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Solving Residential Burglary

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Police Research Group: Crime Detection and Prevention Series

The Home Office Police Research Group (PRG) was formed in 1992 to increase the influence of research and development in police policy and practice. The objectives are to sponsor and undertake research and development to improve and strengthen the police service and to identify and disseminate good policing practice.

The Crime Detection and Prevention Series follows on from the Crime Prevention Unit papers, a series which has been published by the Home Office since 1983. The recognition that effective crime strategies will often involve both crime prevention and crime investigation, however, has led to the scope of this series being broadened. This new series will present research material on both crime prevention and detection in a way which informs policy and practice throughout the service.

A parallel series of papers on resource management and organisational issues is also published by PRG, as is a periodical on policing research called 'Focus'.

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Foreword

This paper presents the findings of a study carried out as part of the Police Research Group's 'Police Operations against Crime' programme. Based on research carried out in the West Midlands Police, this report examines how the police investigate and solve residential burglary and indentifies ways in which detection rates could be increased, resources saved, and victim satisfaction improved.

The report's conclusions are directly relevant to the national key performance indicator on burglary, and should therefore attract a great deal of interest from forces. The recommendations have already been incorporated into ACPO's burglarly strategy, set out in volume 2 of the 'Tackling Crime Effectively' management handbook produced by ACPO Crime Committee, and those relating to the detection of in-progress burglaries are now being piloted in the West Midlands Police. The impact will be monitored and reported in a later PRG paper.

The practical implementations of this report also feature in PRG's 'burglary manual' for the police which draws together all the PRG work on residential burglary.

S W BOYS SMITH
Director of Police Policy
Home Office
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Executive summary

Purpose of the research

This study into how the police investigate and solve residential burglary was carried out in order to:

- identify ways of solving more residential burglaries, and
- maintain and, where possible, improve the service provided to burglary victims by the police.

The study was, therefore, concerned principally with:

- how human resources and time were allocated to cases;
- which activities and operations led to detections and were cost-effective, and which were less fruitful and consumed substantial amount of police resources;
- the effect of various police activities on the victims' view of the service provided.

To improve the effective use of resources, the activities that have the greatest impact on solving cases and recovering stolen property should be more widely employed, while ineffective activities should be scaled down or even eliminated, provided this would not seriously damage the victims' view of the force. Detection rate, staff time and victim satisfaction were used to measure effectiveness.

Methodology

Research was implemented in two divisions of the West Midlands Police Force. This is a large area with 750,000 people and variety of residential environments, from inner city to outer suburban. At the time of the research it was covered by 1,200 police officers, and a variety of investigative procedures and practices were employed.

A sample of 704 cases was drawn from the 5768 burglaries committed during the six months from March to September, 1994. This consisted of all burglaries detected by primary means and an 8% sample of undetected cases, weighted to reflect their incidence across the nine sub-divisions. Data were mainly collected using:

- three questionnaire surveys of police officers;
- interviews with burglary victims;
- 'intervisibility' surveys of burglary sites;
- police records and the 1991 Census.

Findings and recommendations

Of the residential burglaries studied, only 6% of the total number committed were solved through primary means, though a third will probably be eventually cleared up, largely through secondary detection. Only 7% of property stolen was recovered, and the loss of property was unrecoverable for half the victims who were uninsured. Although the results might look initially rather poor the police do well to achieve this level of performance in view of the scarcity of evidence in these cases. There is, however, scope to increase detections, save human resources, and improve victim satisfaction, principally by reallocating existing resources and altering the way certain tasks are carried out.

Most primary detections were attributable to activities carried out by the first officer at the scene. Almost half were due to catching offenders in the act, while witness evidence was responsible for most of the others. Some success resulted from further CID investigations, and rather less from forensic evidence[1]. Stolen property had limited use, almost exclusively as support evidence, while criminal modi operandi played little, if any, role in support investigations. Although screening of cases by the CID was generally working well, there was some scope to investigate additional promising cases, and exclude more of the ones with a poor chance of being solved.

Primary detection rates can be improved by:

- catching more offenders in the act, by responding to alerts more quickly and in greater numbers, particularly during weekday afternoons when many of the least successful responses to 'in progress' burglaries were made. This offers the greatest opportunity for boosting detections;
- introducing more formal crime screening, and improving the selection of cases for investigation;
- interviewing more neighbours at the crime scene, which would require little extra human resource;
- selectively expanding the cost-effective, further activities carried out by the CID.

There is potential to save resources by:

- curtailing CID visits to the burglary scene. These largely duplicated the work of the first officers at the scene, and had little impact on victim satisfaction;
- being more selective in requesting scenes of crime officer (SOCO) visits. SOCOs visited almost every burglary scene in order to collect the evidence used in the detection of a small but important subset of cases;

1 This research was carried out before the introduction and use of the national DNA database

- improving the allocation of resources to cases by more systematic screening procedures.

The victims of burglary were generally satisfied with the service provided by the police. On average, the police took 30 minutes to respond to alerts, and they spent an average of 30 minutes with the victim. Though predictably pleased when the culprit was caught or property recovered, they were less happy when there was a slower response to the burglary alert, and when the first officer attending seemed rude or uninterested or spent too little time with them. While additional visits did not appear to affect them, victims were often dissatisfied when there was no information on the progress or outcome of their case.

Victim satisfaction could be improved by:

- ensuring a response to non-urgent incidents within 30 minutes;
- more especially, spending at least 20 minutes, and preferably 30 minutes, at the scene with the victim;
- not appearing uninterested or rude; though infrequent, this, predictably, damaged the victim's view of the police;
- maintaining contact with victims, for instance, by letter or by telephone, in order to provide information on the progress or outcome of cases.

Burglary incidents offer an opportunity to the police to influence the public's perception of them. Handled well, they can enhance their image. It is, therefore, in the interests of the Service to make the most of their contact with victims, since care taken over this relationship will benefit both parties.

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1. Introduction

Residential burglary can be regarded as one of the most serious crimes, since, as well as being one of the more common forms of criminal behaviour, it also intrudes into the home and damages feelings of personal security, peace of mind and well-being. Because of this, it often has an impact on its victims, and others who fear burglary, that is out of proportion to the value of the property that is stolen. It is, therefore, important that residential burglary detection rates should be improved. As well as reducing the numbers of existing offenders at large, this should also serve to deter others contemplating burglary. Fewer burglaries should also ease public anxiety, and moderate home insurance costs which have risen sharply during the last decade.

The purpose of this research was to identify ways of improving burglary detection rates, while maintaining, and, where possible, improving the quality of service provided to victims by the police. It involved the study of police operations, the offenders, the victims and their perceptions, the burgled dwellings and the property stolen, and the residential environment. It was concerned with how the police allocate resources and time to the investigation of residential burglaries, and with assessing the relative contribution of proactive and reactive policing (Audit Commission, ACPO & HMIC, 1993) to their detection. The principal objective was to assess the scope for adjusting existing operational procedures in order to optimise human resource deployment and primary detection rates, without degrading the victim's perception of police effectiveness. The findings illustrate how police actions during the course of burglary investigations influence the victims' view of the service they provide and form the basis for recommending appropriate indicators for monitoring the quality of policing provision in terms of the service provided to victims.

2. Approach to the Study

Research was conducted into the burglaries that were committed in two divisions of the West Midlands Police Force, between March and September, 1994. The area was covered by nine police sub-divisions, in which a variety of investigative procedures and practices were used. It has a population of 750,000, spread over an area of 21,000 hectares in 290,000 households, and is policed by 1,200 officers. The area includes a major part of a large city and provides a variety of residential environments from inner-city to outer suburban. It includes areas susceptible to different types of burglary, with different types of victim, offering different degrees of cover, opportunity and ease of access to the burglar.

Surveys of police officers, a victim survey, and an 'intervisibility' survey of the incident site were conducted on a single sample of burglaries, so that the various aspects of the crimes and their investigation could be related on the basis of individual incidents. Complemented by police records, the relationships between burglar and burglary were also considered where the burglar's details were known. Enumeration district level census data were used to build profiles of the residential areas where the sample crimes were committed, and the areas where criminals live. The study excluded attempted burglaries since their characteristics are significantly different from burglaries in terms of reporting, available evidence and police investigation.

The surveys of police officers were used to collect details about the initial response and investigations at the burglary scene, any subsequent police visits to the burglary site and, once the burglary had been solved or filed, information on the investigations that were conducted. From the completed questionnaires, it was possible to understand how investigations develop and progress, and how the contributing factors that advance an investigation are sequenced. It was also possible to establish which factors set investigations in motion, the items of evidence that were critical for solving cases, and the operations that the police used to collect them. The survey of burglary victims provided information on the perceived effectiveness of the police response and actions and the effects of the burglary on the household. The 'intervisibility' survey was simultaneously conducted on the victim's residential environment in order to obtain measures of site vulnerability, visibility and accessibility.

Between March and September 1994 5,768 residential burglaries were committed in the survey area. A sample of 704 was selected for the study of police operations. This included all of the 256 primary detected cases that were detected prior to October 1994, and 448 (8%) randomly selected undetected cases, weighted to reflect their incidence across the nine sub-divisions[2]. The overall response rate for

2 The 8% sample was selected so that the number of undetected burglaries, while still representative, would approximately match the number of primary detections.

the questionnaires completed by police officers was 80%, providing 209 primary detected and 354 undetected burglaries. There is no evidence that systematic bias due to non-response affected sample representativeness.

A subset of burglary victims was randomly sampled from the 80% of detected and undetected cases from the officer surveys where data had been successfully collected. The objective was to obtain a representative sample of incidents with a full set of data from all three surveys. The response rate was 43%, providing a total of 200 victim interviews and intervisibility surveys. A sample of 294 offenders was obtained from the 209 primary detected burglaries. A number of offenders were caught more than once during the survey period, and the sample of offenders consisted of 251 separately named people. Details of their previous criminality, if any, their age and their home address, where it was known, were obtained from police records.

3. How burglaries are solved: the effectiveness of police operations

Residential burglaries accounted for 16% of all recorded crime, while their investigation consumed c.7% of all police human resources in the study area (West Midlands Police Activity Analysis, 1992-94); policing burglaries cost an estimated £3 million per annum. The survey of victims revealed that the burglary caused some disturbance, either emotional or physical, to the victim's life in 92% of incidents. It also had longer term effects on a majority of victims, particularly women, with levels of worry remaining high for at least 18 months after the burglary. These effects concerned the fear of another burglary that often resulted in greater security consciousness and nervousness. Nearly 30% of victims were so concerned by what had happened, and frightened by the risk of it happening again, that they wanted to move house to a less vulnerable area and dwelling.

Few of the residential burglaries considered in the study had been solved as a result of 'primary' investigation by the start of 1995; only 5.8%[3] were recorded as detected. The bulk remained and will remain unsolved. Although a further 25-30% will probably be cleared up as secondary detections[4] by Summer 1995, it is almost certain that at least 65% of these crimes overall will never be solved and that many of the criminals responsible for them will never be brought to justice. The record for the recovery of stolen property was worse, with stolen property recovered in only 7% of the burglaries examined in the study. Therefore, a victim was unlikely to see his or her property again if the offender managed to leave the scene of the crime without being caught and this loss was unrecoverable for the 48% of burglary victims who were uninsured. The total financial cost of burglaries over the six months, in terms of stolen property and household repairs, was estimated to be approximately £6 million.

The cost of burglaries, in both financial and emotional terms, makes their effective investigation essential. The main objective of this research was, therefore, to evaluate the effectiveness and efficiency of the police activities used to solve burglaries. In order to improve the effective use of resources, the activities that have the greatest impact on solving burglary cases and recovering stolen property should be more fully employed, while ineffective activities should be scaled down or even eliminated, provided this would not seriously damage the victim's view of the force. Detection rate, time spent on investigation and victim satisfaction were used to measure effectiveness.

3 By January 1995, the number of recorded primary detections had risen to 340. This principally reflected delays in recording detections onto the police database. The profile of detection methods were little different from the survey sample of 256, although detections from forensic evidence were slightly under-represented.

4 The number of secondary detections that are obtained depends on the use of TICs and prison write offs. The number of TICs has declined over recent years due to offenders being less willing to accept crimes; in all but one sub-division prison write-offs were the main tool for obtaining secondary detections. The ratio of primary:secondary detections may alter if sub-divisions change their policy towards prison visits or offenders become less inclined to have burglaries written off.

The burglary investigation process

The police respond to residential burglary in terms of six principal activities:

- the initial despatch of a police unit in response to the burglary alert, and investigation at the scene;
- visits by SOCOs who carry out forensic assessment at the bulk of burglary sites;
- screening by the Criminal Investigation Department (CID);
- following up evidence provided by witnesses;
- visits by CID officers to the burglary sites;
- other CID activities, including surveillance, targeting known offenders, tracing stolen property.

Detection methods

In the course of these activities, West Midlands Police used various methods to investigate and solve burglaries. They either caught the burglar 'in the act', or they collected evidence and information in order to identify the offender. Most burglaries were solved as a result of operations carried out in response to the burglary incident. A substantial minority of detections were the result of further CID activities. Only a few detections, however, were based on predicting either the offender's identity or the dwellings to be burgled. The following six methods were used:

Operations following the burglary

- The police can catch the offender in the act of committing the crime, leaving the crime scene or in a street near the victim's dwelling.
- Evidence provided by witnesses at the scene of the crime can lead to the identification of an offender. Suspect names and descriptions, vehicle descriptions, details of stolen property are the main types of data. Information can be supplied to the first officer at the scene by witnesses, and to CID during subsequent visits. Sometimes information is supplied after police visits to the scene.
- Forensic evidence or a distinctive modus operandi (MO) at the crime scene can lead to the identification of the offender, or assist in confirming his guilt.
- Carrying out surveillance of the places where burglars may sell stolen property in order to identify burglars and receivers and to block this means of disposal.

Other operations

- The use of crime pattern analysis, including the identification of repeat burglary,

to anticipate likely future burglary victims, and to carry out 'targeted patrolling' or surveillance in order to catch the burglar in the act.

- Carrying out surveillance of known burglars in order to catch them in the act.

In practice, many detections are the result of the interplay of a number of factors, rather than attributable to a single investigation method. Confirmation, for instance, that it is the offender who has been caught in a street in the vicinity of the victim's dwelling may be provided by identification of the stolen property he is carrying. Similarly forensic evidence may be used to confirm identification evidence provided by informers or by witnesses, while the identification of a suspect offender by an officer from a description provided by a witness to the crime may prompt a visit to the offender and the identification of stolen goods in his possession.

The principal methods and operations used in the primary detection of the burglaries in the sample are shown in Table 1.

Table 1: Principal methods and operations used to detect burglaries

Detection method	% of detections	Number
Offender caught at or near the scene	43	90
Questioning witnesses (victims and neighbours) at the scene	34	70
Collection of forensic evidence essential in detection	6	13
Subsequent CID investigation, based on information from local contacts (1%) and informants (4%)	5	11
Subsequent investigation (generally CID) involving surveillance (4%) and/or stop-checks (1%)	5	11
Arrested for another offence	3	7
Additional information discovered by the victim	3	6
Miscellaneous	1	1
Total detections at 30/9/94 (excl. non-response)	100	209

Various types of evidence, information and activities were used to solve the burglaries. It is striking that the majority of primary detections (77%) were due to either offenders being caught at or near the scene of the crime, or resulted from investigations based on evidence from witnesses at the crime scene. As a consequence detected burglaries were generally solved quickly. Relatively few detections (only 10%) were principally attributable to 'proactive' policing methods and operations.

The purpose here is to identify the activities, operations and residential environments in which these methods of investigation were most successfully employed, and how much time and effort was expended in carrying out these activities in order to achieve detections. This information forms the basis for recommendations to adjust existing operational practices so that more cases are solved.

The burglary alert and the initial response

Most, 75%, of burglary incidents were reported to the police following their discovery by victims often on their return to the dwelling or upon waking. Others were notified by neighbours, and sometimes by victims themselves, while in progress. In response to this alert, the control room despatched a police unit to attend the burglary, with all haste if the burglar was believed to be still there. This was normally the nearest, available patrol car, but occasionally it was a local beat officer or a detective. The person reporting the incident was questioned, and victims and often neighbours were interviewed at this, or at a later stage, if they were unavailable at the time. The dwelling was checked for evidence.

In general, one or two officers were despatched to the burglaries in the study sample. After receiving a request from the control room, they took an average of 30 minutes to attend the incident, and spent 30 minutes at the burglary, talking to the victim, and often their neighbours, and assessing the burglary site for forensic and other evidence. Once the victim had called the police for help, they expected them to arrive within the hour, and preferably within half an hour. Twenty-nine percent thought the police took too long, and the longer they took to get to the victim, the more the victims expressed dissatisfaction, irrespective of whether or not the case was solved. When they took over an hour to respond, 60% of respondents thought they had waited too long. The average response time viewed as adequate was 31 minutes, indicating that the police response and the public expectation of that response are broadly in line. However, where the police were viewed as responding too slowly, there was a large discrepancy between the average, actual response time of 65 minutes and the average expected time of 17 minutes. While there might be some exaggeration on the part of dissatisfied victims, there appears to be a desire among burglary victims for a response within 30 minutes.

Officers spent more time, 53 minutes on average, and collected additional evidence at incidents which were subsequently detected. They spent an average of 29 minutes at burglaries which would remain unsolved. While at the scene of the crime, 13% of the police units had to leave to attend to another more pressing alert. Investigations shortened in this way were less likely to be detected, even though officers were just as likely to have interviewed neighbours and obtained information from them. Fewer investigations were cut short where there was an indication that available evidence would lead to detection.

Catching the offender in the act

Forty three percent of all primary detections result from the offender being caught at or near the scene. However, the findings indicate that the incidents where offenders were successfully caught in the act represent a minority, only 10%, of the burglaries reported as 'in progress'[5]. Therefore, there appears to be potential to significantly enhance primary detections by catching more burglars in the act since 90% of the burglars observed got clean away, and only 3% of these were subsequently detected by other means. To fully exploit this potential, however, would require sufficient officers to ensure a quick police response and, where necessary, a search of the area.

Successfully catching offenders at or near the scene depended on:

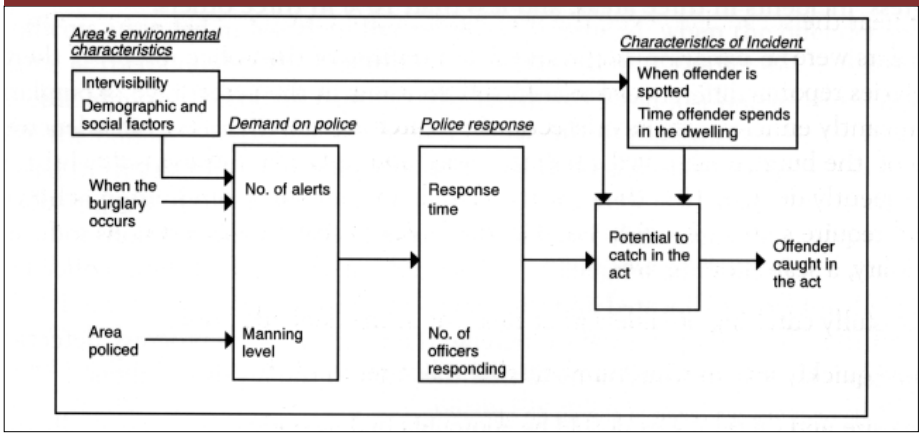
- how quickly and in what numbers the police responded;
- the size and crime levels of the areas officers had to police;
- offender behaviour including:
  - the length of time the offender spent in the victimised dwelling;
  - the stage of the burglary when the offender was spotted;
  - the time of day that the burglary was committed;
- characteristics of the residential environment.

The likelihood of capture was, therefore, dependent on the nature of the police response to an alert and the demands placed on the local police, but also the area's environmental characteristics and the characteristics of the incident itself, over which the police were unable to exercise any control (Figure 1).

Catching offenders immediately is very cost-effective, despite the extra officers that are typically despatched. The average time spent at all detected and undetected 'in-progress' incidents was 47 minutes. Since only 10% of them were detected, an average of 7.6 hours was spent at the scene per detected incident compared with 17.1 hours for all other detections. An improvement in the success rate would make caught in the act (CIA) detection even more economic.

5 Police control room logs were used to identify the burglaries that were coded for an immediate response. The immediate response burglaries where there were persons on or leaving the premises were identified as being reported 'in progress'. Not all the detections classified as 'caught in the act' are included in this sub-sample mainly due to the offender being detained before the burglary was reported or as a result of a police operation.

Figure 1: Factors affecting the police's ability to catch offenders in the act



Nature of the police response

A rapid response enabled burglars to be caught in the act. Where burglars escaped capture, police officers took twice as long to respond, averaging 10 minutes to arrive at the scene after receiving the alert from the control room[6], compared with only five minutes where offenders were caught. In 77% of incidents where burglars were caught, the police arrived at the scene in five minutes or less. However, a five minute response did not guarantee capture. Even with responses as quick as this, the majority of burglars, 85%, evaded capture. The arrest rate improved substantially when a quick response was combined with more than two officers attending. This resulted in 26% of offenders at 'in progress' scenes being captured. This would suggest that something like a quarter of the undetected 'in progress' burglaries or a further 1.5-2% of all burglaries could potentially be solved, as many as 115 additional detections.

Although the police response time and number of officers who attend are both important in the detection of 'in progress' burglaries, their relative importance does vary. When a burglary was reported 'in progress' and the offender was on the premises a quick response time was more important than the number of officers that attended. However, when the offender had just left the premises, the number of officers that attended became more important.

The findings across sub-divisions suggest that responses of five minutes or less are feasible, with some sub-divisions achieving much higher levels than others. Five

6 Therefore, all response times that are quoted exclude the time taken for the alert to be transferred via the control room to the police unit.

minute responses showed considerable variation, from as low as 15% to over 80%. Responses by over two officers also varied substantially, attending over 35% of 'in progress' incidents in three areas, and less than 10% in three others.

As a result of the variation in the speed and staffing of the police response, there were considerable differences between sub-divisions in the percentage of burglaries in progress that were caught in the act. In four of the sub-divisions, offenders were caught in the act in over 24% of all the burglaries reported 'in progress', whilst, in four others, less than 10% were caught. The most successful sub-division achieved 37%, and the least successful, 3%. The differences between sub-divisions indicate that successfully catching burglars in the act did not simply result from police units being advantageously located and thus able to arrive quickly at the scene. It suggests that there is a potential to increase the numbers of 'in progress' detections in the less successful sub-divisions so that they match the levels in others.

Rapid responses of this order should be attainable in many urban areas, especially those with higher population densities. They may not, however, be possible in rural areas.

Area size and crime levels

In the sub-division with the lowest capture rate for 'in progress' burglaries, officers had by far the largest area to cover, two and a half times that of the next largest sub-division. Their average response times were the slowest and the smallest average number of officers attended the incidents. In the sub-division with the next lowest CIA rate, the area covered by each officer was of average size. However, this sub-division's officers had the most crime, particularly burglary, to deal with. The sub-division with the highest CIA rate covers an average size area, had low to average levels of crime and burglary per officer and the fastest average response time (5.8 minutes). However, its crime levels and staff resources were comparable to most of the other sub-divisions, which fared less well.

It would appear that the numbers caught in the act could be raised by taking steps, for instance by adjusting staffing procedures for burglary responses, to ensure a quicker response to burglaries reported in progress. It is likely that, in the sub-division where officers had a much larger area to cover and the one where crime rates were higher, extra human resources or the redeployment of existing staff would be needed to achieve additional detections. In rural areas and certain rural-urban fringe areas, population distribution and other local geographical characteristics will mean that additional patrolling would have little if any impact on detection.

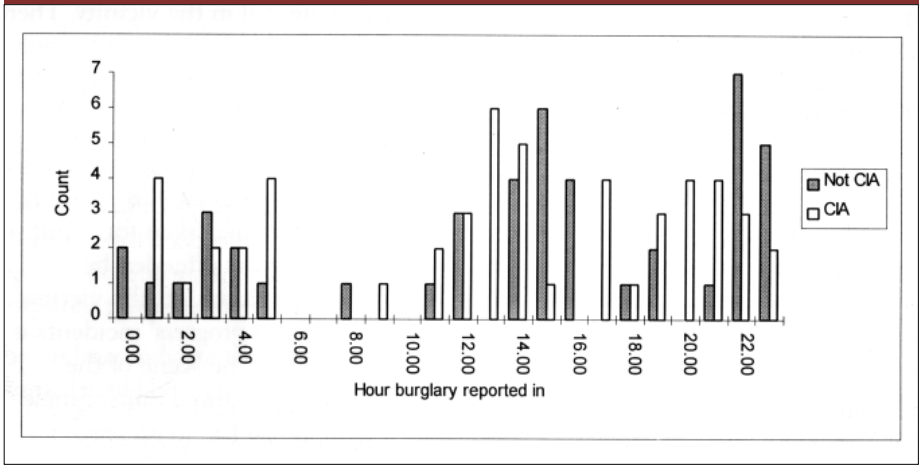
Offender behaviour

The number of officers and their attendance times were more important where the burglary alert was reported at a later stage in the burglary and when the offender spent less time in the victim's dwelling. About half the 'in progress' burglary alerts

were reported as the offender was leaving the premises, and these cases had a lower CIA rate (5%) than those where the witness reported the burglar breaking in or observed him at work (19%), though it improved five-fold to 24% when more than two officers attended in less than five minutes. In general, when the offender spent less time at the burglary, the time the police took to arrive, predictably, proved more crucial in the offender's capture. The offender visited just one room in about a fifth of the burglaries reported 'in progress'. In these circumstances, when the police attended in three minutes or less, all but one offender was caught while longer response times resulted in a capture rate of only 3%.

The timing of 'in progress' burglaries also has an important bearing on both their numbers and their successful detection, partly as a result of the demands placed on police resources at different times of the day and because of the cover that darkness provides for the criminal. Slightly more burglaries than expected were reported 'in progress' at night (00:00 to 06:00) and during the weekend, possibly reflecting the higher occupancy rates at these times. In contrast, there were fewer during the mornings (06:00 to 12:00). Fewer offenders were captured when burglaries were reported in progress during the middle of the night (22:00 to 01:00) and mid-afternoon (15:00 to 17:00) (Figure 2). The mid-afternoon and night capture rates were less than one-seventh of the rest of the day's, and appear to reflect periods when many burglaries are reported. During the afternoon period, both the number of officers attending and their response times are much worse than at other times. In contrast, low capture at night reflected the improved cover and poorer visibility rather than police staffing practices and response times.

Figure 2: Success of response to 'in progress' burglaries by time of day



Characteristics of residential environment

The characteristics of the residential environment influenced the numbers of burglaries reported 'in progress', and also affected their detection. The probability that a burglar is spotted at work depended on the ease with which the dwelling's approaches could be seen by neighbours, and by the socio-demographic profile of the neighbourhood which determined who was likely to be at home at different times of the day, and, therefore, likely to observe him. The ability to report an incident 'in progress' may well be hampered by not having a telephone in the dwelling, and it is notable that fewer burglars were reported at work where the victimised dwellings were located in the most deprived enumeration districts. Residents of these areas may also exhibit a reduced willingness to contact the police because of either intimidation or higher criminal activity within the total population.

Once a burglary was reported 'in progress', the offender was more likely to be caught in the more deprived areas where the burgled property was likely to be less secure than its neighbours' properties and have less cover around it, probably making it more likely that an offender was spotted. Improved responses to 'in progress' alerts are likely to particularly benefit victims in these areas by virtually ensuring the return of property that was commonly uninsured.

Practical implications

The findings indicate that there is a potential to augment the number of 'in progress' detections, principally by improving attendance times and ensuring that the police respond in sufficient numbers. Officers should aim to reach crime scenes in five minutes or less from receiving alerts from the control room, and, where possible, in three minutes, so that burglars leaving the crime scene can be intercepted. At least three officers should be despatched in order to maximise the chances of apprehending burglars who have left the crime site, but are still in the vicinity. There are two main ways of achieving this. The first is to prioritise responses to 'in progress' burglary alerts, whenever this is feasible, especially during the mid-afternoon period when there is a greater opportunity to catch more burglars in the act.

The second way, if other duties permit, would be the creation of more single-crewed units. These could provide 60% more cover, with a probable increase in operating costs of less than 10%. Additional cover should reduce the time taken for a unit to attend and this should increase the probability of capturing the offender, by improving the chances of a police presence before criminals have left the victims' dwellings or while they are still nearby. However, in most 'in progress' incidents it would still be necessary for three officers to be despatched to the scene of the burglary, even if they were operating as three separate single-crewed units. Single-crewed units would be particularly valuable at the peak hours for 'in progress'

burglary alerts, improving police cover when there is the greatest potential for burglars to be caught in the act.

An increase in the use of single-crewed units would have to take account of all the other demands placed upon officers as well as their safety, with lone officers potentially more vulnerable. While attending residential burglaries, there is a 45% chance that a single officer might be faced with more than one offender, though a second officer would be expected to arrive within minutes. Although a multiple officer unit can more easily co-ordinate their response at the scene of 'in progress' alerts, particularly in terms of the deployment of officers in the nearby streets, the evidence available indicates single-crewed units charged a similar number of offenders to multiple response units.

Given the advantages of interviewing neighbours, it is necessary to balance the benefits of single crewed units against the additional time needed to cover tasks where the presence of two or more officers would be helpful. Besides arriving at the scene more quickly, the benefits are that fewer interviews would be curtailed by other more urgent calls, officers would be unoccupied less often at the scene and extra officers could be more fruitfully engaged elsewhere. On the other hand, single officers would need more time to interview neighbours and comfort victims. There would be little change if two single-crewed units were always despatched to burglary incidents.

The behaviour of teams on arrival at the scene is likely to be critical when every minute counts, and unfortunately there is little measured information on this, especially when the burglar has left the premises. In order to determine the best way of dealing with burglaries reported 'in progress', it would be necessary to examine the success of the strategies employed by officers at the scenes of different burglaries.

Summary

A tenth of all burglaries were reported as they were taking place, but the police caught only a tenth of these offenders in the act, often in the better resourced sub-divisions. Most of those who escaped were not subsequently caught, but even when they were, this increased the police effort per case, and stolen property was generally not recovered. Many more burglars could be caught at or near the scene by despatching officers more quickly and in greater numbers. Given the dearth of evidence collected in the bulk of burglaries, this offers the greatest potential to improve detection, and enhance the victim's regard for the police, especially if more uninsured property is recovered.

The findings indicate that the number of burglaries solved and the amount of property returned could be increased by about a third. Catching more burglars in the act would require either more resources or some redeployment of personnel, particularly during the afternoons on weekdays when many of the least successful responses to 'in progress'

burglaries were made. The use of single-crewed units should be especially considered at these times. Home Office funded research is currently being carried out with the assistance of the West Midlands Force into the influence of staffing strengths and dispositions on the successful detection of 'in progress' burglaries.

Questioning the victim

The first officer/s attending questioned 94% of burglary victims. Some useful information was provided by 18% of victims. Although their evidence was the key factor in solving under 1% of the cases, this represents 19% of all primary detections. The different types of evidence obtained from victims, and their role in the investigations, are shown in Table 2. Where victims were not questioned, it was because they could not be contacted when the burglary was discovered, for instance if they were on holiday.

Table 2: Evidence provided by the victim

Type of evidence[7]	Total number of burglaries where this evidence was provided	% of cases that were detected	% of cases where witness evidence was the most important factor in the detection
Definite suspect	120	22	20
Suspect vehicle	35	11	11
Possible suspect	378	5	2.6
Further intelligence	378	1	0.5

On average, officers spent 26 minutes at the burgled dwelling, talking to the victim and assessing the burglary site. This constituted a total of 2350 hours of police time, and represented 58.7 hours of effort per burglary detected primarily through evidence provided by the victim, excluding travel time to and from the scene. However, police visits to the scene have an important bearing on how victims view the service provided by the police.

The victims' satisfaction with the service provided by the police partly depended on the length of time spent at the scene and the attending officer's manner. While 23% of respondents were dissatisfied when the police spent 20 minutes or less at the

7 The categories that were used to define the types of evidence were determined with police assistance. Further intelligence generally covered evidence that was not likely to be very significant in any investigations, for example very vague suspect descriptions.

scene, this fell to 8% when they stayed over twenty minutes, and to 2% when they were there for over 30 minutes. Increasing the level of service to at least 20 minutes for all burglary visits over the study period would have needed an extra 80 to 100 officer hours. This might be contemplated where there would be some other benefit, possibly a more detailed recording of MO or a fuller assessment of the site's potential for forensic evidence.

Since visits to the dwelling have an important bearing on victim satisfaction, as well as providing the witness evidence from the victim that will be critical for the success of a fifth of the burglary cases that are solved, this time can be regarded as a reasonable use of the police's resources. The initial visit to the dwelling, in addition, provides the opportunity to question neighbours, whose vigilance can supply the officers with good suspect or vehicle details that result in the subsequent solution of the case. It should be noted that approximately 15% of the detections from witnesses' evidence are failed 'in progress' burglaries, a quarter of which may be solved by the above recommendations concerning the response to 'in progress' burglary alerts.

Questioning the victim's neighbours

The first officer/s attending the burglary questioned the victim's neighbours in 52% of all burglaries. An average of two households were questioned. Although this had no effect on the victim's regard for the police, 22% of the cases where neighbours were contacted provided useful information, and 5% led to a detection. Information from neighbours was the main factor in the detection of 14% of the burglaries that were solved.

The quality of evidence

The amount and type of information gathered is shown in Table 3. Although officers spent an average of 8 minutes questioning neighbours, where useful information was obtained this rose to an average of 13 minutes. The better the quality of information collected, the longer it took. Details of a definite suspect, a suspect vehicle or a possible suspect took 20 minutes to collect, but were more likely to lead to cases being solved. In the cases where both neighbour and victim provided information, about 1.6% of all burglaries, there was a particularly high chance of a successful detection. While, in general, only 5% of cases where there was evidence from witnesses at the scene were solved, 17% of those where there was evidence from both the victim and a neighbour were successfully detected. This is because when both the victim and neighbour/s provided information it was generally of better quality than when only one or other of them gave any evidence.

Table 3: Evidence provided by neighbours			
Type of evidence	Total number of burglaries where this evidence was provided	% of cases that were detected	% of cases where witness evidence was the most important factor in the detection
Definite suspect	61	22.9	19.7
Suspect vehicle	118	7.6	6.8
Possible suspect	244	4.1	3.7
Further intelligence	237	1.3	0.4

Cost of questioning neighbours

Although the success rate of interviewing neighbours is low, it is comparatively cost-effective, since it does not normally involve a special journey to the crime scene. Only a little additional time is needed to question neighbours, an average of 8 minutes per case, where a single officer attends the scene, and no extra time when there are two or more officers. In general, no additional travel time was incurred. Since 45% of the units responding to burglaries where neighbours were questioned were single-crewed, the cost of interviewing neighbours was 180 hours, or an average of 6 hours per detection obtained through evidence from neighbours. Any recommendation to increase the proportion of single officer patrols might tend to be at the cost of the extra time needed to question neighbours, unless two such patrols or double-crewed patrols were despatched to the non-emergency incidents. However, even if all patrols were single-crewed, interviewing neighbours would still be comparatively cost-effective: for this study, it would have been an average of 13.3 hours per primary detection. This might be expected to rise if more burglars reported while committing the offence are caught in the act, since it was victims' neighbours who raised the alert in a majority of these cases.

Should more neighbours be interviewed?

Since police visits were made to almost all reported burglaries, there may be a potential to economically boost detections by questioning neighbours in the cases where this did not occur, particularly where the circumstances of the burglary match others where evidence from neighbours has proved most useful. There will be little potential for improved detection if the reason for not interviewing neighbours was because no one was at home, or because they would have been prevented from seeing anything by darkness or the layout of the houses, their gardens and other open spaces. If, on the other hand, neighbours were not contacted because fewer

officers responded to the burglary alert, or because the initial visit to the burglary scene was cut short by more pressing calls for assistance, then there may be some scope for improved detection.

In fact, neither the numbers of officers attending the burglary scene, nor the shortening of investigations to attend other incidents, affected whether or not neighbours were questioned, or the amount of useful information obtained from them. Although single officer patrols tended to question fewer neighbouring households at each incident they dealt with than multiple officer units, this had no effect on the amount or quality of information collected. These findings suggest no potential detections were missed because of the way burglary responses were crewed. They may also indicate that single-crewed patrols may be as effective as multiple officer patrols in dealing with burglary incidents.

However, many neighbours estimated to be at home when the burglaries occurred were not contacted, especially during the mornings (6am to mid-day), when only 28% were interviewed, and at night, when 13% were seen. In contrast, rather more, 45%, were contacted during the evenings (6pm to midnight), while even during the afternoons (mid-day to 6pm), when contact peaked at 74%, there were still many who were available but were not seen. This might suggest that officers missed an opportunity to gather incriminating evidence. Nevertheless, since only 13% of the neighbours questioned during the mornings provided useful information, it seems unlikely that much would be gained by extending questioning to more neighbours at this time.

In contrast the small number of neighbours questioned during the night (midnight to 6 a.m.) provided useful information in 40% of cases. Nevertheless, questioning the 87% not contacted at night is unlikely to be worthwhile since contact only took place at this hour because neighbours were perceived or known to be awake, and may well have discovered the burglary. As a result it is not recommended that officers should rouse neighbours during the 'small hours'! In general, contacting more neighbours in the busy afternoon period is likely to prove the most beneficial time. If it is assumed that half the people not questioned at times other than midnight to 6am were available for questioning, then an additional 11 detections might result if they were contacted.

Summary

Interviewing neighbours was a cost effective activity that led to the solution of an important number of cases. Although the gains from questioning more neighbours would be modest, in view of the small additional effort required, it is, nevertheless, sensible for officers to do this wherever possible, particularly in the afternoon period.

Visits by SOCOs

SOCOs attended the burglary site as soon as possible to collect forensic evidence. This was generally on the day the burglary was reported. If any forensic evidence was found, the local CID were notified and the evidence was tested. If a fingerprint was found, it was run through the computer to identify if a match with a known print existed.

SOCOs visited the site of about 90% of all the burglaries that were committed. However, forensic evidence was found and tested in only 9% (470) of the c.5200 burglaries that were visited and it proved useful in under 1%[8]. Although it was the main factor in 6% of the cases that were solved, in an additional 11% it was used as supporting evidence.

Three quarters of the forensic evidence found was fingerprints and the rest consisted of blood, footprints and fibres. Owing to the heavy workloads, there was a delay of between one and three months in testing fingerprint evidence. Blood was found at 1-2% of the burglary sites that were visited. This suggests that the survey area would provide c.130 samples per annum from burglaries for the DNA library. Since burglars commit multiple offences, these may offer the potential for as many as 5-10% of cases to be solved.

Evaluation of SOCO visits

The burglary victims estimated that, on average, SOCOs spent 20 minutes at each burglary. Excluding access and testing time, 1730 hours were used to obtain 12 detections, representing 144 hours per detection.

Although forensic evidence plays a significant role in investigation and detection, evidence was found in only a small number of burglaries that were visited. If the number of burglaries visited could be reduced whilst maintaining the useful evidence that is found, large savings could be made. A reduction in the number of burglary sites visited could help to eliminate the delays in forensic testing. This would lead to the earlier detention of offenders, and to the prevention of the extra burglaries they might commit.

There is no evidence to show that dispensing with many SOCO visits would lower the victim's regard for the service provided by the police[9]. Indeed, it actually damaged this regard in the small proportion of cases where victims regarded the SOCOs' visits as too short or their manner unsatisfactory. Five percent of the

8 It is possible that the number of burglaries where forensic evidence was found is an underestimate, because the figures were provided by detectives who may not have detailed forensic evidence in all the burglaries where it was found and tested.

9 This finding should be treated with caution because only a small number of victims were not visited.

victims considered that the SOCO's visit was too short, viewing officers as either incompetent, discourteous or unsympathetic and these people tended to be less satisfied with the overall service provided by the police.

Limiting SOCO visiting

All available crime scene information has been tested, but, other than for aggravated burglaries and 'caught in the act' cases, no reliable predictor of useful forensic evidence was found. While there may be evidence at some burglary sites which more detailed forensic examination might uncover, there could be substantial savings if first officers at the scene could be more selective rather than, as at present, routinely requesting a SOCO visit. Situations where officers specialise in burglary, such as the West Yorkshire "Crime Car" initiative, can result in greater selectivity in requesting SOCO visits (see Audit Commission, 1993 and Taylor & Hirst, 1995), though there is little precise information concerning the impact of reducing SOCO visits in this way on the collection of forensic evidence and detection rates. Recent work has examined police use of forensic science generally (eg Tilley & Ford, 1996; McCulloch, 1996) and ACPO/FSS have produced guidelines for good practice. Further useful work in this area could be carried out to identify predictors that could be reliably used to exclude the unpromising sites and enable SOCOs to focus on those more likely to provide valuable evidence.

CID Screening

If the offender was not caught in the act or shortly afterwards, responsibility for the investigation was generally transferred to the CID or to the burglary squad, in the case of the sub-divisions that had one. The CID's principal duties were to screen burglary cases and follow up witness evidence, make additional visits to the crime scene and conduct any further investigations and operations. The effectiveness of screening procedures, and therefore, the use of evidence provided by witnesses, are considered in section four.

Visits by CID to the crime scene

CID officers visited the scene of 36% of all burglaries and collected useful information from witnesses in 16% of these (or 6% of all burglaries). However, in all but 2.4% of these visits, the information obtained did not improve on that collected by the first officer at the scene, though when there was new information, it always resulted in a detection. The bulk of the visits to the scene made by the CID appear to be duplicated effort.

For the 'average' burglary, one or two detectives visited the burglary sites two weeks after the incident, and spent 22 minutes there. Excluding access time, which, given the fact that the visits were generally not by telephone appointment, is likely to be

greater per visit than for the response to the initial burglary alert, 1050 officer hours were used to obtain 8 detections, representing 131 hours per detection. This appears less cost-effective than other police activities.

Though the CID visit evoked a negative reaction from a minority of victims (6% of those visited) who thought the visit was too brief, in general, CID visits had little or no effect on the victim's perception of the service offered by the police.

Since CID visits had little impact on either detection rates or victim satisfaction, it would seem that savings could be made by reducing the number of visits to the scene. It would, however, be desirable to achieve this while retaining the subset where new information was collected and resulted in cases being solved. Since 5 of these 8 detections arose from victims' own additional investigations, it would seem that, at most, there would be a risk of losing only three detections if the number of CID visits to the scene were substantially reduced. Additional savings might also result if these visits could be made by appointment, where appropriate, or, where the victim does not have a phone, if visits are made at a time when victims are likely to be at home, such as Sunday morning.

Further CID activities

Further CID activities consisted of the use of surveillance, informants, stop-checks, and admissions made by suspects during questioning when arrested for another offence. Other activities, including checking for stolen property and the investigation of possible offenders, were used infrequently, and any analysis of these would be anecdotal. Some additional detections were based on investigations carried out by the victims themselves.

Together, these additional CID activities accounted for almost 12% of the primary detected cases and, in general, achieved a high rate of successful detection, averaging 23%. This includes the questioning of suspects which was aimed at solving other crimes besides burglary, and, perhaps, partly because of this, had a poorer success rate. When these are excluded, the detection rate was 29% for the other activities.

Use of surveillance

Surveillance operations were employed to investigate 0.6% of burglaries, and this resulted in a quarter of them being solved (9 burglaries). On average, six hours were spent on each operation, indicating officers were not undertaking prolonged or widespread surveillance. Surveillance was usually based on good evidence accumulated from a variety of sources, such as witnesses, local contacts and police intelligence, and because of this, longer was spent on the complete investigation where surveillance was used: an average of 32 hours, compared with 3 hours for a

'standard' investigation. However, a surveillance operation was no more likely to take place if a CID officer had visited the scene.

Their high detection rate indicates that the right people had been targeted. Used as an additional method of solving a case where there was evidence pointing to a suspect, but none of it was conclusive, they provide a cost-effective means of detection. Their unequal application across the sub-divisions suggests that there may be scope for a modest extension of their use.

Use of informants

Information was provided by registered informants on 7 burglaries, all of which were solved. In five of these cases, the information led to the offender being found with stolen property or admitting the offence. In one of the other cases, the offender was caught in the act, and in the other, the informant's information complemented a suspect description to produce a detection.

Local contacts, e.g. social services, were questioned in 0.6% of burglaries, and were the main factor in the detection of 6% of these (2 burglaries), and contributed to the detection of a further 12% (4 burglaries) of these cases. Therefore, 18% of cases where information was provided proved fruitful.

Use of stop-checks

Stop-checks of suspects or suspect vehicles were carried out during the course of 0.4% of burglary investigations. They were successful in 30% (7) of these incidents, as a result of suspects being stopped shortly before or after burglaries had been reported, and often because of a description provided by a witness at the scene.

Victims' investigations

In 3% (6 cases) of detected burglaries, the principal reason for success was the provision of extra information by witnesses, often the victims themselves, after the initial visit from the police. In four cases, the victim supplied the suspect's name, which they had uncovered from a variety of sources, and in another the victim recovered the stolen property, and indicated the offender to the police. This is assuredly the most cost-effective detection method from the police's viewpoint! It characterised poorer residential areas, younger offenders, and victim's property which was not covered by insurance or had high sentimental value.

Suspect admissions

Suspects were questioned in 1% of burglary cases, after having been arrested for other offences, and this resulted in 10% of these incidents (7 burglaries) being solved. When suspects admitted the offence, it was normally because there was good evidence, such as stolen property, linking them to the burglary. Where the

questioning of suspects was unsuccessful, they had been questioned about the burglary on the basis of weaker, more circumstantial evidence.

Summary

These further activities undertaken by the CID accounted for an important minority of detections. In view of their cost-effectiveness, a modest and selective increase in their use would help in solving more cases.

Victims' satisfaction with police operations

It is reasonable for victims to expect a good quality service from the police, and this has been recently endorsed by the introduction of a Victim's Charter. The way contact with victims is handled also affects their regard for the police, and is likely to condition their future response in neighbourhoods where officers may need assistance with other crimes as well as burglary. The victims of all crimes collectively represent a substantial subset of the general public, and as a 'high volume crime', burglary incidents, therefore, offer an opportunity to the police to influence the public's perception of them. Handled well, they can enhance their image. It is, therefore, in the interests of the force to make the most of their contact with victims and their neighbours, since care taken over the relationship between police and victim will benefit both parties.

Although the way the police handled burglaries was generally quite well regarded, there appears to be some scope for improvement. While 53% of victims were satisfied with the service provided, 29% considered it as adequate, and 18% expressed dissatisfaction. Satisfaction increased where the police solved the crime, and when stolen property was returned, most notably when it had not been insured. Predictably, early success affects victims' perceptions, with 70% of victims whose burglaries were primary detected being satisfied with the service provided. It is to be expected, therefore, that any improvement in detection rates that results from implementing the recommendations based on the analysis of police operations will improve the public standing of officers. In fact, 40% of those who were dissatisfied reported they would have been satisfied if the offender had been caught. Subsequent clearing up of burglaries through secondary detection may well also have an impact, though its assessment was beyond the scope of the current research.

Where investigations were unsuccessful, there was considerable variation in victims' opinions, with 30% of the victims of unsolved burglaries satisfied with the outcome, 30% regarding the outcome as 'adequate', but 40% of respondents wanting to change the way the police carried out the investigation of their case. The features that both impressed and displeased indicate how the force should address the issue of improving regard for their work.

It has already been stated that victim satisfaction depended upon the response time to the burglary alert, the attending officer's manner and the time spent by the officer at the scene, but it was independent of visits to the scene by SOCOs or detectives. It was also found that victims who received extra contact from the police were more satisfied with the service provided, no matter what the outcome of the investigation. This contact was generally made by telephone (46%), a police visit (22%), or a letter (27%), but the way victims were contacted made no difference to levels of satisfaction in either detected or undetected burglaries. While these contacts particularly concerned people whose burglaries were solved, police officers made further contact with 61% of all victims. It seems that satisfaction with the way the police handled burglaries could be improved quite cost-effectively by notifying every victim of the outcome or progress of their case, either by letter or by telephone. Since older people were better disposed towards the force and were happier with the service provided by the police, any comparison of victim satisfaction in different police areas should take account of demographic variation.

Summary

Victims were generally satisfied with the service provided by the police. Victims were predictably pleased when the offender was caught or property recovered. They were less happy when there was a slower response to the burglary alert, and when the first officer attending seemed rude or uninterested or spent too little time with them. While additional visits did not appear to affect victims, they were often dissatisfied when there was no information on the progress or outcome of their case.

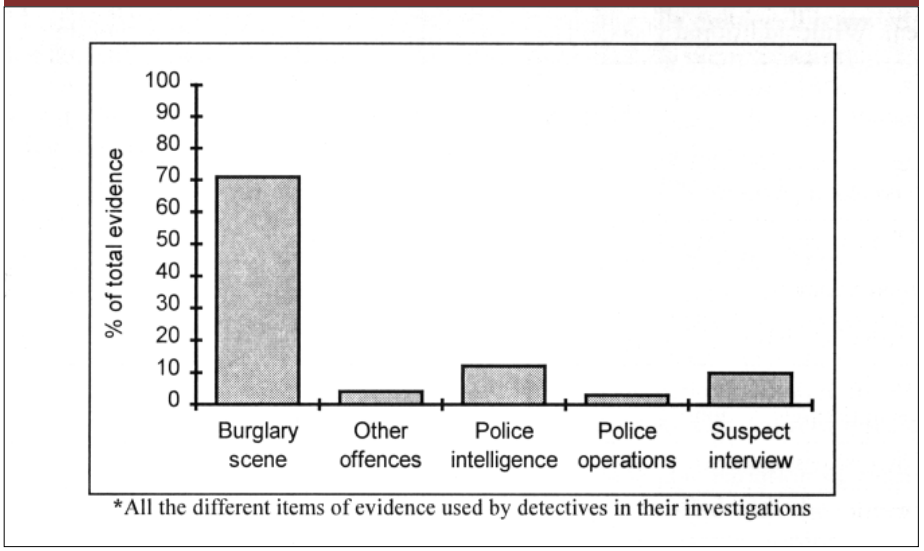
4. How burglaries are solved: the effective use of evidence

Most crime investigation involves the collection and use of evidence or information. In investigating residential burglary, the main obstacle to successful detection was that, in the majority of cases, there was no evidence. Just over a third of all the burglaries in the study provided some information or evidence. It is important to examine the sorts of evidence and information that were used to investigate and solve burglaries with a view to establishing whether or not there is any potential to make better use of the evidence that is available.

Evidence used in burglary investigations

The burglary scene proved to be the richest source of evidence. It provided over 70% of the information used in burglary investigations (Figure 3). The sources of evidence for both detected and undetected burglaries were similar, with the greater part originating at the burglary scene. Officers used an average of 2.6 items of evidence in the burglaries that were detected, compared with 1.4 for cases that were unsuccessfully investigated, and 1.0 for undetected burglaries that were considered for investigation, but not in the event investigated. The more items uncovered, the greater the chances that a case undergoing investigation was successfully solved.

Figure 3: Origin of evidence



*All the different items of evidence used by detectives in their investigations

Evidence used in detecting cases

Details of burglaries in progress, and the descriptions and names of suspects were the most important types of evidence for solving cases (Table 4), and were rated the principal factor by detectives in solving 56% of detected burglaries. Not surprisingly, when a burglary was reported in progress this evidence was always the starting point, or 'trigger', of the investigation. Similarly, suspect names and descriptions were also common 'triggers'. Where details of a named suspect was available, it was almost always the key factor in a detection. Suspect vehicle descriptions and registrations, and forensic evidence were also quite important; each provided the principal means for solving 6% of the detections, although forensic information was more often used as supporting evidence. In contrast, stolen property details were relatively unimportant, except as supporting evidence, although this may in part reflect the fact that there was no coherent strategy for using this information. Admissions in interview played a part in 23% of the detected burglaries, although they were only rated the primary factor in 2% of these. This suggests that suspects seem unlikely to admit to the burglary unless there is very good evidence against them. The nine most important types of evidence, summarised in Table 4, account for 80% of all the 545 factors used in solving the 209 detected burglaries. The other 20% consist of 24 types of evidence or police activities, including various types of evidence from other offences, police intelligence and police operations.

Table 4: The sources of evidence used in 'primary detected' burglary cases

Type of evidence or operation	% of detected burglaries where used	% most important factor (cited by detectives)	% trigger (what initiated the investigation)
Reported in progress	32	21	32
Offender caught in the act*	11	11	11
Suspect name	21	18	17
Suspect description	43	17	28
Vehicle description/registration	12	7	6
Other witness evidence	23	12	14
Forensic	17	6	5
Stolen property	25	2	1
Informants	4	4	4
Interview admissions	21	2	1

These columns do not sum to 100% because most cases have more than one item of evidence
* Apprehended prior to the burglary being reported

Evidence available in undetected cases

Evidence was considered by detectives in 24% of the undetected burglaries, of which 13% were investigated. Suspect descriptions were used in just over half of undetected cases that were investigated. The investigations carried out were the circulation of suspect descriptions, checks by the local intelligence officer for the description, investigation of possible offenders, facial identification searches, and identification parades. Forensic evidence was tested in 17% of cases, and a suspect's name was often put forward with the evidence. The value of supplying a suspect's name is not known. It may not be helpful if the fingerprint computer has a good degree of reliability in matching unknown prints to known offenders, because it could lead to two or more searches of the fingerprint database when one would do. Alternatively, supplying a suspect's name may focus the fingerprint search in a more efficient way. The efficacy of these two approaches to fingerprint testing could usefully be examined further. The remaining investigations involved a surveillance operation, a stop-check of a suspect, the use of informants and the assessment of crime patterns. Vehicle descriptions, suspect MOs, intelligence on travelling criminals, and leads from local knowledge were always investigated.

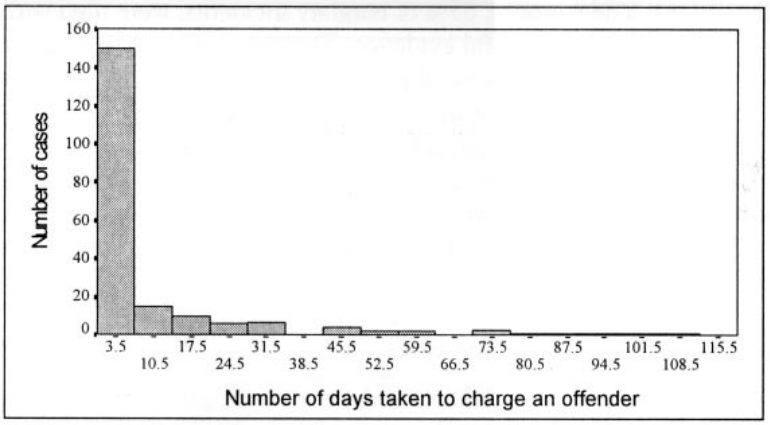
Summary

The majority of burglaries provided no evidence to suggest the offender's identity, and therefore, less than a sixth of cases were actively investigated. The more items of information uncovered, the better the chances of a burglary being solved. Good quality suspect and vehicle evidence from witnesses proved the most valuable, but the organisation of the CID and screening procedures were also effective.

Effect of the length of burglary investigations

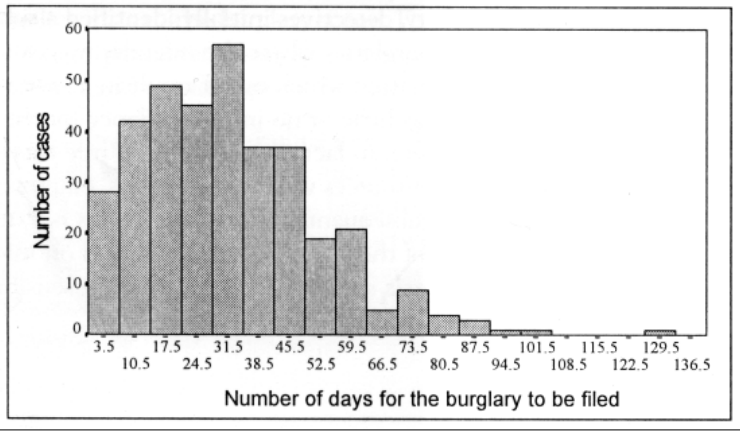
The majority, 80%, of primary detections were made within 10 days (Figure 4) of the crime and there was an average of 6 days between the burglary and the charge of an offender. Therefore, the early period of police operations and activities offered the best chances of detection, while longer investigations produced few detections.

Figure 4: The number of days taken to solve burglaries



Although burglaries are generally filed if they are undetected after a month, in practice, the length of time the burglary investigation was active varied (Figure 5), not least between sub-divisions. One of the sub-divisions filed undetected burglaries after 20 days, on average, with 50% filed within a week. Most of the other sub-divisions filed undetected burglaries after about one month, with a range of 27 to 37 days. However, this difference in policy appears to have been of little importance, since only one of the 'filed undetected' burglaries in the sample was subsequently detected and this was as a result of forensic evidence. Delay in filing cases did not result in more of them being solved, and sub-divisions that left cases unfiled for longer periods were no more likely to solve them. When a case is filed, therefore, is of little consequence in the investigation process.

Figure 5: The number of days taken to file undetected burglaries



Across the nine sub-divisions during the period of study, the CID unsuccessfully investigated about 660 burglary cases, almost double the number of successful, primary detections. The majority, 85% of burglary incidents, were filed without investigation through lack of useful evidence. The net result was that, at what can be regarded as the end of the process of primary investigation, c.95% of burglaries were not solved, largely because of insufficient evidence or information. The paucity of evidence and information reflects the fact that burglaries were generally committed when the dwelling was unoccupied, and that it is an anonymous crime where there is no association between offender and victim. It also means that, other than through secondary detection, the best hope of solving cases with no useful evidence is to catch the culprit in the act.

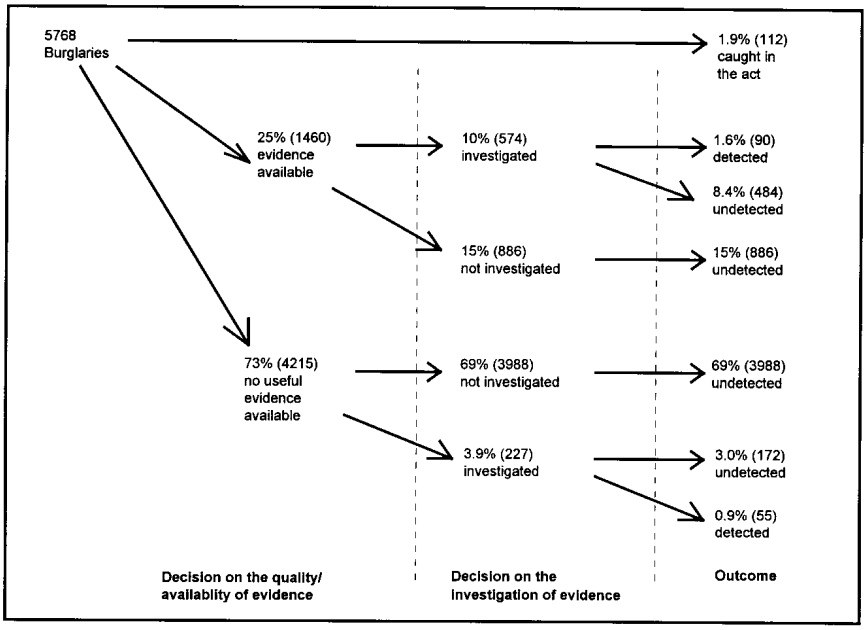
Effectiveness of screening burglary cases

'Screening decisions' were, generally, made by the investigating detectives. Although based on the available evidence, it is likely that these decisions will have also been affected by the detectives' workload, variations in detectives' experience and judgement and the sub-divisions' prioritisation of burglary in relation to other crimes occupying the CID office. This may mean that certain cases were prematurely excluded from investigation and potential detections missed. Conversely, investigations, initiated or maintained when there was little chance of detection, would have been a waste of police resources. It is, therefore, important to assess how effectively the informal screening process discriminates between burglaries worth investigating and those that do not offer much hope of a detection. Since most screening decisions were based on the evidence, or lack of it, that is provided by the initial visit to the scene, it is sensible to use this evidence in order to assess the effectiveness of the burglary screening.

Investigation of cases with no witness evidence

In assessing the details of each burglary, detectives initially identified a subset of 25% of cases, excluding the 1.9% of burglaries where the offender was caught in the act, which they considered had information which might result in a successful detection (Figure 6). Though there was little or no initial evidence for the remaining 73% cases some of these were, in fact, investigated. While this only affected c.5% of them, valuable CID resources were, nevertheless, employed to little useful purpose. Although 1.2% were subsequently detected, this was not, in general, attributable to CID work. All but 15 of these detections were based on information provided from other sources, e.g. forensic supplied later. It would be sensible to screen these cases out after an initial police visit.

Figure 6: The primary investigation of burglary cases



The existing procedures meant that detectives even spent a little time on each of the remaining burglaries that did not have any initial evidence and were not investigated. Closing each of these 4000 cases would probably take at least 5 minutes of a detective's time. The existing practice of the crime screener passing all burglary cases to investigating officers, results in burglary crime reports being read twice. These cases should be screened out by the crime screener, alone, following the initial police visit to the burglary scene. Formal case screening by fewer personnel, who might benefit from some systematic training, would standardise the screening process and would improve the use of resources.

The modest savings gained from dealing more effectively with the cases where there was no evidence might be usefully directed into crime pattern analysis. The limited information that is available from these burglaries could then be used to build up effective intelligence and could aid any pro-active policing that may be considered. Maintaining contact with the victims is important for sustaining their satisfaction with the service provided by the police. This could be dealt with more efficiently than at present by utilising the crime report database to produce correspondence for victims.

Investigation of cases with witness evidence

Burglaries that provide some evidence are screened, using the initial details of the cases, normally recorded by an officer who visited the burgled property. When the crime screener has passed the cases to them, the detectives appear to filter them out at two levels. This process reduces the number of cases investigated from an initial third where there was some evidence, to 25% where there was evidence worth considering, to the 10% that were investigated. If appropriate and consistent decisions are being made, the initial evidence in burglary cases selected for consideration should be better than those that are not selected. Similarly, the burglaries judged to be worth investigating should have better evidence than those that are not selected for investigation.

Two aspects of evidence are used in the following analysis of these comparisons: the type of evidence available and its quality. The type and quality of the evidence were analysed in terms of their potential to identify an offender.

Screening for consideration of evidence

The evidence used in the cases selected for consideration by detectives was of better quality than in those burglaries they did not select for consideration for an investigation, suggesting that the filtering decisions being taken at this point are discriminating reasonably well overall. Despite this, 42% of burglaries with evidence that were not considered were of a similar type to those that were considered, indicating that, in these cases, there may be potential investigations and detections that have been missed. Although detectives spent slightly longer, between 10 and 20 minutes per case, on burglaries where they considered some evidence, there was no increase in the likelihood of a detection simply because a detective had 'considered' the available evidence. The important step was the decision to investigate the evidence.

Screening for investigation[10]

The evidence in cases selected for investigation was better, in terms of type available and quality, than in the cases not selected. Hence, burglaries with better quality suspect descriptions and those with more definite information were more likely to be investigated. This indicates that, in general, the appropriate burglary cases are being filtered out for investigation, though some promising cases were not actually investigated.

The evidence provided by witnesses at the scene was split into four categories: definite suspect, suspect vehicle, possible suspect and further intelligence:

10 All the percentages quoted here exclude offenders caught in the act and aggravated burglaries, both of which would distort the comparison for the use of evidence.

- A 'definite suspect' description or name was provided in 2.3% of burglaries and was almost always investigated. This use of resources was justified by a 19% detection rate for investigated cases. It was particularly successful (30% detection rate) when a definite suspect name was given without a suspect having been seen. This almost certainly reflected the fact that these victims had a good idea about the identity of the culprits. The characteristics of these incidents are consistent with this interpretation, since this evidence was especially provided by victims in poorer neighbourhoods, where offenders were more likely to live locally[11].
- A suspect vehicle was seen in 2.6% of burglaries. Fifty-eight percent of these cases were investigated and there was a 10% detection rate. There does not appear to be much scope for extending investigations of suspect vehicles, since the detections generally occurred shortly after the burglary as a result of the vehicle being spotted. If this does not occur, there is little chance of a detection and investigation should be kept to a minimum. Obviously all vehicle descriptions should always be circulated.
- A 'possible suspect' description or name was provided by witnesses at the scene in 10.6% of burglaries, and was investigated in 43% of cases. This was the most interesting category. When a possible suspect name was provided, without the suspect having been seen, 18% of the burglaries investigated were detected, often because the suspect was found with stolen property in his possession. Out of all the burglaries committed, 78 burglaries had this evidence but were not investigated, giving potential for an extra 14 detections. When a possible suspect was seen and a description provided, the best chance of a detection occurred for good descriptions, a 13.5% detection rate, and these were almost always investigated. When an average or poor description was provided, the detection rate was still 8%. Two hundred and fifty burglaries had this evidence but were not investigated, so there was a possibility of 20 additional detections[12].
- Further intelligence was provided in 10.8% of burglaries, and 16% of these investigated. There seems to have been little gained from the investigation of this evidence, which generally consisted of either a very vague description or the unsupported name of a local criminal, since all the detections in this category were based on evidence arising from other sources, such as forensic testing.

11 This analysis also included cases where a 'possible suspect' name alone was provided since they also showed better detection rates.

12 An increase in the 'caught in the act' rate would reduce the additional detections to 18 or 19.

When a suspect description was provided without a suspect name, there was no difference in the quality of the description between detected and undetected burglaries that were investigated. However, the detected burglaries had more pieces of evidence or were subject to extra police operations. This indicates that, in the undetected cases, there was either less further evidence available, or the investigation was pursued with less vigour. The profile of the extra evidence and/or operations used in detecting these burglaries suggests that more 'pro-active' methods are being used in an attempt to identify the offender. The use of surveillance, area/suspect/MO patterns and intelligence on criminals are all much higher in this subset of detections, for example surveillance was used in 10% of these detections compared with 3% in the others.

Scope for improvement

Changing the way crime screening is carried out could increase the number of detections by c.10% and generate resource savings. Half of the burglaries, with evidence of sufficient quality to generate a good detection rate (8-18%), were not investigated. These cases could have produced an extra 35 detections (33 when any additional 'in progress' detections are taken into account). From detectives' estimates, these extra detections might require c.1000 additional officer hours, or 30 officer hours per detection. This could partly be offset by probable savings of at least 500 officer hours from no longer investigating any of the cases with poor evidence and from improvements in crime screening.

Summary

A two-stage screening process was used, whereby detectives identified the more promising cases, and then selected a subset which were subjected to investigation. This appears to be generally working well, and detectives appear to be using evidence quite effectively. There is, nevertheless, scope to investigate some additional promising cases, as well as no longer pursuing others with a small chance of being solved. The detection of cases with no initial evidence was rare, but it would have taken place even if they had been filed after the initial visit. Police resources could be saved by minimising the investigation of burglaries where there was no evidence, or where the evidence was of poorer quality. In contrast, investigating every incident where there was reasonable quality suspect information would be beneficial, providing a small but significant boost to the detection rate. This would be achieved by transferring responsibility for screening from detectives to the crime screeners, and by selecting appropriate cases more systematically.

Use of other available evidence

Other than forensic material (considered in the previous section), the other evidence collected at the burglary scene consisted of MO details, stolen property details and the use of the incidents themselves in burglary pattern analysis. These may provide valuable evidence for identifying offenders or vulnerable areas, 'burglary hot-spots', which may then lead to further police operations. Details of any stolen property may also be used to catch suspects and its handling and disposal may offer useful areas where more detections could be made.

Modi operandi

An offender's MO was used in the investigation of 1.1% of all burglaries. Although 25% of the cases where it was considered were detected, it was felt to be the main factor in only 6% of these detections (1 burglary). When a MO was used in the detection of a burglary it was mainly rated as supporting evidence and was often combined with a suspect description to identify an offender. Though the MO is infrequently used as a tool for identifying offenders, the high detection rate of cases where an unusual or identifiable MO is present suggests that more extensive use of MOs may prove fruitful.

An offender's MO is not used more often in the detection of offenders when the burglary site is visited more than once. This suggests that extra visits to the scene do not help in the identification of offender MO patterns. In fact, the chance of the same officers visiting a large number of one offender's burglaries is likely to be very small. Common sense dictates that the best time to identify anything distinctive from the burglary site is as shortly after the incident as possible. Therefore, if more use is to be made of MO evidence, it must be recorded accurately and in detail by the first officer who visits the scene. This information would then need to be considered, along with other burglary patterns, for the whole sub-division, if not a larger area[13], so that patterns could be found and used to identify offenders or likely targets.

Burglary pattern analysis

Burglary patterns were used infrequently, but proved successful when they were found. Patterns relating to the suspect or to certain areas were used in the investigation of 0.3% of burglaries, 25% of these cases were detected, but the pattern was the main factor in the detection for only 5% (1 burglary). It would appear that there is scope to use these, and other burglary characteristics, including modi operandi, in a more comprehensive and systematic analysis of burglary incidents.

13 Out of the 60 cases where the offender's address was available, the overall average distance from the victim's property to the offender's home was 9.5 km. This includes a small number of offenders who had travelled long distances - in two cases over 100 km, one over 45 km and one over 22 km. When these are excluded, the average distance from the offender's home to the victim's property was 4 km.

Stolen property details

Although property was stolen in 87% of burglaries, it rarely featured as the key factor in solving a case, though it did play quite an important role as supporting evidence. This is perhaps not surprising, since it is likely that many of the stolen goods will have been disposed of via offenders' informal contacts, and the bulk, 98%, of it was judged by police officers (though not as often by victims!) as insufficiently distinctive to be easily identifiable by anybody other than its previous owner.

At present there is no systematic approach to using stolen property as a means of solving burglaries. However, there may be potential to compile a strictly limited subset of property details for short-term, local use, in particular to solve burglaries where goods are kept by offenders themselves or disposed of locally. Only distinctive, marked or serially numbered items would be eligible for inclusion. Twenty percent of burglaries involved the theft of marked or number items, but a third of these details were not recorded.

It is likely that a stolen property list defined in this way would realistically limit the logistical problem of a vast store of ever held items that a permanent, comprehensive recording approach encounters. A dynamic property list for use by one of the sub-divisions under study might contain the most easily identifiable property stolen across all sub-divisions within 15 km (90% of offenders lived within 15 km of their victims' dwellings) during the previous 4 to 6 days.

Goods disposed of in an area where the burglar neither lives nor committed the crime would be more difficult to track, though it is possible that list swaps with divisions within, say 50-65 km, might be fruitful.

The level of activity in investigations

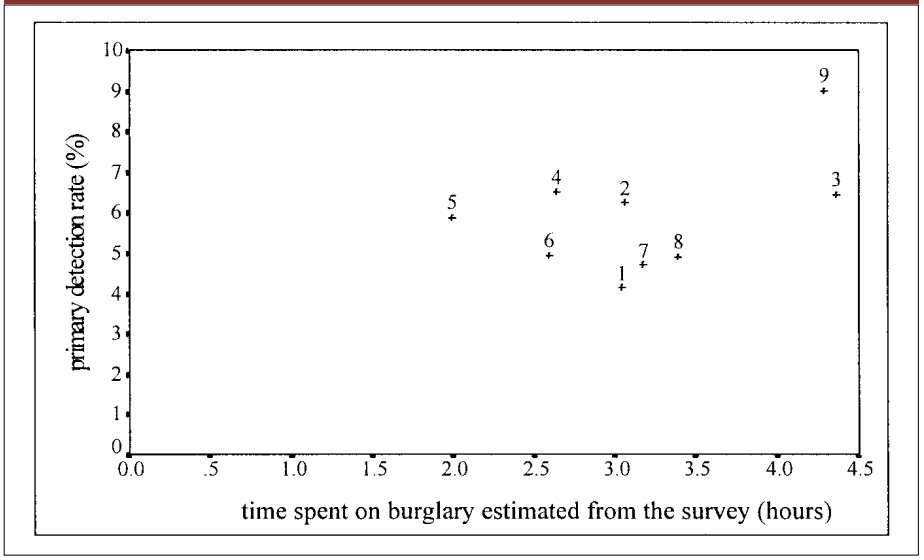
It is difficult to derive a measure of the vigour with which investigations were pursued. It is not satisfactory to use an 'output' measure, such as the number or quality of items of information or evidence, since these may have been obtained using varying amounts of effort. An 'input' measure of work effort is required, such as the hours spent by CID on each case. Unfortunately the hours cited by detectives in the study were judged to be too imprecise to give a meaningful measure of the differences in levels of activity between cases.

The effect of CID organisational structure

Only sub-division Nine ran a burglary squad throughout almost all of the study period, while two others ran squads for short spells at the beginning and end of the survey period. It is dangerous to attempt to assess the effectiveness of these operations

in comparison with standard CID offices since the study was not designed for this purpose. However, the sub-division employing a burglary squad did produce the highest primary detection rate of c.9% compared to the lowest of c.4%. This required over 4 hours of staff time per burglary, while the sub-division that used the least resource per burglary, 2 hours, exhibited a detection rate of c.6%. Nonetheless, sub-division nine appeared to be using the extra resources effectively (Figure 7).

Figure 7: Relationship of primary detection rate with resources allocated to each burglary for the nine sub-divisions



Sub-division nine also used police intelligence and operations, e.g. surveillance, information from contacts/informants, intelligence on criminals, more often in detecting burglaries. They were used in 39% of detections there, compared with 26% elsewhere. This may indicate that the formation of a burglary squad had the desired effect of increasing intelligence on burglars and producing more arrests. It may also, therefore, confirm the benefits of pursuing a more 'proactive' approach. However, the relationship between primary detection rates and resources is a complex one with the sub-division's burglary rate, crime rate, socio-demographic structure and housing environment all likely to have an effect. For instance, sub-divisions with high burglary rates tended to have low detection rates. Therefore, sub-division 9's good detection rate may, in part, reflect the fact that it had one of the lowest burglary rates. A dedicated study would be needed to assess the effectiveness of different CID organisational structures.

5. Conclusions and Recommendations

Residential burglary disrupted the lives of a large number of people. In general, the criminals got clean away with the stolen goods, and the bulk were never returned. This was an unrecoverable loss for almost half the victims who were uninsured and who could least afford it. However, the effects of burglary went far beyond the need to repair the house and replace stolen property; it also damaged peace of mind and undermined the quality of life. Fear of another burglary often had long term effects, particularly on women, and feelings of insecurity frequently lasted for eighteen months. Others were so frightened, they wanted to move to a less vulnerable area and dwelling, and some did so, even before they could be interviewed.

Although less than 6% of these cases were solved, it is likely that a third will be eventually cleared up. However, a majority will not be detected, and many criminals will never be caught. This is principally due to the lack of evidence on which to base investigations, though in certain sub-divisions, it is likely that staffing shortages played a part. In these circumstances, the police handled burglary cases quite effectively.

Most detections were attributable to the activities carried out by the first officers at the scene, and, therefore, occurred within ten days of the burglary. Almost half were due to catching offenders at or near the scene of the burglary, while witness, and, occasionally, vehicle evidence secured most of the others. Some success resulted from further CID investigations, and rather less from forensic evidence although this may have improved with the introduction of the national DNA database since this research was completed. The burglary screening process appeared to be generally working well. Given that many cases remained unsolved and property was infrequently recovered, the victims were on the whole quite satisfied with the service the police provided them. Although detections attributable to 'proactive' police operations were of relatively little importance, it is likely that the use of these methods will have increased since the completion of this research, partly in response to recommendations made by the Audit Commission in 'Tackling Crime Effectively', which were followed by management handbooks in 1994 and 1996. The West Midlands Force has also made changes to the way burglaries are screened, the way requests from the public are dealt with, and to the organisation of shifts.

There is scope to improve the detection rate, to make human resource savings, and to improve the victims' regard for the service provided by the police, with few additional resources. These can be realised largely by using more widely the best practices and procedures currently being employed. This would involve a change of emphasis between certain police activities, and adjustments to the way some activities are carried out. It would also entail switching expenditure from the least cost-effective operations to ones which offer scope to improve detection rates.

It is likely that this reallocation of resources would improve primary detection rates

by as much as 40%, to 8%, with an overall (primary and secondary) clear-up rate approaching 50%. An increase of this order would itself serve to improve officer resourcing per incident, and facilitate the delivery of further improvements in victim service, and in the solution of burglary cases and other crimes. The most significant changes would be to respond more effectively to burglaries reported 'in progress', interview more neighbours at the scene, improve the way crimes are screened for investigation, and selectively expand the CID's 'further activities', while reducing the number of visits made by SOCOs and the CID to the scene of the burglary.

Initial response to the burglary alert

Many more burglaries could be solved by improving the response to burglaries reported 'in progress', while there would be some additional detections if more neighbours were contacted. Only a tenth of the burglars spotted at the crime scene were caught. The findings across the sub-divisions indicate that responses in 5 minutes or less (from the receipt of the request by a patrol unit to the arrival at the burglary scene) to burglary alerts are feasible, and that additional responses by more than 2 officers can be achieved. By responding with sufficient speed and number of officers, there is scope to more than double the numbers caught in the act. This may mean redeploying officers to the late afternoons on weekdays, when the police were generally busy, and when less than 2% of burglaries reported 'in progress' resulted in offenders being caught. It is, however, important that this should not be at the expense of interviewing neighbours, a cost-effective activity that assisted detections and which was also at its peak during the weekday afternoons.

In certain sub-divisions, with particularly high crime rates or with a particularly large area to cover, additional resources may be needed to accomplish this. It may even be necessary to adjust the allocation of police officers at sub-divisional or divisional level.

Recommendations: burglaries reported 'in progress'

- In order to improve the detection rate for burglaries reported 'in progress', officers should aim to arrive at the scene within 5 minutes, and even, where possible, within 3 minutes of receiving the alert from the control room. There should also be a response by at least three officers to this type of incident to maximise the chances of catching offenders. This recommendation may not be relevant to rural, and certain urban fringe areas where the density and distribution of the population make it impractical.
- There should be a redeployment of officers to meet this need, especially during the busiest afternoon period, when the potential to catch the culprit in the act is

not realised. This should not, however, be at the expense of interviewing other burglary victims or their neighbours, an activity which also peaks at this time.

- The Force should evaluate the feasibility of deploying more single-crewed units, particularly at the peak times for 'in progress' burglaries, in order to improve the chances of a speedy arrival at the crime scene. This work is currently being undertaken for the Home Office, with the assistance of the West Midlands Police Force.
- There is a need to research the behaviour of several different police units and multiple-crewed units on arrival at burglary scenes, in order to determine the best way of ensuring a detection, while taking account of the variation in residential environment. This need is also being met by the Home Office funded research into 'in progress' burglaries referred to above.
- There is also a need to monitor the effectiveness of a policy of catching more offenders in the act. If offenders perceive the increased risk, they may meet it by adjusting their behaviour, and spending less time in burgled dwellings.

Recommendations: interviewing neighbours

- Interviewing neighbours of burglary victims was cost-effective. Where feasible they should be questioned whenever they are available, except when they are likely to be asleep.

SOCO visits

Visits by SOCO to burglary victims' homes were neither cost-effective, nor did they appear to improve the victims' regard for the police. Considerable staff effort was expended visiting almost every burglary scene in order to collect the forensic evidence used in the detection of a small but important subset of cases. It has not, unfortunately, proved possible to find good indicators of these cases. Large resource saving could, nevertheless, be achieved by reducing the number of visits made by SOCOs, if a way of excluding the unpromising cases could be found. Visiting fewer sites might facilitate the collection of additional forensic information, since it is possible that more might have been gathered if SOCOs had spent longer at crime scenes. There were often delays in testing samples from the scenes of burglaries and in making the results available to the CID.

Recommendations: SOCO visits

- Where possible, the number of SOCO visits to burgled dwellings, currently covering 90% of cases, should be reduced. The police officers who respond to the burglary alert should exercise more selectivity in requesting forensic visits rather than routinely requesting them.

- Recent work has examined police use of forensic science (eg Tilley & Ford, 1996; McCulloch, 1996) and ACPO/FSS have produced guidelines for good practice. It is clear from all this work that further useful work could be carried out to identify predictors that would enable police officers to assess more accurately the burglary incidents that would benefit from a forensic visit, and, hence, to be more discriminating in their requests for such visits.

CID activities

There were two aspects to the CID role in solving residential burglary cases:

- how they screened cases to determine which would and which would not be investigated, and
- the way they investigated the crimes.

Detection rates could be increased by improving the way cases are screened for investigation. While detectives generally carried this out effectively, there is scope to eliminate more of the less promising cases more quickly, and, conversely, to investigate more of the cases that offer some potential for detection. By excluding burglaries without evidence or with very poor evidence from investigations and concentrating resources on those with some potential, it may be possible to increase the number of detections by c.10%.

Recommendations: screening burglaries

- Burglaries should be screened so that all cases where there is evidence of a 'definite' or 'possible' suspect are actively investigated.
- Cases that do not have any evidence provided at the scene should not normally be investigated nor should those with only vague suspect descriptions and unsubstantiated suspect names.
- Cases where there is only a vehicle description should be filed after two days if still undetected, because there is a very limited chance of them being solved after this time.
- It would be helpful to examine the process of crime screening more closely, in order to verify that there were no 'hidden' supplementary details that made the officers responsible for the screening either select or eliminate cases.
- Burglary screening should be carried out by the crime screening officers instead of the investigating detectives. Training or update guidance should be provided to officers carrying out the screening to ensure that the process operates optimally, so that opportunities for detection are not lost, and resources are not wasted on fruitless investigations.

With respect to the investigations themselves, the CID were more fruitfully employed following up on the evidence collected by the first officers attending the burglary, and carrying out further, often 'pro-active' work, than making supplementary visits to the crime scene. Savings in human resources could be achieved by substantially reducing these visits, which were time-consuming, yet resulted in few detections and did little to alter the victim's regard for the service provided by the police. On the other hand there is scope for a modest extension of certain of the other 'pro-active' CID activities. Stolen property had limited use, almost exclusively as supporting evidence, a fact that may reflect the logistical problems associated with its use in burglary investigation, while criminal modi operandi played little if any role at all in investigations.

Recommendations: CID investigative activities

- CID visits to burgled dwellings should be substantially reduced, since at this stage there is little additional MO evidence, and any other evidence duplicates that collected by the first officers at the scene. However, detectives should maintain their knowledge of local burglary characteristics. Steps should be taken to ensure that the first officers attending collect all the relevant information and see as many witnesses as possible, since it is desirable not to lose the few detections attributable to the current CID visits.
- Research should be carried out to determine the feasibility of training the first officer/s attending to collect more detailed crime scene information, including fuller details of modi operandi. This would be driven by the potential for its use in more systematic and comprehensive police intelligence analysis.
- There should be a modest increase in the other activities and operations pursued by the CID, notably 'limited' surveillance, stop-checks, and targeting of possible offenders.
- There is a need for continued research into how stolen property is disposed of in order to determine the potential for using details of selected stolen property in a systematic and organised way to improve its recovery and detection rates (see Kock et al, 1996 for an example of a strategic approach to the disruption of stolen electrical goods markets).
- The police should consider using characteristics and information from burglary cases in a fuller and more rigorous analysis of crime patterns, based on every case, rather than on the subset that any one detective sees. This would assist in promoting an intelligence driven, proactive approach as recommended by the Audit Commission (1993) and subsequent management handbooks (ACPO, HMIC & Audit Commission, 1994; ACPO Crime Committee, 1996). Read & Oldfield (1995) provide guidance on how to introduce and undertake local crime analysis successfully.

Quality of service

Although burglary victims had a reasonably positive view of the job carried out by the police, there is scope for improvement in the way officers responded to incidents and dealt with victims. Victim satisfaction depended on the officer's manner, how quickly they arrived at the scene, how long they spent there, as well as on the successful outcome of the case, and on the return of stolen property, especially when this was uninsured.

Response time and time spent at the crime scene are good indicators of victim satisfaction, even when the case remains unsolved and stolen property is not returned. Older people were happier with the service provided by the police, reflecting the fact that they were better disposed towards the force, and this should be taken into account when comparing satisfaction in different police areas.

Although additional visits by police officers did not markedly improve on the impression made by the first officer on the scene, keeping the victim informed of progress and outcome of the case, including communication by letter and by telephone, did enhance victim satisfaction.

Recommendations: quality of service

- With regard to the quality of service provided to victims, the police should attend the scene of non-urgent burglary cases in under 30 minutes. They should, if possible, also aim to spend at least 20 minutes, and preferably 30 minutes, at the scene, and this is more important for victim satisfaction than a quick response.
- Victims should be kept informed of the progress of the investigation, even if the case has not been solved, and is being filed. If detected, the victim should be made aware of this. Communication by letter or by telephone is likely to be just as effective as a personal call in influencing satisfaction.
- Officers should not be excessively negative about the chances of a case being solved during the initial contact. This is likely to have an adverse effect on victim satisfaction, because it suggests there will be little or no attempt to investigate the case.

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