, by phone, by fax, and via email from the agency's website. Any officer can take a complaint, whereupon it is required to be filed with IA. There is no "statute of limitations" on the filing of complaints, meaning a complaint can be filed any time after the incident, regardless of duration. This agency also takes anonymous complaints, and so long as a complainant provides enough information so that an officer(s) can be identified, and investigation will occur. IA investigators have 20 days with which to conduct an investigation, although they can file for up to two 20-day extensions.

Officer Selection

As we are interested in the likelihood and timing of personnel complaints, and because there is reason to believe that experience with the disciplinary system affects later behavior, it is desirable to have complete information

about each officer's complaint record from its beginning. Thus, we select for analysis officers who entered this police force between 1987 and 2001. For officers who began their service prior to 1987, we do not know whether or how many complaints were filed or sustained prior to those on which we have data. Among officers whose service began in 1987 or later, we must further select those who had a meaningful opportunity to engage in and be sanctioned for misconduct prior to the end of the study period in 2001. As this agency did not hire any officers in 1995, this year serves as a functional endpoint for the range of officer selection. (The last year to use for these analytic purposes is arbitrary, but the later officers begin their careers, the less time they have to generate complaints during the study period.) So we begin with all officers who began their employment with this agency between 1987 and 1994 and who served at least 1 year ($n = 2,145$).

Next, as we are interested in determining whether sanction severity has a deterrent effect on future misconduct, we selected only those officers who received at least one complaint during the observation period ($n = 1,466$). In addition, the vast majority (85%) of personnel complaints were filed against patrol officers. Those who are promoted above this rank have less exposure to citizens, and thus have less chance of complaint. Supervisory positions also place such officers at reduced risk of internal complaints. As such, the time under consideration is limited to periods when the officers served in a patrol function. We further exclude from this sample officers who are of Native American or Asian origin ($n = 8$) because of their small numbers.

Finally, we select from this group of patrol officers those who had at least one sustained complaint, and then further select only those officers' sustained complaints across their patrol career (see Figure 1). As officers who are terminated or allowed to retire or resign following a sustained complaint leave the agency and are no longer at risk for future complaints, we do not consider outcomes for these particular complaints. Of the 3,854 complaints filed against the 1,356 patrol officers with at least one personnel complaint in the study period, 1,216 (31.6%) complaints were sustained across 791 officers. The vast majority of the sustained cases (91.6%) were subject to at least one sanction.⁵ No patrol officer received more than 5 sustained complaints during the study period.

Dependent Variables

The dependent variables in this study are (a) personnel complaints filed by either citizens or other officers that were sustained and (b) the time between these complaints.

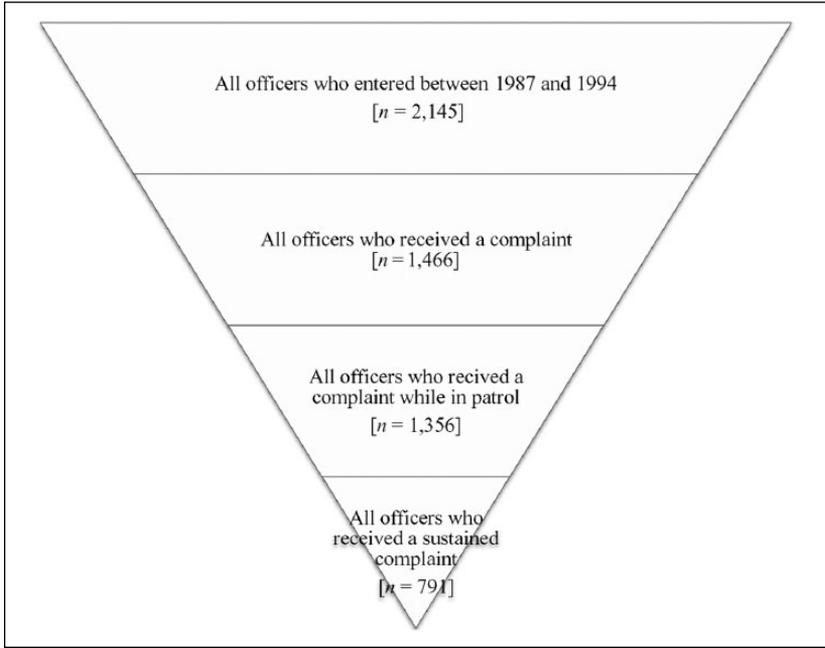


Figure 1. Officer selection.

Officers who received a next complaint. For each sustained complaint, we determine whether another complaint was filed and sustained against the same officer before the officer’s end date; this is the first dependent variable. As we restrict consideration to only time serving in patrol, the follow-up period varies with officers’ career developments. For some officers, who remained in patrol throughout their careers, the follow-up period ends at the end of the study period (June 30, 2001). For officers who were promoted, the follow-up period ends on their date of first promotion. And for still other officers, the follow-up period ends on the date they left the agency, if they retired or were terminated before the study period ended.

Time to next complaint (i.e., time to failure). The time between sustained complaints is simply the time (in days) between when the *n*th complaint’s investigative report was received by IA and the date of the incident for the next complaint. As the data do not contain the date on which the officer’s sanction was meted out, we use as a proxy for the sanction date the date when the investigative report was received by IA, inasmuch as the report contains

the complaint's disposition. Once an investigative report is received, all sustained complaints are immediately forwarded to the appropriate member of the command staff, who then decides on the appropriate sanction. Officers are also quickly apprised that their complaint is sustained by the agency via their police union, and so they understand a sanction is forthcoming. There are no grounds for appealing a sanction unless the officer goes outside the agency for redress. Discussions with IA personnel reveal that this is rarely done, particularly because the officer must bear the cost of hiring a lawyer to engage in legal proceedings.

Computing time to failure in this way is intuitive, but in a small number of cases it yields a counterintuitive value. For some officers, the date of the investigative report on the prior complaint occurred after the date of the incident for the next complaint.⁶ These cases were due to a long time period between when the first incident occurred and when the citizen (these are all citizen complaints) filed the complaint (recall that there is no statute of limitations on complaints). For these specific cases, it makes no sense to analyze a negative time to failure. Although small in number ($n = 73$), these negative values are considered missing, and we employ the next positive failure time value in its stead (if any).

Independent Variable

The independent variable for these analyses is the severity of sanctions given to officers following a personnel complaint. The range of sanctions for complaints is censure, counseled by supervisor, probation, the docking of vacation days, suspension without pay, assignment transfer, "other," or some combination thereof. The sanctions of reduction in rank, dismissal or allowed to retire, and resigned are not applicable, as described above. Table 1 displays the frequencies of the sanctions. As one can see, there were 1,896 sanctions across 1,114 sanctioned complaints, a rate of 1.7 sanctions per complaint. Just over half (55%) of the sanctioned complaints received more than one type of sanction, with the vast majority of these complaints receiving two (37.3%) or three (12.7%). Less than 1% received four or five different sanctions. What is more, the more severe sanctions are more likely to be imposed in conjunction with other sanctions. For example, all officers who were suspended without pay were also censured, and just over one third (36%) were also placed on probation. While creating some analytic complexities, these patterns demonstrate that sanction severity is sufficient to expect observable deterrent effects, and that the agency under study is not typical of agencies that have been criticized in the past for sanctions that were too lenient or nonexistent.

Table 1. Sanction Frequency by Type (*n* = 1,216).

Sanction type	Frequency	%
Counsel	23	1.9
Censure	940	77.3
Docked vacation days	415	34.1
Suspended without pay	161	13.2
Probation	186	15.3
Transfer	6	0.5
Other	165	13.6
No sanction	102	8.4

Given that some sanctions are given infrequently, coupled with the finding that many complaints receive multiple sanctions, examining the effect of individual sanctions is not feasible. Instead, we construct three dummy variables—no sanction, nonsevere sanction only, and severe sanction—using a hierarchy rule. Nonsevere sanctions include censure, counseled by supervisor, probation, and other. Severe sanctions include docked vacation days, suspended without pay, and transfer. If, as was often the case, officers received multiple sanctions and one of them was in the severe category, then the sanction was considered severe. Multiple sanctions that were all nonsevere were left in that category. With the variables constructed in this way, all of the severely sanctioned cases received more than one sanction, while very few (6.5%) nonsevere cases received multiple sanctions. Moreover, the sanctioned complaints are quite evenly split among nonsevere (48%) and severe (52%) cases.

Control Variables

To assess the effect of sanction severity on the likelihood and timing of future complaints, a number of other variables are included in the model, data on which were obtained from either the IA complaint database or from the personnel information system at agency headquarters. First, the officer’s demographic characteristics of race, education, and prior military service are considered.⁷ Binary variables were constructed for each race category (White, Black, and Hispanic), whether the officer had at least an associate’s degree or higher (yes/no), or had prior military service (yes/no). In addition, as there are likely differences in training, academy class size,

and the like among officers entering in different years, eight dummy variables are included for each year of entry (1987-1994).

Second, two characteristics of the complaint are considered.⁸ First, the source of the complaint is considered. One might suspect that officers might attribute more legitimacy to a complaint brought about by another officer, and less weight to those filed by citizens, and so internal complaints may exhibit a lower probability of recidivism. Second, we account for the nature of the complaint. The agency under study not only employs more than 50 complaint codes but also uses 9 more general "character codes" that include administrative matters, racial discrimination, sexual harassment, use of firearms, illegal conduct either on or off duty, use of force, service, and improper vehicle use. The majority of the sustained complaints were for administrative matters (71.6%), followed by the service (17.7%) code. None had the racial discrimination code. The remaining codes account for 3% or less of the sanctioned complaints, so illegal conduct both on and off duty and sexual harassment were merged into a conduct code, and use of force and firearms were combined into a force code. Administrative matters, improper vehicle use, and service codes were unchanged. A dummy variable was created for each of these 5 codes.

Third, the timing of the officer's first sustained complaint is considered as a measure of onset of misconduct. Some research has demonstrated that officers who obtain their first complaint early in their careers tend to persist in misconduct (Harris, 2010; Kane & White, 2009). This is partially due to officers with an early onset having more time with which to accumulate complaints, but this research also clearly demonstrates that officers who onset early in their careers engage in misconduct more frequently and for a longer time. As such, an early onset variable is created that measures whether officers obtained their first sustained complaint within their 1st year and a half of service (i.e., their 1st year on the road following 6 months in the academy, where they are at a significantly decreased risk of complaint).

Fourth, as an officer's assignment likely affects his or her likelihood of sustained complaints, as officers in busier assignments have more face time with citizens and therefore more opportunities to make mistakes, the geographic assignment of the officer when each complaint was filed is considered. As noted above, this is a large police department with a correspondingly large number of patrol assignments, and so creating dummy variables for each assignment location is not feasible. As such, we rely on several broader geographic "patrol zones" employed by the agency. Although each zone includes several patrol assignments, they are few enough in number to be useful for analytic purposes. For the comparison patrol zone, we chose Zone 10. Based

on our knowledge of the agency, we selected one which we took to represent a busier area, and so we expect many officers assigned to other zones to be at a decreased likelihood of complaint when compared with Zone 10.

Finally, exposure time and the number of prior sustained complaints are considered, as these help to capture the repeated events nature of the data (see below).⁹ Exposure time is a measure of time (in days) between when the investigative report was received by the IA unit and the officer's end date. The analyses consider exposure time roughly in quartiles, based on its frequency distribution.¹⁰ Table 2 displays information about complaint characteristics.

Analytic Strategy

We estimate the effect of sanction severity on both the likelihood and timing of future complaints. To estimate the likelihood of future sustained complaints, we use logistic regression for the binary outcome of whether officers with a sustained complaint obtain another. There were 1,216 complaints filed against the 791 officers in the sample, and so we pool the complaints across officers, treating each complaint as a separate observation. An alternative strategy would be to conduct separate analyses for each complaint interval (1-2, 2-3, etc.), or only consider the outcome of the first complaint on the second, but as each process is the same across successive complaints, the former would be statistically inefficient and the latter would waste information.

To estimate the timing until the next sustained complaint, we use the Cox proportional hazards model (hereafter termed *Cox regression*; Cox, 1972). Cox regression is a particular model within the broad category of survival analysis, which is used in studies where a phenomenon of interest is not in the event itself, but in the time duration (termed *failure time*) to the event. Such models focus on the hazard function, which is the probability that an event of interest will occur at a particular time, given that the event has not been experienced to that point. The time to death in medical studies is a classic example of survival analysis (hence, the term *survival*), but here we are interested in exploring the time-to-next-complaint. We use Cox regression instead of other survival methods, as it does not require the researcher to specify a baseline hazard rate (as some other methods do). As there is no strong theoretical reason to specify a particular baseline hazard for complaints in this study (as no research has explored this phenomenon before), Cox is the preferred model.

However, as these data contain officers who received multiple complaints, they violate the independence of failure times assumption required of

Table 2. Sustained Complaint Characteristics ($n = 1,216$).

	Frequency	%
Sex		
Male	1089	89.6
Female	127	10.4
Race		
White	821	67.5
Black	265	21.8
Hispanic	130	10.7
Prior military service		
No	1078	88.7
Yes	138	11.3
College degree		
No	650	53.5
Yes	566	46.5
Year of entry		
1987	348	28.6
1988	240	19.7
1989	176	14.5
1990	161	13.2
1991	34	2.8
1992	123	10.1
1993	25	2.1
1994	109	9.0
Complaint type		
Citizen	459	37.7
Internal	757	62.3
Early onset		
No	1171	96.3
Yes	45	24.3
Officer assignment		
Zone 1	69	5.7
Zone 2	106	8.7
Zone 3	99	8.1
Zone 4	137	11.3
Zone 5	118	9.7
Zone 6	98	8.1
Zone 7	167	13.7
Zone 8	122	10.0

(continued)

Table 2. (continued)

	Frequency	%
Zone 9	121	10.0
Zone 10	157	12.9
Zone 11	21	1.7
Prior sustained complaints		
0	784	64.5
1	303	24.9
2	96	7.9
3	30	2.5
4	3	0.2
Exposure time		
Less than 3 years	296	24.3
3-5 years	272	22.4
5-8 years	343	28.2
8 years or more	305	25.1

traditional survival analysis. To accommodate this feature of the data, we estimate a repeated events model that is adjusted to account for the additional correlation of multiple-failure times (Box-Steffensmeier & Jones, 2004). Specifically, we use a conditional risk set model that measures the time to each complaint from the time of the previous complaint (Wei, Lin, & Weissfeld, 1989). Such an approach is similar to the Andersen and Gill method, except that a variable is included in the data that measures failure order, and so the analysis is stratified accordingly (see Cleves, 2000).

Results

Overall, 36% of the 1,216 sustained complaints failed; that is, they were followed by another sustained complaint within the follow-up period for each officer. We first present the distribution of the time to failure, and then present the results for the logistic and Cox regression analyses of the likelihood of a repeat complaint and the time to failure, respectively.

Time-to-Failure Distribution

Table 3 presents the time-to-failure quartiles (in days) for each sustained complaint interval, derived from the Kaplan–Meier estimator. The last row

Table 3. Survival Times (in Days) for Sustained Complaint Intervals ($n = 1,143$).

Complaint intervals	Percentile		
	75%	50%	25%
1-2	339	836	2,127
2-3	235	604	1,419
3-4	160	606	1,656
4-5	197	565	1,340
5-6	125	489	1,354
Overall	222	680	1,681

of the table presents medians for each quartile. As can be seen, the survival times drop rapidly, and then decrease more slowly as one moves across each successive quartile. The median survival time is 680 days, or about 22.5 months, which means that half of the officers failed (i.e., got another sustained complaint) by this period. Such a distribution demonstrates that, on average, officers take quite a long time to obtain another sustained complaint. But for a quarter of these officers, it takes just over 7 months to fail. That time period has to more than triple to 22 months for half of the officers to fail, and more than double yet again to 56 months to account for the failure time of 75% of these officers. This clearly demonstrates that the risk of obtaining another sustained complaint is greatest in the first several months following a sanction, and that this risk declines as the months pass. When examining the complaint intervals, generally the survival times decrease with each successive interval, which is expected given that with each successive complaint, the time period for obtaining another complaint is shortened.

These results are suggestive of possibly different underlying mechanisms in time to failure. For the most problematic officers, one might expect that complaints follow one another in quick succession, whereas for other officers, complaints may be filed years apart. For the former group, a relatively quick time to failure might be suggestive of persistent behavioral problems; for the latter, a relatively long time to failure could be the result of complaints from lapses in judgment made during split-second decisions that often occur while doing routine police work that is sometimes urgent, involuntary, and occurs in full view of the public (Fyfe, 1986). Such mistakes are likely not deliberate choices, occur when officers act on impulse, and therefore may not be deterrable in any traditional sense.

While Table 3 summarizes the failure time distributions, any analysis should account for the effects of important covariates, such as the number of prior complaints, officer assignment, and so on. For example, one might reasonably expect officers with a number of prior sustained complaints to have a higher probability of another such complaint when compared with officers with fewer, or no, prior complaints. To account for these differences, multivariate models of sustained complaints are estimated and presented below.

Complaint Likelihood and Time-to-Failure Models

We estimated logistic regression and survival models designed to predict the likelihood and timing of sustained personnel complaints. The models include coefficients from Cox regression, which estimates the probability that another sustained complaint has occurred at time t , given that this has not yet occurred (Cox, 1972). Positive coefficients indicate that a complaint with this characteristic (or higher value on a given variable) fails more quickly, whereas a negative coefficient denotes a delayed time to failure. For the logistic regression models, which are designed to estimate the probability of another sustained complaint following a prior one, positive coefficients signal a greater chance of obtaining another complaint.

Table 4 presents both the logistic and Cox regression models.¹¹ The results from the logistic regression demonstrate that officers who were sanctioned, either with a severe or nonsevere sanction, were *more* likely to obtain another complaint than those who were not sanctioned. Both severe and less severe sanctions had effects of roughly the same magnitude. The results also demonstrate that complaints associated with Black officers, officers with prior complaints, officers who entered in 1994, and officers with longer exposure times were more likely to be followed by another complaint. Officers who had a college degree and served in Zone 4 were less likely to receive another complaint. Officers' sex, ethnicity (i.e., Hispanic or not), and prior military service, as well as the early onset of misconduct and the source of the complaint (citizen or internal) had no impact on complaint likelihood. Complaint types also had no effect.

The results from the survival analysis also show a fair degree of consistency when compared with the logistic regression results. With respect to sanctions, not only were sanctioned officers more likely to obtain another sustained complaint compared with nonsanctioned officers, but they also obtained their next complaint more quickly. And severe sanctions and less severe sanctions had roughly equivalent effects. With respect to the other variables in the model, officers who were Black, and who were followed for

Table 4. Logistic Model of Sustained Complaint Likelihood and Survival Analysis of Time to Failure.^a

	Logistic model			Survival model		
	Coefficient	SE	Odds	Coefficient	SE	Odds
Constant	-1.175*	.454	0.309	—	—	—
Sanction						
Nonsevere	0.535*	.261	1.71	0.679*	.237	1.97
Severe	0.739*	.263	2.09	0.794*	.231	2.21
Demographics						
Male	0.386	.225	1.47	-0.194	.162	0.82
Black	0.291*	.112	1.34	0.186*	.071	1.20
Hispanic	0.033	.093	1.03	0.112	.058	1.12
Prior military	-0.27	.234	0.973	0.227	.188	1.25
Degree	-0.553*	.162	.575	-0.373*	.116	0.69
Complaints						
Internal	-0.205	.186	0.815	-0.148	.126	0.86
Early onset	0.852	.554	2.41	0.457*	.245	1.58
Priors	0.205*	.062	1.23	—	—	—
Complaint type						
Service	0.283	.229	1.33	0.026	.157	1.03
Force	0.290	.330	1.34	0.395	.244	1.48
Conduct	-0.260	.547	0.771	0.063	.347	1.06
Vehicle	-2.01	.575	0.818	0.571	.311	1.77
Year of entry						
1988	-0.199	.225	0.820	-0.212	.154	0.81
1989	-0.124	.249	0.883	-0.139	.185	0.87
1990	-0.053	.252	0.948	-0.119	.181	0.89
1991	0.559	.470	1.75	0.174	.335	1.19
1992	0.267	.272	1.31	0.038	.226	1.04
1993	-0.618	.505	0.539	-0.707	.486	0.49
1994	0.940*	.303	2.56	0.199	.224	1.22
Assignment						
Zone 1	-0.381	.362	0.683	-0.180	.288	0.84
Zone 2	0.067	.344	1.07	0.029	.213	1.03
Zone 3	-0.385	.330	0.680	0.138	.220	1.15
Zone 4	-0.699*	.292	0.497	-0.297	.231	0.74
Zone 5	-0.169	.319	0.844	-0.226	.192	0.80
Zone 6	0.282	.335	1.33	0.176	.240	1.19

(continued)

Table 4. (continued)

	Logistic model			Survival model		
	Coefficient	SE	Odds	Coefficient	SE	Odds
Zone 7	-0.276	.300	0.759	-0.171	.210	0.84
Zone 8	-0.279	.342	0.756	0.001	.195	1.00
Zone 9	-0.197	.323	0.822	-0.103	.214	0.90
Zone 11	-0.602	.567	0.548	-0.791	.560	0.45
Exposure time						
3-5 years	1.061*	.192	2.89	0.014	.220	1.01
5-8 years	1.974*	.210	7.20	0.198	.197	1.22
8 years or more	2.966*	.277	19.4	0.561*	.199	1.75
Model fit						
Nagelkerke's R ²	.282					
-2 log likelihood	1,162.325			-2,124.1512		
	n = 1,216			n = 1,143		

^aReference categories are as follows: male (female), race (White), prior military service (no), college degree (no), internal complaint (citizen complaint), early onset (no), complaint type (administrative matter), year of entry (1987), assignment (Zone 10), exposure (less than 3 years), and sanction (no sanction).

*p < .05.

8 years or more, were not only more likely to obtain another such complaint but also did so more quickly.¹² Officers who had a college degree were not only less likely to get a complaint, but when they did so, they took longer to obtain their next one when compared with those without a degree. In addition, officers with an early onset received their next complaint more quickly than officers with a later onset. Officers' sex, prior military service, and assignment, along with the source of the complaint and complaint type, had no effect on failure time.

To verify that our key findings of a positive effect of sanctions on both the likelihood and timing of future misconduct were not limited to only sustained complaints, we reran the analyses using the same population of officers, but including complaints from the first through the fifth regardless of disposition. We used the same independent, dependent, and control variables as above. The results demonstrate that the key findings still hold, but with one difference: The imposition of severe sanctions had a positive and statistically significant effect on both the likelihood of another complaint and the time between complaints when compared with no sanctions, whereas nonsevere

sanctions had a positive, but only marginally significant ($p = .054$) effect.¹³ Such results show that officers who are severely sanctioned are more likely to receive another complaint—sustained or otherwise—and to do so more quickly than officers who are not severely sanctioned.

Discussion

The purpose of this research was to test propositions about the effects of sanctions for police misconduct. Contrary to findings expected from deterrence theory, the results demonstrate that officers who are sanctioned are both more likely to engage in further misconduct and to do so more rapidly when compared with unsanctioned officers. The results are, however, consistent with expectations derived from defiance theory, with a “resetting” hypothesis, and with a selection artifact. We consider each of these possibilities in turn.

Decades of research on police has repeatedly found that patrol officers regard police discipline as a threat as unpredictable as any they face on the street, and the rules and regulations for whose violation they might be sanctioned as simply incompatible with getting the job done. Although not all officers perceive their bureaucratic environment in the same terms, and the evidence is fragmentary, we would surmise that many officers are skeptical about the legitimacy of their departments’ administrations, in general, and would regard sanctions for many of the violations of departmental regulations as substantively and/or procedurally unfair. Unfortunately, we have data neither on officers’ general perceptions of organizational legitimacy or justice nor on sanctioned officers’ perceptions of the fairness of the sanctions that were imposed on them, and so we are left to speculate whether the positive effect of sanctions on further misconduct is attributable to defiance. But we regard this explanation as quite plausible.

Another possible explanation is that officers who are sanctioned might “reset” their estimates of the likelihood of being sanctioned. If officers’ subjective risk estimates are commensurate with our estimate of objective risk, and insofar as officers subscribe to the gamblers fallacy and suppose that their sanction today will be evened out by a still lower risk in the future, then they would be correspondingly more likely to engage in misconduct in the future. As we also lack data on officers’ perceptions of sanction risks, we are unable to explore this possibility empirically.

A final possibility is that sanctions are an indicator for the most misconduct-prone officers. Officers who frequently engage in misconduct expose themselves to the greatest risk of detection and sanction, and so the positive

relationship between sanctions and misconduct, by this account, is an artifact of this process and not an effect of the former on the latter. In other words, sanctions merely coincide with, but do not encourage, future misconduct. This is all the more plausible insofar as the misconduct-prone officers might attract the greatest supervisory scrutiny. This is less plausible to the extent that our controls for prior complaints and early onset suffice to control for differences among officers in their propensities for misconduct (see, for example, Paternoster & Piquero, 1995).

The other results are much in-line with what might be expected given existing empirical evidence. With regard to protective factors, officers with a college degree are less likely to receive complaints, and take longer to receive their next complaint, when compared with officers without such a degree. With regard to risk factors, that Black officers are more likely to receive additional complaints, and take less time to do so when compared with Whites, is also consistent with the results of several other studies, and to date no clear explanation has emerged. Lersch and Mieczkowski (1996) suggested that minority citizens are more likely to file complaints against minority officers, because minority citizens may feel more confident that this type of complaint will be addressed, whereas complaints against White officers will be ignored. Kane and White (2009), in their study of career-ending misconduct, suggest that Black officers may respond more vigorously to complaints (e.g., demanding departmental trials), and so their increased likelihood of being involved in such misconduct could be an artifact of how they proceed through the disciplinary system. Of course, race is also a proxy for a myriad of other unmeasured factors. Unfortunately, our data do not permit the testing of the possible explanations as to why Blacks were more likely to receive complaints, and to fail more quickly, when compared with Whites.

Of course, this study is not the final word on the effect of sanctions on future misconduct. The data presented herein were obtained from a large police department, which may not be applicable to many other agencies.

Conclusion

On the whole, the results of this study suggest that sanctions do not deter misconduct and, worse, prompt more misconduct. Whether the findings from this one agency also hold in other agencies, and through what perceptual and cognitive mechanisms sanctions are connected to behavior, are questions that demand further empirical inquiry. For the present, however, these results cast some doubt on the efficacy of systems of police discipline

in controlling police behavior. When patterns of lenient punishments for police misconduct are revealed, we react with dismay partly because we count on police discipline as an important mechanism in preventing misconduct. But our examination of a system that provides for sanctions that are demonstrably punitive—and which are known by the rank and file as punitive—indicates that sanctions have counterproductive effects on misconduct.

Recidivism following sustained complaints is not high, so something seems to be working to curb police misconduct, though the sustained complaints surely understate the true recidivism rate. As we noted above, police misconduct tends for the most part to be concentrated among officers with less experience. As they mature, officers' behavior is less often improper. These trends could reflect any of a number of influences: learning better how to do their jobs; peer and supervisory pressure; acquiring still greater "stakes in conformity"—for example, marriage, mortgages, children—that are put at risk by misconduct. Research does not suffice to explain these patterns, nor does it offer guidance about how to do better. Overall, the results here highlight a number of questions for future research on police disciplinary systems. We know very little about the processes and outcomes of disciplinary actions: how officers are treated when they are the subjects of investigations, how officers perceive their treatment, and the extent to which sanctions in any one agency conform to standards of uniformity and proportionality. One important implication of research on procedural justice is that how officers are treated in this process is at least as important as the outcomes that are reached. Prescriptions for improving discipline—such as discipline matrices—would ideally be based on greater knowledge of the status quo than we have currently.

Authors' Note

This study is based on data collected for the Analysis of Police Behavior Indicators Project, directed by Robert E. Worden.

Acknowledgments

We gratefully acknowledge the other members of the project team: Mary Anne Pratte, Shelagh Dorn, and Shelley S. Hyland. We also would like to thank the three anonymous reviews for their helpful comments and suggestions.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. By “misconduct” we mean “any alleged improper or illegal act, omission or decision” by a police officer that directly affects the person or property of an individual by reason of a violation of any general, standing, or special order or guideline of the police department; a violation of any federal law, state law, or municipal ordinance; or “any act otherwise evidencing improper or unbecoming conduct.” In this, we follow the City of Pittsburgh Citizen Police Review Board, “Rules and Operating Procedures” (1998, p. 2).
2. We might expect that, like white-collar offenders, police officers would be responsive to the threat of punishment, but as Weisburd, Waring, and Chayet (1995) showed, this expectation for white-collar offenders may not hold.
3. A somewhat different approach to analyzing these data would be to focus on the larger set of officers against whom a complaint was filed, regardless of its disposition. Thus, the analysis would include many officers who were not sanctioned because the complaints against them were not sustained. However, this approach is defensible only if one is willing to assume that validity of every complaint. We take such an assumption to be untenable. The unsustained complaints, we believe, would include instances of unsubstantiated misconduct and also instances of properly performed police work, and we would suppose that among the latter we would find a disproportionate fraction of cases with no “repeat” misconduct. As in this heterogeneous group of unsustained complaints, we cannot discriminate the actual misconduct from the mislabeled misconduct, and as the results would be systematically biased (against the hypotheses), we do not further consider this approach, except where noted below.
4. The agency can only be referred to in these terms, and no additional identifying characteristics can be provided, as it wishes to remain confidential. Although the authors acknowledge this is less than ideal, from the information provided herein, and depending on how one operationalizes “northeast,” there are only about a dozen sites that could be the source of these data. To provide any additional information would be to so undermine the site’s confidentiality that the promise of the research team to maintain confidentiality would be essentially empty.
5. A very small number of complaints that received a disposition other than sustained were given a sanction of counseled by supervisor. These are not included in the analyses. To ensure that the lack of sanction for sustained complaints was

- not biased in some fashion, cross-tabulations were run on each independent variable and the unsanctioned complaints. None showed any significant differences.
6. The data file is ordered chronologically by the date when the investigative report was received by internal affairs (IA).
 7. College education and military service are as of the study end date, and not by the date of complaint.
 8. The complaint data also contain a field that ranks seriousness on a scale from 1 to 4, but most (82.4%) of these data are missing from the electronic records.
 9. Knowing when officers were out on leave due to sickness or injury over the study period would have allowed for more refined estimations of both failure and exposure time. Although there are data on officer sick leave usage, these data were only available for 1995 to 2001. The data do show that very few officers took any leave, and so it is likely, had these data been available for the entire study period, estimations of failure and exposure time would not have been substantially altered.
 10. Instead of using exact quartiles, we use the closest year, rounded down, for ease of presentational purposes. The results do not differ when using exact quartiles.
 11. For all logistic regression models, the Hosmer and Lemeshow tests were not significant, indicating the model provided a good fit to the data.
 12. The Hispanic variable was marginally significant at 0.053.
 13. The full results are not shown due to space limitations, but are available from the authors on request.

References

- Blackmer, G. (2001). *Addressing citizen complaints about police: A proposal for change*. Portland, OR: Office of the City Auditor.
- Bouffard, L. A., & Piquero, N. L. (2010). Defiance theory and life course explanations of persistent offending. *Crime & Delinquency*, 56, 227-252.
- Box-Steffensmeier, J. M., & Jones, B. S. (2004). *Event history modeling: A guide for social scientists*. New York, NY: Oxford University Press.
- Brandl, S. G., Strohshine, M. S., & Frank, J. (2001). Who are the complaint-prone officers? An examination of the relationship between police officers' attributes, arrest activity, assignment, and citizens' complaints about excessive force. *Journal of Criminal Justice*, 29, 521-529.
- Brown, M. K. (1981). *Working the street: Police discretion and the dilemmas of reform*. New York, NY: Russell Sage.
- City of Pittsburgh Citizen Police Review Board. (1988). Rules and operating procedures. Retrieved from <http://www.city.pittsburgh.pa.us/cprb/>
- Cleves, M. A. (2000). Analysis of multiple-failure time data with Stata. *Stata Technical Bulletin*, 9, 30-39.

- Cohen, B., & Chaiken, J. M. (1972). *Police background characteristics and performance*. New York, NY: Rand Corporation.
- Cox, D. R. (1972). Regression models and life tables. *Journal of the Royal Statistical Society, 34*, 187-200.
- Crank, J. P. (2004). *Understanding police culture* (2nd ed.). Cincinnati, OH: Anderson.
- Crank, J. P., & Caldero, M. (1991). The production of occupational stress among police officers: A survey of eight municipal police organizations in Illinois. *Journal of Criminal Justice, 19*, 339-350.
- Curry, T. H. (2004). *An analysis of the discipline process and outcomes, with recommendations, for the Lansing Police Department*. East Lansing: Michigan State University.
- Finn, P., & Tomz, J. E. (1997). *Developing a law enforcement stress program for officers and their families*. Washington, DC: National Institute of Justice.
- Fyfe, J.J. (1986). The split-second syndrome and other determinants of police violence. In Campbell, A & Gibbs, J.J. (Eds), *Violent Transactions*. Oxford: Basil Blackwell.
- Goldstein, H. (1977). *Policing a free society*. Cambridge, MA: Ballinger.
- Griswold, D. B. (1994). Complaints against the police: Predicting dispositions. *Journal of Criminal Justice, 22*, 215-221.
- Harris, C. J. (2009). Exploring the relationship between experience and problem behaviors: A longitudinal analysis of officers from a large cohort. *Police Quarterly, 12*, 192-213.
- Harris, C. J. (2010). Problem officers? An analysis of problem behavior patterns from a large cohort. *Journal of Criminal Justice, 38*, 216-225.
- Hassell, K. D., & Archbold, C. A. (2010). Widening the scope of complaints of police misconduct. *Policing: An International Journal of Police Strategies & Management, 33*, 473-489.
- Jerome, P. C. (2002). *Police oversight project, City of Albuquerque*. Los Angeles, CA: Police Assessment Resource Center.
- Kane, R. J., & White, M. D. (2009). Bad cops. *Criminology & Public Policy, 8*, 737-769.
- Kappeler, V. E., Sapp, A. D., & Carter, D. L. (1992). Police officer higher education, citizen complaints and departmental rule violations. *American Journal of Police, 15*, 23-44.
- Lersch, K. M. (2002). Are citizen complaints just another measure of officer productivity? An analysis of citizen complaints and officer activity measures. *Police Practice & Research, 3*, 135-147.
- Lersch, K. M., Bazley, T., & Mieczkowski, T. (2006). Early intervention programs: An effective police accountability tool, or punishment of the productive? *Policing: An International Journal of Police Strategies & Management, 29*, 58-76.

- Lersch, K. M., & Mieczkowski, T. (1996). Who are the problem-prone officers? An analysis of citizen complaints. *American Journal of Police, 15*, 23-44.
- Lersch, K. M., & Mieczkowski, T. (2000). An examination of the convergence and divergence of internal and external allegations of misconduct filed against police officers. *Policing, 23*, 54-68.
- Liederbach, J., Boyd, L. M., Taylor, R. W., & Kawucha, S. K. (2007). Is it an inside job? An examination of internal affairs complaint investigation files and the production of nonsustained findings. *Criminal Justice Policy Review, 18*, 353-377.
- Manis, J., Archbold, C. A., & Hassell, K. D. (2008). Exploring the impact of officer education level on allegations of police misconduct. *International Journal of Police Science and Management, 10*, 509-523.
- Manning, P. K. (1978). Rules, colleagues, and situationally justified actions. In P. K. Manning & J. Van Maanen (Eds.), *Policing: A view from the street* (pp. 71-89). New York, NY: Random House.
- Nagin, D. S. (1998). Criminal deterrence research at the outset of the twenty-first century. In M. Tonry (Ed.), *Crime and justice: A review of research* (Vol. 23, pp. 51-92). Chicago, IL: University of Chicago Press.
- National Research Council. (2004). *Fairness and effectiveness in policing: The evidence*. Washington, DC: National Academies Press.
- Niederhoffer, A. (1969). *Behind the shield: The police in urban society*. New York, NY: Anchor Books.
- Paternoster, R. (2010). How much do we really know about criminal deterrence? *Journal of Criminal Law and Criminology, 100*, 765-823.
- Paternoster, R., & Piquero, A. (1995). Reconceptualizing deterrence: An empirical test of personal and vicarious experiences. *Journal of Research in Crime & Delinquency, 32*, 251-286.
- Perez, D. W. (1994). *Common sense about police review*. Philadelphia, PA: Temple University Press.
- Pogarsky, G. (2002). Identifying "deterable" offenders: Implications for research on deterrence. *Justice Quarterly, 19*, 431-452.
- Pogarsky, G., & Piquero, A. R. (2003). Can punishment encourage offending? Investigating the "resetting" effect. *Journal of Research in Crime & Delinquency, 40*, 95-120.
- Pogarsky, G., & Piquero, A. R. (2004). Studying the research on deterrence: Can deterrence theory help explain police misconduct? *Journal of Criminal Justice, 32*, 371-386.
- Reuss-Ianni, E., & Ianni, F. A. J. (1983). Street cops and management cops: The two cultures of policing. In M. Punch (Ed.), *Control in the police organization* (pp. 45-57). Cambridge, MA: MIT Press.

- Sherman, L.W. (1990). Police crackdowns: Initial and residual deterrence. In Tonry, M & Morris, N (Eds.), *Crime & Justice: A Review of Research* (pp. 1-48). Chicago: University of Chicago Press.
- Sherman, L. W. (1993). Defiance, deterrence, and irrelevance: A theory of the criminal sanction. *Journal of Research in Crime & Delinquency*, 30, 445-473.
- Skolnick, J. H., & Fyfe, J. J. (1993). *Above the law: Police and the excessive use of force*. New York, NY: The Free Press.
- Stephens, D. W. (2011). *Police discipline: A case for change*. Washington, DC: National Institute of Justice.
- Terrill, W., & McCluskey, J. (2002). Citizen complaints and problem officers: Examining officer behavior. *Journal of Criminal Justice*, 30, 143-155.
- Toch, H. (2002). *Stress in policing*. Washington, DC: American Psychological Association.
- Tyler, T. R. (2004). Enhancing police legitimacy. *Annals of the American Academy of Political and Social Science*, 593, 84-99.
- Tyler, T. R. (2006). *Why people obey the law*. Princeton, NJ: Princeton University Press.
- Tyler, T. R., Callahan, P. E., & Frost, J. (2007). Armed and dangerous (?): Motivating rule adherence among agents of social control. *Law & Society Review*, 41, 457-492.
- Walker, S. (2005). *The new world of police accountability*. Thousand Oaks, CA: SAGE.
- Walker, S., & Bumphus, V. W. (1992). The effectiveness of civilian review: Observations on recent trends and new issues regarding the civilian review of the police. *American Journal of Police*, 11, 1-26.
- Walker, S., & Graham, N. (1998). Citizen complaints in response to police misconduct: The results of a victimization survey. *Police Quarterly*, 1, 65-89.
- Wei, L. J., Lin, D. Y., & Weissfeld, L. (1989). Regression analysis of multivariate incomplete failure time data by modeling marginal distributions. *Journal of the American Statistical Association*, 84, 1065-1073.
- Weisburd, D., Waring, E., & Chayet, E. (1995). Specific deterrence in a sample of offenders convicted of white-collar crimes. *Criminology*, 33, 587-607.
- Wolfe, S. E., & Piquero, A. R. (2011). Organizational justice and police misconduct. *Criminal Justice and Behavior*, 38, 332-353.
- Worden, R. E., Harris, C. J., Pratte, M. A., Catlin, S., & Schlieff, S. (2003, March). *Problem officers, problem behaviors, and early warning systems*. Paper presented at the annual meeting of the Academy of Criminal Justice Sciences. Boston, MA.

Author Biographies

Christopher J. Harris is an assistant professor in the Department of Criminology and Criminal Justice at University of Massachusetts Lowell. He holds a PhD in criminal justice from the University at Albany. His research interests are primarily in police performance and public perceptions of police, as well as evaluation research of police initiatives. He is the author of *Pathways of Police Misconduct* (2009) from Carolina Academic Press.

Robert E. Worden is an associate professor of criminal justice and public policy at the University at Albany, State University of New York, and the director of the John F. Finn Institute. He holds a PhD in political science from the University of North Carolina at Chapel Hill. He previously served on the faculties of the University of Georgia and Michigan State University. His scholarship has appeared in a number of academic journals, and his research has been funded by the National Institute of Justice, the Bureau of Justice Assistance, the New York State Division of Criminal Justice Services, and other sponsors.