

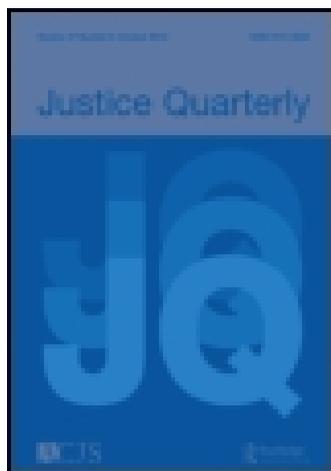
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Police Manipulations of Crime Reporting: Insiders' Revelations

*John A. Eterno, Arvind Verma and
Eli B. Silverman*

Social scientists have theorized about the corruption of crime reports (Bayley, 1983; Campbell, 1976). Yet, scant empirical research has examined the impact of modern policing methods on the accuracy of crime reporting. Our research uses an anonymous survey of 1,770 retired New York City police officers examining retirees' experiences with crime report manipulations across their years of retirement. This includes retirees from the community policing as well as police performance management eras. We subject the data to various statistical tests including tabular analysis, graphical trends to visualize the data, MANOVA, and logistic regression to explain report manipulations. Results indicate that the misuse of the performance management system and pressures on officers from management are key explanations for manipulating crime reports. Individual explanatory variables such as gender, educational status, rank, race, and

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marital status had no effect. Our research supports Bayley's and Campbell's theories. We recommend greater transparency to remedy this.

Keywords COMPSTAT; performance management; NYPD; crime rates; crime statistics

Introduction

Researchers, policy-makers, media, and scholars rely on crimes reported by the police as a staple of their analyses. Numerous reports, scholarly papers, media accounts, books, and other materials are grounded on crime reports. The current study critically examines this excessive reliance on police reports by focusing on the New York City Police Department (NYPD).

The NYPD's substantial and significant impact on policing in the free world is indisputable. Bayley (1994) calls the NYPD, the nation's largest police force, a "flagship" police agency as other departments follow NYPD's lead. NYPD's performance management system, Compstat (short for compare statistics), starkly epitomizes the NYPD's leadership position. Compstat began in 1994 under the then Police Commissioner William Bratton (Silverman, 2001). Focusing on index crime and using computer mapping, managerial accountability, data-driven reporting, and regular crime meetings, Compstat has been emulated throughout the United States and the free world. A recent survey by the Police Executive Research Forum (PERF) indicates that Compstat is now ubiquitous. In 2011, the survey was sent to 326 of PERF's member agencies with 166 responding. The survey indicated that 79% of the agencies utilized Compstat. Further, over half (52%) indicated that they began using Compstat between 2006 and 2010 (Bureau of Justice Assistance, Police Executive Research Forum, 2013).

In addition, the sheer number of agencies now using computers for crime analysis, crime mapping, and hotspot identification indicate the widespread adoption of NYPD Compstat-like performance management systems. In the United States, a nationwide study of police agencies in 2007 showed that 100% of the agencies serving populations of 250,000 or more were using computers for crime analysis and crime mapping. Further, 80% of those same agencies are also using computers for hotspot identification (Reaves, 2010).

The bulk of New York City's crime reduction has taken place since 1994 when Compstat—a police performance management system—and other police reforms were introduced. The NYPD repeatedly publicizes an astounding 79.67% drop in index crime since 1990. New York City's reported dramatic crime decline has drawn widespread attention to the NYPD from professionals, criminologists, law enforcement, politicians, the media, and the general public. Such a phenomenon is certainly important for social scientists to study and understand.

Some attribute the decline almost exclusively to the practices of the police and in particular to Compstat (Bratton, 1998; Henry, 2002; Kelling & Coles, 1998; Kelling & Sousa, 2001; Maple, 1999; Zimring, 2011). Some have labeled these police activities as responsible for the “Guinness Book of World Records” crime drop (Zimring, 2011). Other studies demonstrate less confidence in the police’s role in the crime decline. (Bowling, 1999; Conklin, 2003; Harcourt, 2001; Karmen, 2000; Messner et al., 2007; Rosenfeld & Fornango, 2014; Rosenfeld, Forango, & Rengifo, 2007).

Regardless of the explanation that any individual author favors, these studies often use official police reports as their underlying (data) support. However, earlier research on police reporting of crimes suggests such data is, at a minimum, suspect. Marvell and Moody (1996), for example, demonstrate that the number of crime reports is correlated with the number of officers—more officers lead to more reports. In New York City, the number of officers has been drastically reduced by thousands since its high point in 2000. This alone may have a dramatic influence on reported crime in New York City, but is rarely acknowledged by the media, politicians, and, more importantly, social scientists. Thus, previous research on New York City tends to have an over-reliance on crimes reported by the police.

Bayley (1983), moreover, lists 19 factors that affect the correspondence between reported crime and actual crime incidence. Among these factors are: organizational emphasis in policing, number of police, attentiveness of police, consequences to the police of recording an offense, and willful repression by police. He further writes, “In my view, unless there is evidence, not presumption, that these factors are negligible or stable between places or times being compared, reported crime figures must not be used in evaluating the effectiveness of police performance.” (Bayley, 1983, p. 25) Thus, not only are there well-known defects with the crime reporting system (see also Maltz, 1977; McCleary, Nienstedt, & Erven, 1982; Mosher, Miethe, & Hart, 2011; Seidman & Couzens, 1974), but using reported offenses to gauge police effectiveness can be problematic.

The use of crime reports to measure police effectiveness may be especially questionable in New York City. For example, one important defect in crime reporting that social scientists tend to overlook, downplay, or even ignore in studying New York City is the possibility that an overly intense focus on index crime by management could lead to the manipulation of crime reports by lower ranking officers. Since Compstat meetings and reports heavily focus on index crime, it is possible that this management priority will distort official crime statistics (Eterno & Silverman, 2012). This postulate is sensible if not axiomatic. As the eminent social psychologist Donald Campbell (1976, p. 49) writes, “The more any quantitative social indicator is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor.”

Background Information

The setting for this study is New York City—a city with over 8 million people, millions of tourists and commuters, as well as diverse cultures. In addition to the city’s frequently cited large decrease in reported crime and associated research, evidence and testimony from police unions, whistleblowers, hospital data, a thwarted commission, and, most recently, an internal committee’s findings provide compelling reasons to focus on New York City. Two police unions (the Patrolman’s Benevolent Association and the Sergeant’s Benevolent Association) joint press release on March 23 2004 maintained that crime reports were downgraded. They state: “It [downgrading] is a truth that is widely known by members of the department ...” (“Unions Call”, 2004, n.p.)

Whistleblowers have provided audiotapes indicating that crime reports are manipulated. Officers Adrian Schoolcraft, Adyl Polanco, Sergeant Robert Borrelli, and others produced ample evidence of manipulation. Indeed, Officer Schoolcraft’s allegations have since been confirmed by the department’s own “secret” internal investigation exposed by a reporter (Rayman, 2012). One example of the level of manipulation from Schoolcraft’s tapes is supervisors at roll calls instructing entire shifts of officers not to take robbery reports if victims are not willing to return to the station house—clearly violating department training and procedures.

Hospital data, available through 2006 on these issues, raises serious questions regarding manipulation particularly with respect to assaults, thus providing additional reasons for studying the phenomenon of crime reporting manipulation. New York City’s Department of Health and Mental Hygiene statistics indicate that in 1999 there were 25,181 visits to emergency rooms throughout the City for assault. In 2006, there were 47,779 visits. This represents a 90% increase in visits for assault while the NYPD reported a substantial decline. Even more a concern is visits to emergency rooms for firearms assaults which skyrocketed as well. In 1999, there were 224 visits and in 2006, they count 514 visits—a 129% increase (New York City Health and Hospitals Corporation, 2011).

The NYPD’s lack of transparency (i.e. openness to non-partisan research and requests from outside the agency) makes value-neutral scientific study difficult, yet at the same time more urgent. NYPD has not allowed scrutiny of its written crime reports even from official government bodies. For example, Mark Pomerantz, a former federal prosecutor who chaired New York City’s Commission to Combat Corruption (a Mayoral agency) was denied permission by the police department to view its crime reports (Rashbaum, 2005). His appeal to Mayor Bloomberg was rebuffed resulting in Mr Pomerantz’s resignation.

Under mounting pressure from public disclosures of crime report manipulation, in January 2011, Commissioner Raymond Kelly appointed three former federal prosecutors to review NYPD’s crime report auditing practices. The report (released 2 years later than its promised date) does not examine written

complaints but merely reviews the auditing system. Even this report raises serious questions. For example, the report indicates, "... the persistence of 'egregious' errors in certain precincts despite the pre-finalization review of the complaint reports by supervisors may be construed to support the conclusion that complaint reports are not meaningfully or at least proficiently reviewed at the precinct level—or, in the worst light, that the reviewing supervisors are complicit in the downgrading ..." (NYPD, 2013, p. 47)

Recent studies on New York City crime reveal how scientists are attempting to cope with the issue of report manipulation. Greenberg (2014), for example, simply chooses to disregard the possibility of police manipulating crime reports by citing a non-peer-reviewed source. Another study using the National Crime Victimization survey (NCVS) tangentially discusses this issue. Xie (2014) proposes that victims in New York City are confident in the police and report regularly. However, even if victims report to the police, this does not necessarily mean the reports are properly classified or taken—victims would rarely know this. Furthermore, Karmen (2014) reports that the NCVS has been plagued with funding problems and that the authors of a major study on New York City who compared NCVS with NYPD figures could not offer any comments with respect to report manipulation by police (Langan & Durose, 2004).

Thus with numerous studies on the New York City crime drop often relying on crimes recorded by the police as their foundation, the matter of report manipulation is ripe for scientific inquiry. We hypothesize that perceived managerial pressures on lowering index crime via the Compstat crime management system in New York City likely has a deleterious influence on the accuracy of crime reporting by police. Testing this hypothesis is difficult, at best, since the NYPD's transparency is quite limited (Ortiz, 2011). The current study fills a research gap by using unique primary data in the form of surveys of nearly 2,000 retired New York City officers of all ranks, thereby providing specific data that demonstrates, explains, and compares these officers' experiences with crime report manipulation in different time periods.

Methodology

This combination of an array of evidence suggestive of crime report manipulation and the lack of NYPD transparency provides the backdrop for the construction of this study's research method. While whistleblowers' revelations and newspaper accounts indicate some level of manipulation, there is little in the form of scientific study on the issue. To that end, the heart of our method is the use of an anonymous survey of retired officers of all ranks. The current study incorporates a large sample of 1,962 retired officers who responded to the survey. An e-mail-based survey was conducted in March 2012. The sampling frame is registered officers on the NYPD active retiree's database. Only retired officers can register on the site which is maintained by the NYPD. The purpose of the site is to offer information to retirees and to tap them in emergency

situations as necessary. It is completely voluntary for retired members to register. The site allows registered members to contact other registered retirees and the site supplies e-mail addresses and other contact information. We had access to a retiree allowing us to download the contact information. Additional information about the database can be found at the website <http://www.nypd2.org/retirement/home.html>.

Using this database, we sent a request to participate in the survey—which included a unique link to the questionnaire in its body—via e-mail to the 4,069 NYPD retirees with operational e-mail addresses (see e-mail verbiage in Appendix). The survey was sent on March 26 2012. If the unique link did not indicate a response, a follow-up was sent on April 3. A final follow-up was sent only to links that indicated no responses to the first or second invitations on April 16. In total, there were 1,962 responses. This indicates a return rate of 48.2%. Mail surveys commonly have response rates between 10 and 50% (Neuman, 2000). E-mail surveys tend to have weaker response rates when we examine more recent years (Sheehan, 2001). This study's response rate, then, is certainly good—especially for a contemporary e-mail survey.

We examine the data by the officers' reported year of retirement. For some analyses, we divide the sample into 3 key groups using 1981 as the earliest year proceeding to 1993 which is the last year prior to the introduction of NYPD's Compstat management system. We then examine 1994 until 2001—the Mayor Giuliani years. Lastly, we examined those who retired from 2002 until 2012—the Mayor Bloomberg years. This categorization emerged from trends we saw in the data. We removed those who did not supply their year of retirement and those who retired before 1981. The officers who retired before 1981 had policing careers that focused on traditional and reactive policing. These officers were from a different era. For example, most were trained pre-Knapp Commission (a critically important commission to combat corruption at NYPD) in the early 1970s. Another example of their differences is seen in the class of 1969. That class entered the streets during the Vietnam riots without police academy training. As a final example, women made great strides in policing in the 1980s. There were very few females before 1981. Thus, we removed 45 officers who retired before 1981—not enough for a separate analysis of this era. In addition, we removed another 147 who did not supply a comprehensible retirement year. Therefore, for the purposes of this study, our final sample size was fairly large—1,770 retired officers. The sample size adds assurance that the findings accurately reflect the experiences of actively retired officers.

Table 1 shows the demographic information of the sample. While our sampling frame examines actively retired officers, we also note that the trends in the characteristics of the respondents are very similar to what is known about NYPD. The number of retirees in each rank comports well with known rank distributions of NYPD. That is, police officers/detectives are the largest group with descending counts as one goes up the ranks. Thus, as expected, there are fewer sergeants compared to police officers/detectives and so forth. This pyramidal structure clearly mimics the rank structure at NYPD. Education level

Table 1 Demographics of sample

Variable	Attributes										
Rank	PO/Detective 60.1%	Sergeant 19.8%	Lieutenant 13.4%	Capt. & up 5.9%	Other .2%	Missing .6%					
Educ.	GED/HS only 7.7%	Some College 44.2%	Bachelor's Deg. 29.4%	Some Grad. 6.6%	Grad. Degree 11.3%	Missing .7%					
Females	Pre 1994 2.1%	1994–2001 10.7%	Post 2001 11.0%	Total in sample 8.5% (n=149)	Missing .7%						
Avg. Age	Pre 1994 65.9	1994–2001 58.8	Post 2001 50.1	Mean of sample 56.7	Missing 4.6%						
Race/ethnicity	White <94 94–01 >01	Hispanic <94 94–01 >01	Black <94 94–01 >01	Asian <94 94–01 >01	Other <94 94–01 >01	Sub-total n					
%=	88.2	5.1	3.9	0	2.8	<94 94–01 >01					
Marital	Single 6.7%	Married 79.4%	Divorced 9.1%	Widow(er) 2.0%	Other 1.2%	467					
						403					
						Missing 1.5%					
						n = 1,770					

*Percentages may not add to 100 due to rounding.

is also as expected since 60 credits college or 2 years military has been a requirement since the mid-1990s. Gender too is as expected since this study examines earlier years where the NYPD had not yet hired many female officers. Also, the percentage of women officers increases in each of our groups (1981–1993 [2.1% female]; 1994–2001 [10.7% female]; 2002–2012 [11.0% female]). Today, NYPD has nearly 35,000 officers and is 17% female (For 1st Time, 2011). Only 30 years ago, there were 350 women officers (NYPD Press Release, 2009). Lastly, race also mimics what is known about NYPD. NYPD trends indicate that minorities are making great strides (El-Ghobashy, 2011). Our sample shows whites decreasing as a percentage in our 3 categories pre-1994, 1994–2001, and 2002 onward (88.2, 82.6, and 74.6%, respectively). Hispanics and blacks both show increasing trends with Hispanics having a greater percentage. This again agrees with known trends (blacks 3.9, 5.2, and 7.0%; Hispanics 5.1, 10.2, and 15.2% respectively). Importantly, we also note that every officer in the study had considerable experience of working in different units of NYPD including work in a patrol (precinct) assignment at one time in their careers. Overall, the trends in the data are clear and completely in synch with trends at NYPD.

The large sample size and the distributions that comport with what limited information is available about NYPD personnel are indicators that social bias is probably not an issue and that the sample is somewhat representative of NYPD. We also note that all respondents elected to be on the database maintained by their former employer and volunteered to help their former employer in emergencies. We supply this information for readers to consider for themselves how this might influence the sampling frame and corresponding interpretation of the data.

It is important to note that the probability of events being conflated (i.e. officers reporting the same event) is highly unlikely. First, we ask officers to report their personal experiences—not what they heard or learned about. Second, our sample includes officers who retired over various decades and who worked in numerous and varied commands. The NYPD, for example, has 76 precincts, 12 Transit Districts, and 9 Housing Police Service Areas. This is not to mention numerous other commands (detective commands, organized crime control bureau, internal affairs, etc.) Also, officers with more seniority tend to change assignments to more pleasant working environments. Additionally, the open-ended responses to our last question show no evidence of events being repeated. Simply put, it is exceedingly unlikely that officers reporting to us were working together and reporting the same event. What we are capturing in this survey are the officers' personal and individual experiences while employed at the NYPD.

In addition, anonymity is a key feature of our survey as it allows maximum privacy and tends to produce more valid responses to sensitive questions such as those in this survey (Babbie, 1989; Bradburn, 1983; Dillman, Smyth, & Christianson, 2009; Neuman, 2000). As Mosher et al. (2011, p. 219) write, "... the relative anonymity of the Internet may lead to higher response rates and

more truthful answers (Skitka & Sargis, 2006).” Furthermore, respondents have the extra protection of being retired. They have far less to fear from repercussions by the NYPD (e.g. whistleblowers Schoolcraft, Polanco, and others were punished for revealing their experiences). Since our sample retired from the NYPD, they are in a far better position to reflect on their careers, share their experiences and answer candidly.

The questionnaire was designed using focus groups including retired NYPD officers of varied ranks, experienced researchers, and others familiar with NYPD jargon. The instrument and the e-mail invitation were reviewed by the Institutional Review Board affiliated with the principal researcher. Wording was carefully designed to address any issues with respect to whether officers actually observed the activities in the survey. Therefore, the wording “Based on your experience, do you have any personal knowledge of ...” was placed on all pertinent questions. We do note, however, that such knowledge could be from a third person. Also, respondents were instructed on the front page of the survey that if they retired 1994 (the first year of Compstat) or after to base their answers only on experiences in 1994 and after. Conversely, those who retired before 1994 are being asked about their personal experiences in the era when they worked.

Given that the entire sampling frame is retired, memory can be an issue. We address this using techniques suggested in the scientific literature. We use a very limited number of questions (Bradburn, Rips, & Shevell, 1987); a specific cut time—1994—(Bradburn et al., 1987); a self-administration method that allows maximum time to consider answers (Bradburn et al., 1987); analyze whether the event occurred—not specific number of events—(i.e. our dependent variable is dichotomous) (Bradburn et al., 1987), less complex matrix type questions for the key independent variables (Bourbonnais, Meyer, & Theriault, 1988), confirm the analysis with four separate dependent variables (i.e. questions) (Zelinski, 1999); use those employed for many years (Stewart, Tonascia, & Matanoski, 1987 inform us that 5 or more years of employment leads to better recall—only 1 respondent had less than 5 years’ experience); and ask questions that are pertinent to the study and to respondents (Bourbonnais et al., 1988).

We tested the reliability of the responses by estimating Cronbach’s α for the 8 items measured on the Likert Scale of 1–10 [minimal to strong pressure]. The value was observed to be .802 that indicated a high degree of reliability in the responses. Further, we also estimated the reliability by conducting a split-half procedure. The Spearman Brown split half value was found to be .760 assuming unequal length of the two halves. Both of these values suggest that the reliability of the items was high.

Our statistical analyses focus on three key areas. First, we compare and contrast their experiences with crime report manipulation based on officers’ reported year of retirement. Second, we examine the perceptions of pressure from management, including pressures to reduce index crime, across the years. Third, we examine the extent to which, if at all, the perceived

management pressures explain observed crime report manipulation. Where appropriate, we also include various quotes from a general open ended question posed at the end of the questionnaire. These statements support the quantitative analysis.

Data Analysis

Data Information

The second survey question was in the form of a matrix. It reads, "With respect to the following criteria and based on your personal experience/knowledge, on a scale of 1–10 (with 1 being the least and 10 the most), how much pressure did precinct (patrol) personnel receive from management/supervisors to" decrease index crimes, decrease other crimes, downgrade index to non-index crimes, maintain integrity in crime statistics, and to obey Constitutional rules (see Appendix). The extent of those pressures (or lack thereof) helps to reveal the experiences of those who worked in various years. For one variable, downgrading index to non-index crime, little pressure is customarily expected since the activity of downgrading is itself unethical and likely illegal (e.g. filing false police reports, tampering with official documents). With regard to the level of perceived pressure to report crime statistics accurately or to obey Constitutional or departmental rules, we expect somewhat *higher* pressures to remain fairly constant across our respondents' retirement years. This is because police ought to always report crime accurately and obey the law.

The coding of the independent variables is very straightforward. For the pressure variable in the matrix question, we use a Likert scale of 1–10 with 1 being the least pressure and 10 being the most. We use the 1–10 scale for familiarity and note that there is no zero point. We clearly mark "least pressure" for number 1, but without a zero point some pressure, however minimal, might be inferred and readers should interpret the data with that in mind. For gender 1 = Male and 2 = Female; education level 1 = High School, 2 = Some College, 3 = College Graduate, 4 = Some graduate/law school, 5 = Graduate or law degree completed; marital status 1 = married 2 = not married; race 1 = White 2 = Non-White; rank 1 = police officer/detective, 2 = sergeant, 3 = lieutenant, and 4 = captain or higher rank.

The survey also provided four specific dependent variables (based on questions 3–6, respectively) that gauge respondents' knowledge/experiences of crime report manipulation. The first was based on personal experience or knowledge that crime data was manipulated to make the crime numbers "look better than they were." A second variable measured respondent's personal experience/knowledge that officers were "not taking complaint reports when they should have." A third variable focused on officers "changing words on complaint reports to downgrade the crime." These three questions ask respondents about specific types of behaviors such as not taking reports and changing words to

downgrade reports. These responses were dichotomous and coded as “1” for “yes” and “0” for “no.” A final question was a “catch-all” inquiring about “... any unethical strategies to minimize/reduce/downgrade crime numbers” This was asked in case anything about unethical strategies was missed.

The data is described to elicit respondents’ perspectives directly and clearly as possible. Accordingly, we present descriptive statistics through a bivariate crosstab; through visualization of the data and comparison of mean values. We present statistical tests to show the direct relationships among different sets of variables and retirement time periods. In addition, a multivariate logistic regression model reveals more complex relationships among this set of variables. In order to supplement the analyses, we also offer a number of direct quotes reflecting respondents’ NYPD experiences based on an open-ended final question on the survey, “Please make any comments that you feel are important to understanding the NYPD based on your experience”

Crosstab

The first question reads, “are you confident that major crimes have declined by 80% in New York since 1990s?” The majority of respondents were not confident in the accuracy of NYPD crime numbers widely cited by NYPD, the media and social scientists. Indeed, 58.2% of the respondents stated “no” to this question. This is not unexpected since some crime report manipulation has been publicly acknowledged and some works on official statistics have indicated concerns with crime statistics (e.g. Mosher et al., 2011). However, as we will show, the trends in our data are very important. Thus, it is not the mere existence of manipulation but its extent, especially since 2002. Our respondents often expressed strong feelings. For example, in the words of one respondent who retired in 2007: “Crime is a constant. To believe that crime has gone down 80% is a joke. I believe eventually if the Feds get involved the truth will come out.”

We took two approaches to examining these trends. First, we created a crosstab to analyze the relationship between the time officers retired and whether or not they had personal knowledge of any instances in which crime reports were changed to make crime numbers appear better. We recoded the variable year of retirement into three groups based on time periods. The first group consists of those who retired before Compstat began; 1993 was the cut off year. The second worked during the early years of Compstat, and the third in the most recent period. We found that there were 484 respondents who retired between 1981 and 1993 and were designated as pre-Compstat category. These officers worked during Mayors Edward Koch and/or Mayor David Dinkins. The second group of 415 officers worked when Rudolph Giuliani was Mayor and retired between the years 1994 and 2001. The third group of 871 respondents consisted of officers who retired in the period from 2002 until 2012 during the administration of Mayor Michael Bloomberg.

To the specific question, “based upon your experience do you have personal knowledge of any instance in which crime reports were changed to make crime numbers look better than they were?”, 974 respondents stated that they were *not* aware of manipulation of crime statistics. However, 78 stated that they were aware of such manipulation 1–2 times; 309 stated they had knowledge of this being done 3–4 times and 371 stated 5 or more times.

A bivariate crosstab analysis between period of retirement and this variable of “personal knowledge of any instances in which crime reports were changed to make crime numbers look better” is shown in Table 2.

In this table, we see that the majority of respondents who worked during the Bloomberg years had personal knowledge of manipulation “to make crime numbers look better” (55.5%). The previous two eras show a markedly smaller proportion of officers observing manipulation. In the pre-Compstat era [1981–1993], only 30.3% indicate personal knowledge of manipulation. While there is a slight increase during the first Compstat era under Mayor Giuliani, it is very similar to the previous era (34.5%). Thus, there is a striking increase in knowledge of report manipulation during the Bloomberg era. Our measure of association— $\gamma = .337$ —supports this interpretation showing a strong relationship between knowledge of manipulation and the three periods of Compstat. Although for the sake of brevity it is not necessary to provide the individual crosstabs for other questions regarding personal knowledge of crime statistics manipulation, it is important to note that this trend is exceedingly similar for questions 4 (not taking complaint reports when they should have [$\gamma = .288$]) and 5 (changing words on complaint reports to downgrade crime [$\gamma = .350$]). Each of these relationships showed similar associations and all were statistically significant ($p < .0001$) suggesting that knowledge of manipulation was related to the

Table 2 Crosstab: knowledge of crime manipulation and retirement category

		Period 1 1981–1993	Period 2 1994–2001	Period 3 2002–2012	<i>N</i>
No		327 (69.7%)	264 (65.5%)	383 (44.5%)	974
Yes	1–2 times	15	19	44	78
	3–5 times	55	66	188	309
	5+ times	72 (30.3%)	54 (34.5%)	245 (55.5%)	371
	<i>n</i>	469	403	860	1732
	Missing	15	12	11	38
	<i>N</i>	484	415	871	1770
<i>Statistics</i>					
γ [ordinal by ordinal]		.337***			

*** $p < .001$.

three periods of the study. There was greater knowledge of manipulation during the last era of Mayor Bloomberg and Commissioner Kelly. As one respondent who retired in 2005 offered, "A CO may 'suggest' that a burglary complaint was a criminal trespass." Another who retired in 2008 remarked: "A clear robbery was split into its component parts-larceny and assault-two misdemeanors. I was told that the c/w [complainant/witness] couldn't ID so what's the difference." A third respondent who retired in 2003 offered: "In some cases, larcenies became 'lost property' and values were skewed so they didn't become grand larcenies. Also complainants were told they must go to the stationhouse or to the precinct of record to report a crime."

Graphical Trends

A second way to demonstrate these trends in the data is to display officer responses to key managerial pressures over time. To examine this, we estimated the mean values of yearly responses to the set of questions regarding knowledge or experience of pressure to decrease index crime and to downgrade various crimes. These were plotted according to the year of retirement beginning 1990. We note that downgrading is, by definition, suspect activity. It involves officers attempting to place index crimes into non-index crime categories.

Figure 1 clearly indicates the rising trend of pressure being exerted upon the officers to reduce the index crime numbers and downgrade index crimes. The trend lines embedded within the graph display the rising trend in pressure for the two questions about index crimes. A second figure is used to show the trends in pressures to obey the law and accurately report crime statistics. Concurrently, departmental pressures to accurately report crime statistics and to obey constitutional and legal rules show *declining* trends (see Figure 2). However, for accurately reporting crime statistics there is some increase in

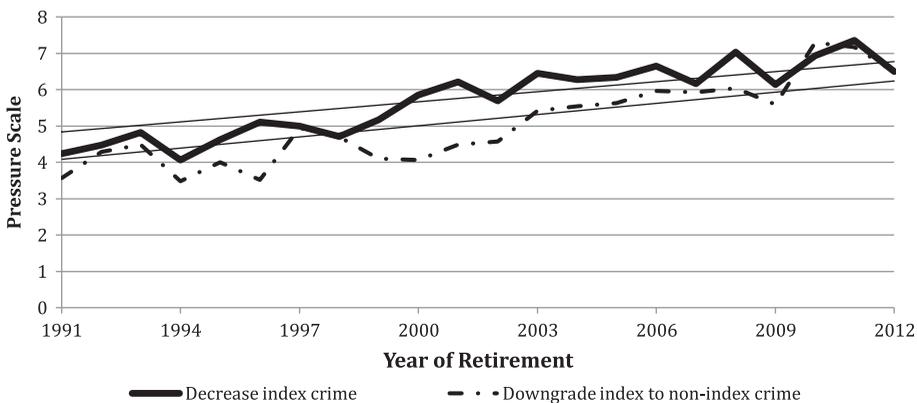


Figure 1 Trend in management pressures to decrease and downgrade index crime.



Figure 2 Trend in management pressures to accurately report crime and obey legal rules.

pressure initially at the beginning of Compstat but this dissipates over time. Clearly, department managers were, during this latter period, sending out the message that decreasing index crime rates were vastly important but, simultaneously conveying the message that maintaining accurate crime statistics and following legal guidelines were *not* a major concern—a questionable combination, at best.

Comments from respondents support these trends. One respondent who retired in 2005 commented: “Compstat instilled fear and pressure on COs to lower index crime.” Another who retired in 2003 wrote: “Compstat was the big thing for commanders keeping their positions and getting promoted. Changing stats was not unusual.”

Comparison of Mean Values—Perceived Pressures by Retirement Category

While the crosstabs and graphs offer an excellent visual representation of responses, we further examined the data to pinpoint more precisely the pressures that respondents felt from management and/or supervisors. To do this, we conducted a multivariate analysis of variance (MANOVA) between the three categories of retirement years: pre-Compstat [1981–1993]; early Compstat1 [1994–2001], and most recent period [2002–2012] for the variables of knowledge or experience of pressures to manipulate crime data.

The MANOVA results were found to be significant at p -value = .0 for α .05 with Wilk’s lambda = .899 suggesting that mean differences for these set of variables were real among the three time periods. Given the previous analysis, this is not surprising. There are significant differences in pressure that officers felt for decreasing index crime, decreasing other crime, downgrading index crime, accurately reporting crime statistics, and obeying Constitutional guidelines (Tables 3 and 4).

Table 3 Mean values of pressure for various items*

Pressure type	Retirement category	Mean	Std. dev.	N
Decrease index crime	1	4.46	2.929	410
	2	5.45	3.051	371
	3	6.36	2.98	810
Decrease other crime	1	4.36	2.677	410
	2	4.9	2.692	371
	3	5.43	2.781	810
Downgrade index crime to non-index crime	1	3.77	2.943	410
	2	4.16	3.05	371
	3	5.63	3.308	810
Accurately report crime statistics	1	5.25	3.007	410
	2	5.75	2.861	371
	3	5.28	2.888	810
Obey Legal/ Constitutional Rules	1	6.35	3.041	410
	2	6.59	2.859	371
	3	5.95	2.854	810
Retirement category	Cut off years of retirement			
1	1981–1993: Pre-Compstat			
2	1994–2001: Post-Compstat1			
3	2002–2011: Post-Compstat2			

*Pressure measured on a Likert Scale 1–10 with 1 being the least.

Table 4 Manova results

Statistics	Value	F	Hypothesis df	Error df
Wilk's Lamda	.899***	17.395	10	3190
*** $p < .001$				
Test of between subject effects				
Dep. variable	Type III SS	df	Mean S	F
Decrease index crime	1003.8	2	501.91	56.41***
Decrease other crime	313.86	2	156.93	20.96***
Downgrade index to Non-index crimes	1173.39	2	586.69	58.86***
Accurately report crimes	67.93	2	33.96	3.99*
Obey rules	116.51	2	58.25	6.89**

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

Importantly, an examination of the actual means and the *post hoc* results [Games-Howell statistics] was very revealing. Recall all variables examining

pressure are measured on a 1–10 Likert scale with 1 being the least pressure. First, comparing the differences in means for reducing index crime and decreasing other crime showed that every period had a statistically significant difference showing markedly increasing pressure for later periods. That is, the pressures to reduce index crime steadily increased with significant differences in means for each time category pre-Compstat, early-Compstat, and most recent period ($M = 4.46, 5.45, \text{ and } 6.36$ respectively). The pressure to decrease other crime also shows steady and significant increases over the same time periods ($M = 4.36, 4.90, \text{ and } 5.43$). So increasing pressure is consistent over time for these two variables although the pressure to decrease other crime is lower compared to decreasing index crime.

Interestingly, the pressure to downgrade index crime also steadily increases over the time periods ($M = 3.77, 4.16, \text{ and } 5.63$ respectively). However, the difference between the periods 1981–1994 and 1994–2001 is not statistically different for this variable of “downgrade index crime]. For 2002 onwards, however, the mean value significantly differs compared to the earlier two eras. This strongly suggests that the Bloomberg era placed more pressure on officers to downgrade than the previous two.

We now examine the stress placed upon officers regarding the importance of accurately reporting crime statistics. For this variable, increased pressure indicates that the agency is interested in accurate reporting. The pre-Compstat period shows a low mean of 5.25. The department then increased pressure to properly report crime when it first introduced Compstat ($M = 5.75$). This difference is statistically significant, though only barely at $p = .048$. So when the department first introduced Compstat, it increased pressure to reduce index crime but concurrently also increased pressure to ensure accuracy. However, the increased pressure to accurately report does not hold for the most recent Kelly/Bloomberg era but reverts back down to the mean value of 5.28. This difference is also statistically significant with respect to the previous period of 1994–2001. However, for this era, as seen earlier, management did *not* concurrently reduce pressure to decrease or downgrade index crime. In sum, those who retired in the Kelly/Bloomberg era felt significantly increased pressures to decrease and downgrade crime and concurrently felt *reduced* pressures to keep accurate crime statistics.

We see a similar effect with the variable measuring pressure to obey legal/Constitutional rules. There is no statistical difference between pre-Compstat [$M = 6.35$] and the post-Compstat category 1994–2001 [$M = 6.59$]. The more recent Kelly/Bloomberg era, however, showed a significant difference between the two previous eras [$M = 5.95$] with p -value being .001.

Logistic Regression Model

Four direct questions were asked regarding whether the respondents had personal knowledge or experience of manipulating the crime reports. These were

dichotomous responses as “yes” or “no” and we examined their relationship with the intensity of pressures to downgrade the crimes. Separate Logistic regression models were developed for these four sets of dependent variable questions using the independent variables of decreasing index crimes, downgrading index crimes, reporting accurately, obeying the rules, and various individual explanatory variables. All the models had exceedingly similar results. For the sake of brevity, we present the model for the specific question, “Based on your experience, do you have personal knowledge of any instances in which crime reports were changed to make crime numbers look better than they were” which is reported in Table 5.

This model was able to explain 39.0% the variance of the dependent variable according to the Nagelkerke R squared. Furthermore, the classification table showed that the model correctly predicted 75.0% of the responses falling in the two groups. As may be seen, the variables “Decrease index crimes” and “Downgrade index to non-index crimes” were good predictors of this knowledge/ experience of manipulation. It is also pertinent that for the variables “accurately report crime statistics” and “obey rules” the slopes were negative. This implies that these unethical strategies were predicted by a *decrease* in the value of the variable. Significantly, the time variable “year of retirement” variable was a good predictor too. As may be seen, the strongest predictor was the “downgrade index to non-index crimes” with the “b value of .307 and

Table 5 Logit regression model

	B	Std. error	Wald stats	Exp (B)
Decrease index crime	.102***	.028	13.480	1.107
Downgrade index to Non-index crimes	.307***	.025	149.957	1.360
Accurately report crimes	-.128***	.027	22.230	.880
Obey rules	-.051*	.026	30.855	.951
Year retirement	.038***	.008	20.551	1.039
Gender	-.406	.234	3.004	.666
Education	.082	.063	1.668	1.085
Marital status	.130	.157	.684	1.139
Race	-.049	.154	.101	.952
Rank	-.031	.076	.164	.970
Constant	-77.672**	16.978	22.273	.000
N = 1561 [missing 209]				

Dependent variable: Based on your experience, do you have personal knowledge of any instances in which crime reports were changed to make crime numbers look better than they were? Yes/No

Model coefficients Chi-Square = 538.586*** df =10
 Model Summary -2 Log Likelihood =1612.666 Nagelkerke R² = .390

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

exp [b] of 1.36.” This implies that a unit change in the independent variable “year of retirement category” affects the log of odds by a factor of .307. The results are similar for the other specific questions about knowledge or experience of changing citizen complaints, not taking them or changing their words to downgrade the crimes. The variables of gender, race, education, and rank appear to have no impact upon the model, which suggests that pressures were uniformly felt across the organization.

We tested the assumptions for the logit by examining the sample size, multicollinearity among the independent variables, and standard errors. The large sample size $n = 1538$ ensured that we exceeded the minimum number of cases per independent variable, which is suggested to be 10 (Hosmer & Lemeshow, 2000). We also tested for multicollinearity by examining the inter-correlations among the independent variables used in logit. Except for 2 pairs with modest correlations of .62 and .54, the remaining have very low correlations barely reaching .2. Lastly, we examined the standard errors for the b coefficients of every independent variable. All error values were less than 1.0 and hence suggest that multicollinearity is not a problem (Hosmer & Lemeshow, 2000).

Discussion

It is widely known that there are weaknesses in the validity of official crime data (e.g. Mosher et al., 2011). Bayley (1983, p. 24) directly states,

Changes in reported rates are a fraudulent measure of police effectiveness. Although everyone who has looked into the reliability of reported crime figures knows that they are unstable to the point of worthlessness, everyone, including academics, continues to use them.

The current study strongly supports the validity of Bayley’s (1983) insights.

The analyses provide evidence regarding NYPD manipulation of crime statistics. We find a core set of variables that strongly predicts officers’ experiences with report manipulation. Time of retirement is one of these variables. Time of retirement is a good predictor of experience with report manipulation and, as indicated by the multivariate model, has an independent effect from the pressures on officers. One interpretation of the positive slope coefficient of the time of retirement variable is that the management culture (community policing in the 1980s, then Compstat in the 1990s, and continuing with even more centralization in the 2000s) of the era has an influence on the officers’ knowledge of manipulation of crime reports—*independent of pressures*. The slope coefficient is positive and significant indicating that officers had more personal knowledge of manipulation of crime reports in recent years when the performance management culture was at its apex. It may be that as reported crime plummeted over 60% through 2001, it became more and more difficult over time to sustain such decreases. It is possible that the Compstat system, at first very productive, morphed into a culture of “gaming numbers” to keep

the decreases going. This suggests that the performance management elements, initially healthy, must carefully be monitored. Specifically, the top-down management style, commander morale, accountability goals or expectations, centralization of bureaucracy, actions of management toward subordinates, and other organizational effects are captured by this variable (Eterno & Silverman, 2010; Weisburd, Mastrofski, McNally, Greenspan, & Willis, 2001). While future research will have to confirm this, the data certainly reflect this interpretation. Comments from our respondents also clearly support this. Two pertinent examples from respondents who retired in 2001 and 2010, respectively, are: (1) Although Compstat started as a good project, it is no longer that. (2) Compstat started out as a good thing and went bad.

Second, other explanations for officers' experiences with crime report manipulation are the various pressures they felt from management. Our respondents indicate that the trend in pressures to decrease index crime numbers, decrease other crime and downgrade index to non-index crime have all markedly increased. Nevertheless, the multivariate model suggests something more complicated. Namely, these pressures have a separate influence regardless of the time period (management style). That is, as leadership in any era exerts pressures to lower the crime rates, officers' experiences and knowledge of crime report manipulations are likely to increase. These increased pressures were not due to chance alone and show reasonably high explanatory power when predicting knowledge of crime report manipulation. Interestingly, the level of pressure to accurately report and pressure to obey legal rules also had independent and significant influences on knowledge of manipulation. Thus, in these data, we see increasing pressures to keep crime numbers down and decreasing pressures to accurately report crime and follow rules.

Additionally, the synchronicity of these variables across the data suggests that the pressures on police are critically important to explaining the level of knowledge of report manipulation. Our data suggest, then, that one important factor to explaining knowledge of report manipulation or lack thereof is *pressures* from leadership (management), regardless of era. Given that the key police leadership position (police commissioner) is selected by the mayor (executive branch) in New York City (and in many departments), politics would appear to be very important to explaining crime report manipulation.

We note that typical individual explanatory variables including gender, educational status, rank, race and marital status were not significant. Thus, individual explanatory variables played little role in explaining these behaviors. It appears, then, that the powerful influences of the performance management culture and the pressures on officers from leadership overwhelm individual influences. This corresponds with research about the influence of police culture on police behavior (Drummond, 1976; Manning, 1977; Reuss-Ianni, 1983).

Comments from our respondents help confirm this interpretation. The following are a few excerpts from respondents who retired in 2002, 2003, and 2002 respectively: (1) "The pressure and humiliation attributed to Compstat was too much for most commanding officers. The vast majority of them played

the numbers game to some degree to avoid being embarrassed and degraded in front of their peers.” (2) “Compstat was the big thing for commanders keeping their positions and getting promoted. Changing stats was not unusual we could see it in the squad [detectives] because we got copies of all uf61s [complaint reports for crimes] and would see changes on a DD5 [a follow up report that can change the classification] for a reclassification.” (3) “The pressure from the advent of Compstat on was enormous. Commanding Officers lived in mortal fear of being embarrassed or removed from command due to poor performance at the podium. Otherwise ethical men were driven to cook the books on major crimes to keep the Compstat gods appeased.”

These interpretations must await further study but the powerful explanatory models and analyses strongly suggest our conclusions are, at a bare minimum, logical. As with all social science, however, they are subject to limitations. One limitation pertains to the sample. Since we do not have access to the entire NYPD, our sampling frame is NYPD active retirees. We show trends and other data indicating that the sample is reasonably representative but without full access, this will necessarily be a limitation. Importantly, since active retirees volunteer to help the NYPD, this sample is more likely to be favorable to the agency. Results ought to be interpreted considering this facet.

Another limitation is that the data are collected in a cross-sectional manner (a one shot study). This may lead to some telescoping (i.e. respondents reporting on events that occurred in previous eras and bringing them to the more recent time period). For the first period (1981–1993), telescoping is not a problem since these respondents did not work during the Compstat periods and, therefore, cannot report on events for which they were not present. To address the telescoping issue (recalling incidents that occurred in the non-Compstat era by those who worked during both non-Compstat and Compstat), the instructions stipulated responses only to those events that occurred in 1994 and after if respondents retired after 1994. This helps minimize any telescoping into the non-Compstat era.

We are confident that this paper accurately reflects police practices as they occurred in New York City. Given the data and transparency issues we confronted, this line of research was the best possible option to pursue. We expect that this study will motivate future research, replication, and provocative conversations among social scientists. Necessarily, clarification of the findings will have to await further inquiry.

This study indicates that Bayley’s (1983) warning that social scientists should not use police reports as gauges of police success is profoundly accurate. If we are to use crime reports for decision-making purposes (e.g. research, hiring of officers, tactical use of officers, real estate values, etc.), far more scrutiny is necessary. Transparency in policing would seem to be a prerequisite for this to occur. That is, agencies would have to allow some outside bodies to closely scrutinize their record keeping. One suggestion is professional accreditation through bodies such as the Commission on Accreditation for Law Enforcement

Agencies (CALEA). While this is not a silver bullet, it is in our view a step in the right direction—toward more transparency.

In sum, this study presents the results of a survey with nearly 2,000 retired NYPD officers demonstrating the agency's practices with respect to crime report manipulation. Specifically, a top-down management style and managerial pressures help explain the knowledge of manipulation of index crime reports by field officers. Experiences officers had with manipulation of crime reports is likely a byproduct of over-reliance on crime numbers by police performance management systems as well as leadership pressures. The utility of this study is not in questioning police crime reporting—that is well known. Rather, it is in understanding the level of and explanations for that manipulation. We suggest more transparency in police agencies to help remedy the situation.

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Appendix

E-mail Invitation

_____ is the Principal Researcher on a study of the New York City police department's (NYCPD) management. It is requested that you take part in a short survey that should take no more than 5 min to complete about your personal experience as a New York City police officer. There are a total of nineteen (19) questions. It is anonymous (there is no way for us to know your identity) and voluntary. You indicate your voluntary consent by answering the survey. The NYCPD has no involvement in this research. This is an independent, scientific study.

Your answers may influence policy decisions and results will be published in press reports and scientific journals.

Please follow the link below to take the short survey. Let me thank you for your help.

Link to survey

If you have any questions, feel free to contact me.

Contact information

This email and any attachments may contain confidential and privileged information. If you are not the intended recipient, please notify the sender immediately by return email, delete this message and destroy any copies. Any dissemination or use of this information by a person other than the intended recipient is unauthorized and may be illegal.

NYCPD Survey*

The Wording of the Directions

Directions: All responses are voluntary (you do not have to answer questions). You may skip questions you feel unsure about or do not wish to answer. You indicate your voluntary consent by answering the survey. The survey is anonymous (there is no way for us to know your identity).

For all questions, if you retired before 1994, base your answers on your overall impressions over your entire career; if you retired in 1994 or after, base your answers on experiences that occurred only in 1994 and after. Choose the responses that best reflect your personal experiences.

The Wording of the Questions

- (1) Based on your personal experience are you confident that major crime has decreased 80% since 1990 in New York City?
- (2) With respect to the following criteria and based on your personal experience/knowledge, on a scale of 1 to 10 (with 1 being the least and 10 the most), how much pressure did precinct (patrol) personnel receive from management/supervisors to:
- (3) Based on your experience, do you have personal knowledge of any instances in which crime reports were changed to make crime numbers look better than they were?
- (4) Based on your experience, do you have personal knowledge of officers/supervisors not taking complaint reports when they should have?
- (5) Based on your experience, do you have personal knowledge of officers/supervisors changing words on complaint reports to downgrade the crime?
- (6) Based on your experience, do you have personal knowledge of any unethical strategies used to minimize/reduce/downgrade crime numbers (reported crimes)?
- (7) What is your gender?
- (8) What is your current age?
- (9) What is the highest level of formal education you have completed?
- (10) What is your marital status?
- (11) What is your race/ethnicity?
- (12) What was your rank when you retired?
- (13) How many years of service did you do for the NYPD?
- (14) Do you have military experience?
- (15) What year did you retire?
- (16) Did you have a patrol (precinct) assignment after 1994?
- (17) Were you ever the commanding officer of a precinct?
- (18) Overall, how would you characterize your work experience in the following years?
- (19) Please make any comments that you feel are important to understanding the NYPD based on your experiences. Please do not indicate your name or other identifying information in your response.

*The above only shows the wording of the initial directions and questions for respondents. It includes neither the formatting of the questionnaire nor the response possibilities. Readers may request the full survey from the authors.