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PUBLIC PERCEPTIONS OF THE POLICE: EFFECTS OF POLICE INVESTIGATION AND POLICE RESOURCES

By Andreas Cebulla and Mike Stephens[1]

1 Introduction

Since the 1980s, successive UK governments have sought to increase efficiency in, and effectiveness of, policing through what has been described as "cycles of reform" (Reiner, 2000, p. 204). The reforms typically involved exerting greater central control over regional police forces. Many of the early initiatives met with resistance from within the police and, as a result, were not fully implemented (McLaughlin and Murji, 1995). By the late 1990s and early 2000s, however, more effective and direct control over police performance was finally established. This took the form of a centralisation of police management, which resulted in the introduction of more uniform measures of monitoring police performance, including the regular recording of crime and crime detection rates among police forces. Performance targets were set and the public's satisfaction with the work of the police in their local area became one of several performance indicators.

Performance targets and measures to generate greater cost efficiency in service provision, however, can have unexpected, sometimes perverse side effects. Two of these are focus of this paper. First, it explores how shifts in the police's focus on specific types of crime in response to the introduction of performance targets affected the public's reporting of crime. Second, it asks whether, in the light of efforts to achieve efficiency savings in the police, public spending on police forces has had any bearing on the public's perception of the quality of local policing.

2 Police reforms - an overview

Savage (2007) describes the historical emergence of a performance culture in the police services in three phases. The first phase, approximating with the 1980s, saw an increased focus on resource inputs to the police and how they could be used more effectively. At this time, central government's approach could still be described as fairly hands-off and also involving more rather than less cost to the tax payer – a step that later initiatives sought to stop, if not reverse. Police officers' salaries were increased to create incentives, buy loyalty, especially during the miners' strike, and placate discontent among police officers with previous governments' alleged neglect of police interests. This changed in the mid-1990s when a stricter regime of supervision was introduced. This second phase of police reforms followed a

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sustained, albeit brief period of rising crime, when questions were asked about the return the government and the public received from increased investment in the police. From this point, the organisations charged with monitoring the activities and performance of police forces, Her Majesty's Inspectorate of Constabulary (HMIC), and the National Audit Commission (NAC) adopted a more active role in setting priorities for policing, and defining and measuring outputs and performance indicators. This step change was probably most visible in the case of the NAC. The Commission gave up its traditional focus on monitoring financial efficiency in areas that were often only peripheral to policing, such as vehicle fleet management, in favour of investigating matters closer to the heart of policing (Savage, 2007). By the mid-1990s, NAC reports were scrutinizing individual police forces, investigating issues such as forces' responses to 999 calls and, for the first time, crime detection rates.

The focus on performance was further strengthened with the Police and Magistrates' Court Act 1994, which formally introduced national policing objectives. The Act set out that police forces needed to maintain and, in some instances, improve detection rates, in particular of violent crimes and burglaries, while working in partnership with public agencies and local authorities. In addition, picking up themes addressed by previous policing reviews and the forces' concerns, the Act determined that the police were required to respond promptly to emergency calls and reassure the public through high visibility policing (Jones and Newburn, 1997, p.36). But whereas central government and its agencies exerted more pressure on police forces to monitor their performance, the onus for driving up performance remained firmly on the police forces themselves. Government agencies set the priorities and produced information that would allow change to be monitored; developing the means to bring about that change remained the responsibility of the police.

During the third phase of police reforms, starting in the early 2000s, the organisational and legal parameters were moved again. Driving up performance became the responsibility of central government, with national policing plans being prepared and put into place alongside new national standards agencies authorised to intervene where police forces were failing to meet newly established targets. The first step into this direction was taken with the Local Government Act 1999, which introduced Best Value Performance Indicators (BVPIs) and institutionalised performance league tables across the public sector. Effectively, applied to the police service, this signalled the nationalisation of policing (Savage, 2007). A few years later, the Police Reform Act 2002 formally placed the responsibility for driving up performance in the police service with central government. In turn, this led to the setting up of the National Policing Improvement Agency (NPIA) in 2007 charged with defining, measuring and training for improving policing in the UK.

2.1 Performance targets

From 2004/05 and until 2007/08, policing performance was measured using the Policing Performance Assessment Framework (PPAF). The PPAF introduced user satisfaction measures in April 2004, building on and improving best value performance indicators previously used to measure police performance. Whereas the old measures largely focussed on user perceptions at the initial stages of a police action, the new measures sought to record perceptions at later stages of the process.

These now required police forces to record the level of overall satisfaction with the police among the public who had used police services. User satisfaction was specifically to be measured with respect to the public's experience of making contact with the police, the action that police took in response to the contact, the information that users (in particular, victims of crime) received during police investigations, and the police officers' and civilian staff's treatment of users.

The new Framework also stipulated that police forces' performance was to be measured in terms of the general public's confidence in local policing, that is, including both users and non-users of the police service. For this purpose, the British Crime Survey (BCS[2]), the most authoritative survey of victimisation in England and Wales, was to be analysed annually to determine the percentage of respondents who thought their local police did a "good or excellent job" in policing the area. A standardised approach and method of performance measurement across police forces had thus been introduced.

The Framework was soon revised and, from 2008/09, replaced with the new Assessments of Policing and Community Safety framework, which was, in turn, soon renamed Analysis of Policing and Community Safety (APACS). APACS granted a greater role in police performance assessment to the HMIC and the local police authorities rather than the Home Office. The Home Office continues to publish the annual performance data for police forces and has retained measuring public confidence as the top-down performance indicator for the police service. However, this indicator was no longer to be measured by analysing the BCS. Instead it became the local police forces' responsibility to put into place appropriate monitoring systems (in effect, opinion surveys) that would allow the performance indicator to be measured locally.

2.2 Performance targets and perverse effects

Performance targets can have unintended, perverse effects, in particular as they encourage individuals or organisations whose performance is monitored to develop strategies that help meet targets often at the expense of operational and practical objectives. This type of behavioural response, also referred to as gaming (Hood, 2006), maintains the individual's and the organisation's status vis-à-vis the supervising agent while preserving legitimacy vis-à-vis the service user.

In the view of the former Chief Constable of Thames Valley Police, Peter Neyroud, the use of BCS-derived national measures of crime in defining crime reduction targets for Crime and Disorder Reduction Partnerships (CDRP) caused police forces to engage in 'gaming'. CDRP had been set up by police forces, local councils, health authorities, the probation service and residents and business representatives in response to the 1998 Crime and Disorder Act, charged with coordinating efforts to reduce crime and disorder in local areas. But rather than enhancing the quality of policing that should have been guided by local priorities, it undermined it (Neyroud, 2007, p.218).

[2] For more details, see Section 3.1.

Hallam (2000, p.92) argued, more generally, that centrally-set objectives and performance targets led officers to focus on "crimes that gave the greatest yield in detections, such as domestic violence or violence on the street" rather than those that were most severe or of greatest public concern. There is certainly anecdotal evidence that some crimes or disturbances, such as complaints about noisy neighbours, are reported less frequently to the police who are known to respond only reluctantly to calls made in relation to 'petty' crimes. Unless they involve violence and their perpetrators are persistent offenders, the police do not typically perceive neighbourhood disputes as central to their policing role. A recent example of this narrowing of police responsibilities was the decision, in April 2007, to no longer charge the police with investigating cases of debit or credit card fraud. Following a change in the law, this is now the responsibility of the affected banks (Poulter, 2007). The public is thus increasingly directed towards other bodies that take on quasi-policing functions, such as private service providers[3] and, in the case of public noise, local councils.

One reason for the shift in the focus of local policing towards crimes that offered the best chance of detection is the increased administrative burden on police officers who, as a result, became more selective about the types of crime they investigate. Although consistent longitudinal data measuring the share of administrative tasks among a police officer's workload appear to be unavailable, in the mid-90s, the Conservative Minister of State for the Home Office, David McLean reported in reply to a parliamentary question that "the police are required to complete an average of five forms in order to prosecute an adult offender" (Hansard, 10 December 1996). A decade later, the then Labour Minister of State for the Home Office, Tony McNulty, admitted that, in each of the previous four financial years, police officers had spent, on average, around 20 per cent of their time on "paperwork", although the average percentages were a little lower for patrol officers (between 16 per cent and 19 per cent) (Hansard, 10 December 2007). Depending on one's political position, this was either seen as plainly too much or as, expressed somewhat more leniently, merely leaving scope for reduction. In reality, it may be rather difficult to benchmark an "appropriate" amount of time that police officers (or others) should spend on administrative tasks.

2.3 Police Resources and public opinion

Efficiency savings, which had been at the centre of police reform initiatives since the 1980s and more so from the mid-1990s, have sought to increase performance without necessarily also increasing resources (most recently, see Home Office, 2009). Police reforms tried to take the effect of police funding out of the performance equation. Despite these efforts, total gross police revenue expenditure continued to rise – from £8,578 million in 1996–97 to £12,015 million in 2006–07, a real terms increase of 40% (£3,437 million) (HoC, 2007)[4]. Precept on council tax accounted for between 13.0 per cent and 21.5 per cent of total police funding in 1997–98 and 2006–07 respectively.[5] The remainder was made up of the various components of the central

[3] Increasing also the onus on the individual to seek insurance against risk or damage.
[4] Our analyses focused on the period ending with 2001/02 or 2002/03, as these were the years for which data were available. Total expenditures for those years came to £9,968 million in 2001/02 and £10,130 million in 2002/03 (ibid.).
[5] 13.2% and 12.2% respectively in 2001/02 and 2002/03.

government Police Grant, which is estimated for each police force on the basis of projected resident population. Adjustments are made to the Grant to account for variations in the socio-economic characteristics of police force areas and for differences in the costs of provision between areas.

Not all the increased funding resulted in enlargements to the police forces, although the number of officers rose by 11% from 1997 to 2006, equivalent to 14,233 new officers (HoC, 2007). Police Community Support Officers, introduced in 2003, comprised about 5% of the total police service strength in 2006. Additional employment of civilian staff increased from 53,000 to 86,000 between 1997 and 2007 (HoC, 2007).

In 2007, the Home Affairs committee expressed concern that the increase in police funding and staffing appeared not to be reflected in a concurrent decrease in BCS-measured crime (HoC, 2007). Although BCS data suggested a fall in the number of all crimes committed against private households by around 35 per cent between 1997 and 2005/06, this was mainly due to a steep decline in burglaries and vehicle thefts, which is typically attributed to improved security rather than higher detection rates (Solomon et al., 2007). Other crimes, such as violent crimes, increased during at least part of this time period. Referring to an internal study by the Prime Minister's Strategy Unit (PMSU), Solomon et al. (2007, p. 23) note that increases in spending on the police "appear unrelated to changes in productivity" and that "80 per cent of the reduction in the official crime rate since 1997 was the result of economic, not criminal justice, factors".

Public opinion moved in line with these changes in the prevalence of BCS-measured crimes, as, between 2000 and 2005/6, the percentage of people worried about crimes fell from 19 per cent to 13 per cent with respect to burglaries, 22 per cent to 14 per cent with respect to car crime and 25 per cent to 17 per cent with respect to violent crime (HoC, 2007).

3 Research Issues

This sequence of national police reforms and their rationales and expected and possibly unexpected outcomes raise questions as to their effect on the perceptions and the experiences of policing among the public. This study explored two of these, asking:

- As police targets de-facto emphasised and rewarded policing of 'high yield' crimes, how did the public in general and victims of crime in particular respond? Specifically, how did this shift in the focus of policing effect the reporting of those crimes that the police no longer considered priority crimes within their remit?
- As national policy focussed more firmly on improving the police forces' efficiency, how did changes in the funding of police forces, largely in response to population changes and local authorities' ability to raise council tax revenues, affect public perceptions of the quality of the local police service?

3.1 The data

To explore these issues, we analysed several years of British Crime Survey (BCS) data. The BCS is a large-scale survey of the public, first conducted in 1982 and initially repeated every two years, surveying a representative sample of people aged 16 or older and living in private households. The survey asks whether respondents have been victims of crime and how they rate the police. Although its title suggests coverage of Great Britain, the BCS, in fact, only surveys individuals and crimes committed in England and Wales, but not Scotland. Since 2000/1 it has been carried out annually. Both victims and non-victims are interviewed. Victims of crime are specifically asked about the crime or crimes committed against them in the previous 12 months. Sample sizes increased substantially from a little less than 11,000 in 1982 to more than 45,000 in 2004/5. The survey asks over 200 questions gathering information on the type of crime and victimisation; whether or not victims reported crimes to the police; their reasons for non-reporting; and the types of crime that respondents fear most.

Included in the BCS are also identifiers of the Police Force Areas (PFAs) in which the survey respondents lived. In this study, the PFAs were used to append further data to the BCS that described the police forces' staffing levels, ethnic composition and revenue (that is, nationally allocated Police Grants). With the help of census data, the size of the police forces relative to the population they served was estimated. Changes in absolute and relative sizes, and in revenue were also estimated. These data were only available at PFA level from 1997, which restricted the scope of this study to more recent years. Moreover, it had been hoped that further information might be available, including, for instance, the police forces' staff training activities and expenditures or allocation of police time to administrative or on-the-beat tasks. Unfortunately, none of this information could be obtained as it is not collected centrally nor in a uniform and easily accessible format by individual police forces.

4 Analysis and Results

Despite these limitations, our analyses combined a range of police force-related administrative data and the BCS, using both the victim and non-victim individual response data, and the case-level datasets of reported crimes. Occasionally, variables describing respondents were appended to case-level data, or variables derived from the case-level datasets were appended to the individual response data to add context. Our analysis methods included basic descriptive statistical methods and logistic regression analyses, which were conducted in SPSS. Throughout, weighted BCS data were used. Some of our analyses required the combining of several years of BCS data. Where this was the case, new weights were estimated to account for the effect of combining datasets of different size and to ensure that similar weighting principles applied to each year of survey data.

4.1 Crime and Crime Reporting since the late 1980s

Burglaries, vehicle theft and damage, and violent crime are among the most prevalent offences in England and Wales, contributing about over 60 per cent[6] of all crimes

[6] Seven per cent, 32 per cent and 23 per cent respectively.

reported in the BCS in 2005/6 (Jansson, not dated). They have also frequently been the focus of national police reviews and the setting of policing targets. For the same reasons, our analysis of the connection between police investigations and the public's reporting of crime also focussed on burglary, vehicle-related and violent crimes.

In the early years of the BCS, vehicle crime accounted for about 40 per cent and, thus, the majority share of the three crimes committed against (and reported by) BCS respondents. After the year 2000, however, violent crime increased markedly and accounted for almost 50 per cent of the three types of crimes in 2005/6 (Figure 1 about here). All the while, burglaries remained the crimes least frequently reported throughout the 1990s and into the 2000s.

As violent crime increased relative to other crimes in the early years of the new millennium, the police became more likely to know about these crimes, typically because victims reported incidents and, less likely, because police officers witnessed the crime taking place (Figure 2 about here). The opposite was the case for burglaries and vehicle crimes. Here the proportion of burglaries and vehicle-related crimes that BCS respondents said the police knew about (mainly because the victim had reported them to the police) declined steeply during the 1990s, remaining steady thereafter. Over time, the trends in reporting crimes to the police approximately followed the trends in their prevalence: the proportion of victims of crimes reporting these to the police increased for crimes that became relatively more frequent, but decreased for crimes that became less frequent. Despite the marked rise in their share of crimes since the early 2000s, however, violent crimes remained less likely to be reported to the police than burglaries or vehicle crimes.

Crimes do or do not get reported to the police for a range of reasons: the severity of a crime may mediate decisions as to whether to report an incident or not, or the desire or need for compensation (e.g. when making an insurance claim). However, there may also be other 'institutional' reasons for the reporting and non-reporting of crimes. Just as legal changes have directed the public away from the police as the body responsible for investigating certain crimes, such as the aforementioned credit card fraud, police 'gaming' channels their resources and attention away from some and towards other criminal acts. It may also relay to the public the message that the police no longer judge particular crimes to be sufficiently 'severe' to warrant investigating, thus at least implicitly encouraging the under-reporting of such crimes. The recent Flanaghan Review into policing in the UK appeared to anticipate a narrowing of the police remit when it recommended that the 'severity' of a crime inform the focus of future policing strategies (Flanagan, 2008).

BCS data provide evidence of changing police behaviour in attending crime scenes and follow-up investigations. Since the 1990s, police response has declined, with victims increasingly reporting that they had to wait for the police to attend to a crime (Figure 3 about here). Moreover, victims reported changes in police behaviour following the reporting of a crime. In the early 1990s, between two and eight percent of incidents reported to the police resulted, in the view of the victim, in the police taking no further action. This increased only slightly for burglaries and violent crimes (to five and seven percent respectively by 2005/06), but more steeply for vehicle crimes, peaking at 17 percent in 2004/05, before dropping back to 15 percent in 2005/06 (Figure 4 about here).

Crimes that are reported and crimes that are not

We used data from the BCS to explore if changes in reported police responses, in particular, the perceived absence of a full investigation of a crime, affected subsequent reporting of crime. This involved comparing across PFAs the differences in the rates of crimes that BCS participants had reported to the police and the participants' perceptions of the level of police investigation in the previous survey year[7]. By adding lagged data to the BCS and comparing responses from different years, we simulated a panel or time series of events to test if they were connected. It assumed that victims of crime were, at least intuitively, aware of the typical previous years' response by the police to the type of crime that the victim had suffered. This is a reasonable assumption insofar as our analysis focused on variations between PFAs and, hence, location-specific experiences.

The analysis also took into account other potentially confounding factors. These included the type of area in which the victim lived (and where, typically, the crime had been committed), the size of the police force (absolute size and estimated as per head of population), the police forces' Police Grants (per head of population and as a percentage change since 1997[8]), and the characteristics of the victim.

We focussed the analysis on the reporting of vehicle crimes and burglaries, that is, the two crimes for which reporting declined during the 1990s, before steadying in the 2000s. Unfortunately, at PFA level, there were too few reported cases of vehicle crimes that the victims said had not been fully investigated in order to focus the analysis on that crime alone.

Logistic regression analysis[9] was conducted to determine the 'drivers' of reporting of these crimes for three consecutive survey years: 2000, 2001/2 and 2002/3. These three years saw a continued rise in the proportion of crimes that victims said the police had not dealt with. The absence of information about police resources prior to 1996 also required us to limit our analysis to more recent years.

In the analysis, we experimented with data pertaining to any one of the BCS years since 1998, for which it was possible to determine the percentage of victims who reported the crime they had experienced had not been further investigated. The years were also selected on the basis that they would have to be sufficiently close to the principal survey year that an effect could still be reasonably anticipated and explained.

In the end, the analysis provided some, but no consistent evidence of victims' descriptions of the police's commitment to investigating crimes in the past affecting the current reporting of crime. Only in the year 2001/2 was the reporting of crime to the police linked with the police's investigating crime in the previous year or years (Table 1 about here). In that year, there was a statistically strong, but numerically small inverse effect of the police's investigating crime in 1998 on the reporting of the police. The lag was, therefore, over two years rather than just the anticipated single

[7] Because the BCS has only recently been undertaken annually, some survey years were, in fact, two years apart.
[8] The first year for which PFA-level grant data were available.
[9] Forward step-wise analysis.

year. The percentage of victims reporting that the crime they had experienced and reported had never been fully investigated ranged from less than one per cent in three PFAs to over five per cent in a further three PFAs. The mean was 2.8 per cent, the median was 3.1 per cent.

In each year, burglaries were more likely to be reported than vehicle-related crimes. Although this is consistent with the hypothesis that reduced investigative efforts by the police reduces reporting of the same type of crime (here: vehicle crimes) in later years, the absence of a statistically significant effect of the 'reporting' variable would not support such a conclusion. Other factors were likely to have caused these differences in reporting, but we cannot tell what they might be from the available data.

The remaining factors that influenced victims' reporting of crime varied year on year. In 2000, crimes were less likely to be reported to the police in police force areas that were among the top third of forces in terms of increases in police grants between 1997 and 2000. PFAs in the top third of the distribution had seen their Police Grants increase by between 7.2 per cent and 10 per cent between 1997/98 and 1999/2000.

In 2001/2, in addition to the reported non-investigation of crimes by the police in 1998 and the type of crime reported, the victim's sex affected reporting: men were less likely to report crimes than women. In 2002/3, finally, in addition to burglaries, crimes were more likely to be reported if victims considered them to have been racially motivated, but less likely to be reported if they had taken place within London's Metropolitan Police Force area.

5.2 Public Perceptions of Police Force(Area)s

The second objective in this study was to explore if police funding affected public perceptions of police performance, again using the BCS data. As noted earlier, the BCS has been used to define targets for Crime and Disorder Reduction Partnerships, which specified the rate of reduction in crimes measured by the BCS that these partnership ought to achieve (Home Office, 2004). The use of the "good job" opinion variable is supported by analyses of police efficiency, which has found that technical efficiency (estimated as the relationship between the number of crimes in a police force area and the total offences cleared up) has a statistically significant affect on the public's perception that the police were doing an excellent or good job. This finding led the authors of that study to conclude that "the public has a reasonably accurate view of the efficiency of police forces as it relates to domains such as reducing crime or investigating crime" (Drake and Simper, 2005, p. 480).

More so than the reporting of crime, public perceptions of the effectiveness of policing vary strongly with socio-economic and socio-demographic characteristics of the population (Nicholas and Walker, 2004; Duffy et al., 2007). The second phase of our study explored whether, after controlling for these factors, it would be possible to identify police forces that receive particularly high public ratings. Moreover, we wanted to identify additional drivers of these ratings and explore whether they varied during different police reform phases.

To do so, we combined BCS data from 1988 to 2003/4 inclusive. Our analyses used all combined data, but also data only pertaining to three time periods that approximated the key police reform phases: the early- and mid-1990s (1988-1996); the late 1990s and early 2000s (1998-2001/2), and the early- to mid-2000s (2002/3-2003/4). During this time, local policing was generally rated fairly highly. Over the entire period, 78.8 per cent of the population of England and Wales felt that the police were going "a good job" in their local areas. This compared to 82.4 per cent between 1988 and 1996, 78.1 per cent between 1998 and 2001/2, and 76.5 per cent between 2002/3 and 2003/4.

We again used logistic regression and found drivers of perceptions of local police effectiveness that were very similar across the three observation periods. Men and those below the age of 25 were least likely to have a positive view of local policing, as did people not in full-time employment, living in lower status and inner city areas, those worried about walking in the dark, and those who had been victims of crime (Table 2 about here). By contrast, positive perceptions of local policing were greater among minority ethnic populations and respondents living in mature and prosperous areas.

Among the range of variables describing police forces (rather than the areas and population they served) that we would have liked to append to the datasets, only information about staffing levels was available for the various survey years. We did not find any evidence of the number or gender of ranked police officers affecting public perceptions of police force effectiveness. However, perception varied with the number of police officers relative to the total PFA population, that is, the population-to-police officer ratio.

Between 1988 and 2003/4, the population-to-officer ratio across all 43 police forces in England and Wales decreased by about five per cent. In other words, police forces grew faster - or declined less – than the average PFA populations, but there was considerable variation between police forces, ranging from -26 per cent (indicating fewer residents in the PFA per police officer) to + 11 per cent (more PFA residents per police officer). We used census data from 1991 and 2001, whichever the closer, to estimate the ratios for the respective BCS years. Because the size of PFA populations would have changed over time, the ratios should only be read as approximations. In order to reduce the likely effect of deviation of actual ratio from our estimates on our analysis, the ratios were divided into four percentiles (i.e. quartiles) of approximately equal number of cases. Nominal ratios and changes in these ratios were then included in the regression analysis. An increase in the population-to-officer ratio indicated a greater number of residents that each individual police officer would serve. In contrast, a decrease in the ratio suggested that each police officer would, over time, serve fewer residents. Put differently, in the first case, the same number of residents would have fewer officers policing their area, whereas in the latter case, they would have more officers policing their area.

The final regression model showed that, compared with the PFA in the lowest quartile (that is, the PFA with the greatest decrease in the population-to-officer ratio), residents in the PFA in the highest quartile (that is, the PFA with the largest population-to-officer increase) were around one-fifth more likely to judge the local police to be doing a “good job” (Table 3 about here). In other words, a reduction in

the number police officers per population was associated with a more positive assessment of local policing.

This relationship held for the periods 1988 to 1996 and 1998 to 2001/2, but it was subsequently reversed during 2002/3 to 2003/4. During this latter period, an increase in the population-police officer ratio was associated with declining odds of a public endorsement of local policing efforts. Again comparing the highest with the lowest quartile, the odds of local populations judging the police to be doing a "good job" were reduced by around one-tenth. However, a similar relationship could not be found in comparisons of other quartiles, which, with the exception of the most recent years, did not produce statistically significantly different odds. Overall, the evidence nevertheless suggested that the public's assessment of local policing was, indeed, sensitive to staffing levels, but not necessarily in the direction that is often assumed. The public occasionally call for more police and greater visibility of policing, but the evidence shows that fewer police and, hence, potentially less visibility do not inevitably incur less public support. It might indeed have been greater efficiency within relatively shrinking police forces, as suggested by Drake and Simper (2005), that made the public judge these forces as doing a "good job" in their local areas.[10]

6 Discussion and Conclusion

By combining BCS survey data with a range of contextual data, derived from official police statistics and the national population census, as well as using ONS area indicators derived from a range of sources, it was possible to relate public perceptions of local policing to changes in police resources. However, so far, it is clear that many of the results are counter-intuitive or inconclusive.

We were able to show that public perceptions of the police were not only associated with personal characteristics (and possibly unmeasured attitudinal differences), but also with the way in which the forces' relative size in the population had changed in recent years. Police forces shrinking in relative size were typically more likely to be seen to be doing a "good job" in local areas. This result holds even after controlling for population and other area characteristics, which also inform Police Grant allocations. It is therefore unlikely that this association only reflects shifts over time in resource allocation to more 'problematic' and possibly less 'police-friendly' areas. However, the data for more recent years also suggested that these associations might also change.

Our analysis of the link between accounts of police investigations (or lack of it) and subsequent reporting of crime was inconclusive: we found a statistical association for crimes reported in 2001/2. The reasons are not entirely clear. It is unlikely that the precise nature or severity of the reported or unreported crimes were so markedly different in the other years that this obscured the link. Likewise, it is unlikely that the crimes of 2001/2 (especially those not reported) were so different from crimes in the other years to affect the link. Instead, it is more likely that victims of crime have come to accept changes in police behaviour and correspondingly changed their

[10] We repeated the analysis after controlling for individual PFAs. This analysis confirmed the earlier results, albeit at reduced levels of statistical significance and emphasising more strongly the differences in public perceptions between the lowest and the second-highest quintiles.

expectations, but not behaviour. Thus, the year 1998 saw a dramatic increase in the wait reported by victims of crime, which continued to rise thereafter, albeit less steeply (Figure 3). Intriguingly, the proportion of victims who reported that they had to wait for the police to respond to a 999 call or other form of reporting, but who considered this wait "reasonable" also rose after 1996, and did so almost in line with the growing incidents of waits (not shown). The public were adapting their judgements (and perhaps even their expectations) to a changed reality of policing. Unfortunately, case numbers in BCS measuring wait and the assessment of that wait were too small to be included in our analyses. But we suggest these 'consumer attitudes' be studied more closely.

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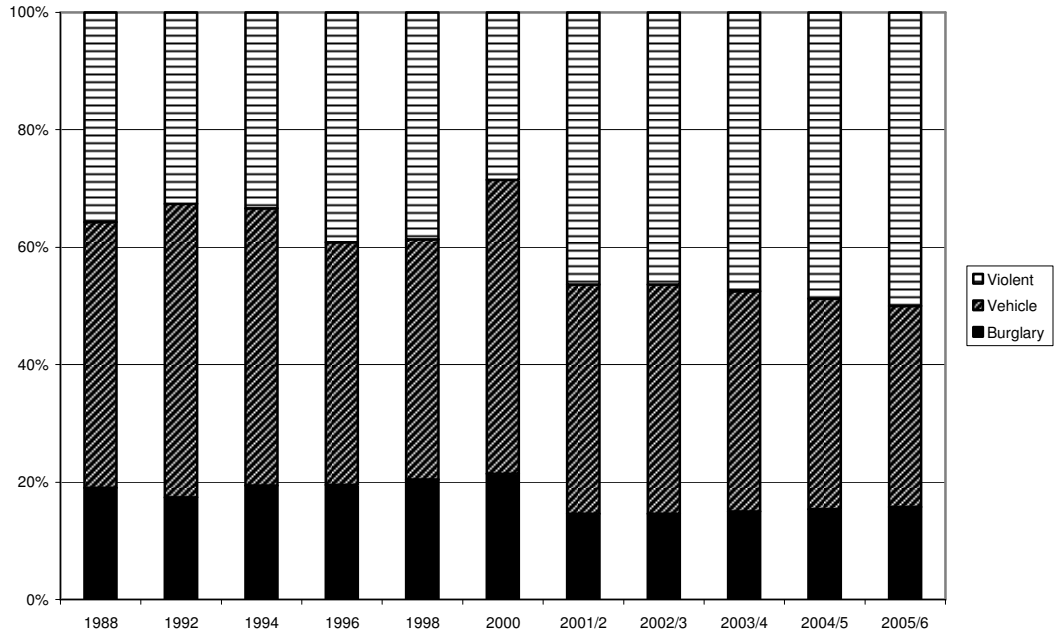
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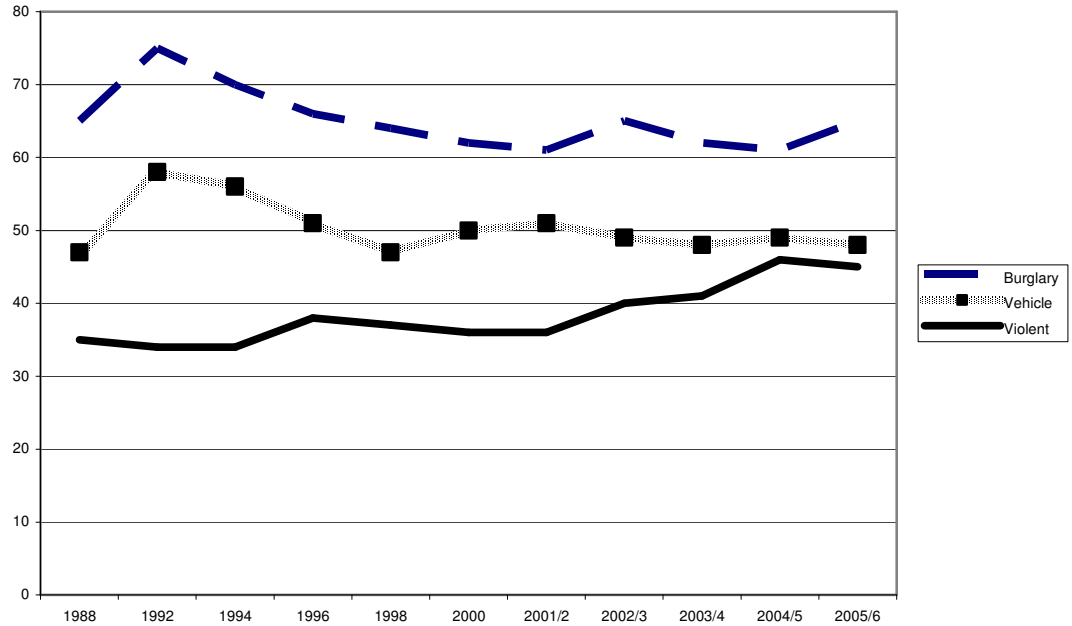
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Figure 1 Relative Frequency of Violent and Vehicle Crimes, and Burglaries Experienced by BCS Participants in Previous 12 Months (Year = BCS survey year)



Base: All violent and vehicle crimes, and burglaries reported in each BCS

Figure 2 Relative Frequency of Violent and Vehicle Crimes, and Burglaries Reported to the Police (Year = BCS survey year)



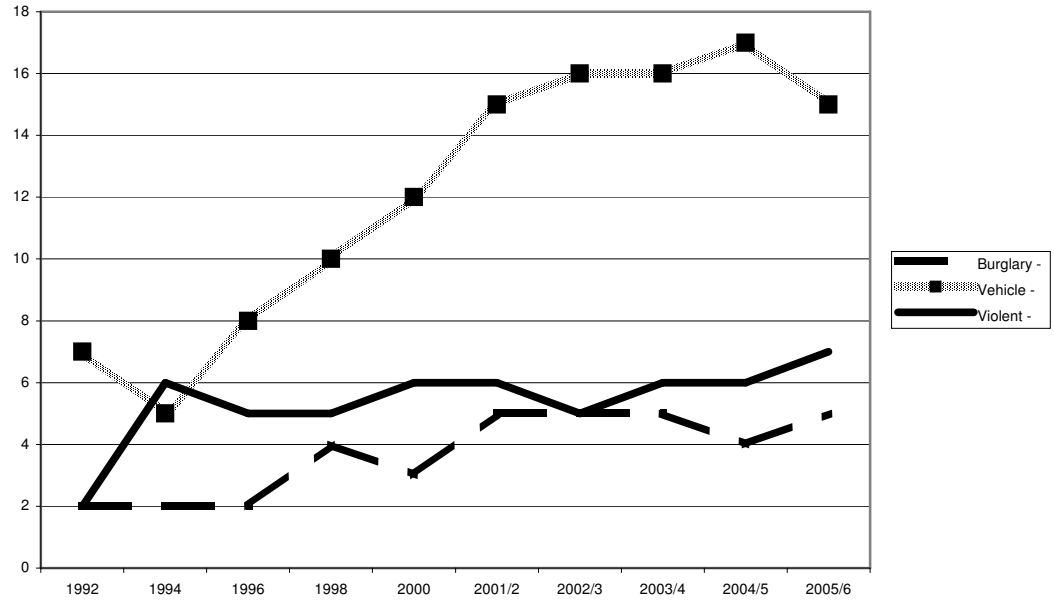
Base: All violent and vehicle crimes, and burglaries reported in each BCS.

Figure 3 Percentage of Crime Victims Who Reported They had to Wait for the Police to Attend to the Crime, by Violent and Vehicle Crimes, and Burglaries



Base: Violent and vehicle crime, and burglaries reported in each BCS and known to the police.

Figure 4 Percentage of Crime Victims Who Reported The Police Never Dealt with the Reported Crime, by Violent and Vehicle Crimes, and Burglaries



Base: Violent and vehicle crime, and burglaries reported in each BCS and known to the police.

Table 1 Best-fitting model of Odds of Police Getting to Know about a Vehicle Crime or Burglary

	B	S.E.	Sig.	Exp(B)
2000				
Type of crime: burglary	0.52	0.08	***	1.681
Change in Police Grant (97/98-99/00): lowest third			***	
Change in Police Grant (97/98-99/00): middle third	0.09	0.10		1.091
Change in Police Grant (97/98-99/00): top third	-0.24	0.09	***	0.785
Constant	0.09	0.08		1.094
Cox & Snell R Square	0.018			
Nagelkerke R Square	0.024			
2001/2				
Victims reporting police never investigated the crime (%)	-0.05	0.02	***	0.95
Sex: male	-0.27	0.08	***	0.76
Type of crime: burglary	0.36	0.09	***	1.44
Constant	0.35	0.08	***	1.42
Cox & Snell R Square	0.014			
Nagelkerke R Square	0.019			
2002/3				
Type of crime: burglary	0.62	0.09	***	1.86
Victims reporting crime was racially motivated (%)	2.64	1.03	***	14.07
Metropolitan Police Force	-0.22	0.11	**	0.80
Constant	0.01	0.05		1.01
Cox & Snell R Square	0.025			
Nagelkerke R Square	0.034			

Base: BCS-reported vehicle crimes and burglaries.
Note: 2002/3 only 20 cases were racecrim=1; hence the high odds (overall 3% of crimes reported as race crimes). 2001/2=22. 2000=11.
Stat sig: * 10% ** 5% ***1% level

Table 2 Best fitting logistic regression model for predicting perception that the police were "doing good job" in the local area (1988-2004/5)

	Odds	Sig
Sex: Female	1	
Male	0.71	***
Age Group: 16-24		
25-34	1.31	***
35-44	1.31	***
45-54	1.22	***
55-64	1.22	***
65+	1.46	***
Ethnicity: White	1	
Mixed Race	0.83	
Black	1.26	**
Asian	1.16	**
Other	1.12	
Employment: In work	1	
Unemployed	0.62	***
Retired	0.99	
Looking after the home	1.00	
Sick or disabled, full time education, other	0.94	
Victimisation (last 12 months): Victims	1	
Non-victims	1.53	***
Ward group: Suburbia, rural areas and rural fringes	1	
Industrial areas	0.69	***
Low status owner occupiers and middling Britain	0.81	***
Inner city estates and deprived city areas	0.69	***
Mature, established and prosperous areas	1.17	***
Metropolitan professionals and transient populations	1.27	***
Fear of crime (walking alone at night): Unafraid	1	
Afraid	0.53	***
Year of BCS: 1988	1	
1992	0.71	***
1996	0.73	***
1998	0.65	***
2000	0.53	***
2001/02	0.43	***
2002/03	0.43	***
2003/04	0.52	***
2004/05	0.53	***

Base: All BCS respondents.

Table 3 Logistic Regression Odds of the Changes in Population-to-Police Officer Ratios Affecting the Likelihood of the Public Perceiving the Police to do "a good job" in the Local Area

1988-2002/3			**1988-1996**			**1998-2001**			**2001/2-2002/3**		
Mean change	-5.0%			0.4%			2.5%			-2.5%	
	Odds	**Sig**		**Odds**	**Sig**		**Odds**	**Sig**		**Odds**	**Sig**
Up to –11%			Up to –3.5%		**	Up to –1%	0.00		Up to –3.1%	0.00	
-10% to –5%	1.15	***	-3.4% to 0%	1.00		0% to 2.7%	0.97		-3.2% to –1.6%	0.72	***
-4% to 1%	1.04		1% to 3.5%	1.05		2.8% to 5.8%	1.13	***	-1.5% to –0.6%	0.77	***
2%+	1.16	***	3.6% +	1.23	***	5.9% +	1.17	***	-0.5% +	0.88	**
N (unweighted)	226186			36798			67182			74410	

Note: Percentage ranges are quartiles of PFAs. The dependent variable is measured for individual BCS respondents. Odds greater than 1 indicate increased propensity to describe the police as doing a "good job"; odds below 1 indicate decreased propensity to describe the police as doing a "good job". Other variables held constant: gender, age, ethnicity and employment status of respondent; ONS ward characteristic; victim status; PFA.