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Title: Research on Target: A collaboration between researchers and practitioners for a target hardening scheme

This paper discusses a crime prevention initiative in which an academic research team was involved from the outset until the final evaluation. It is reported here to illustrate both the ways in which researchers can work with practitioners to produce evidence-led responses to crime problems and to highlight a number of issues worthy of consideration for others working in this way. First, we briefly describe the project and the analysis which led to its formation. This is of particular interest as it involved incorporating a fairly new crime concept into a prevention scheme. We also consider the degree to which the research team was involved in the project, as it moved through several stages, and provide an overview of our evaluation of the scheme. Next, we discuss the value of and issues surrounding such collaborations and finally we raise a number of points in the form of recommendations for good practice and points to consider.

## The Project

From 2002, the authors were involved in a research collaboration which was formed to assist a Crime and Disorder Reduction Partnership (CDRP) in the West Midlands region of England to achieve its Public Service Agreement targets in crime reduction. The area in question was considered a highly deprived borough.<sup>1</sup> The 2001 Census showed the borough had a similar age and gender profile to England and Wales as a whole, but a higher proportion of minority ethnic groups. It further recorded a slightly higher unemployment rate than the average, as well as fewer owner-occupied households. The initial focus for the research team was domestic burglary. In 2002/03, the police recorded rate for domestic burglary in the borough was 29.6 offences per 1,000 households,<sup>2</sup> compared to a national rate of 20 for the same period.<sup>3</sup> The research team identified, from police recorded crime data, several high number, high rate 'priority' neighbourhoods.<sup>4</sup> Interviews were carried out with police crime prevention officers responsible for these neighbourhoods and a number of reports were produced to advise the CDRP Burglary Task Group (BTG) on the extent and nature of the problem,<sup>5</sup> as well as providing a menu of possible reduction measures, predominantly drawing on the situational crime prevention literature,<sup>6</sup> which included cross-cutting, borough wide approaches and a matrix of options tailored for each of the high priority neighbourhoods.<sup>7</sup>

Subsequent to these reports and discussions between the BTG and the researchers, the following options were chosen as key to achieving the greatest reduction in domestic burglary, across the greatest number of households at risk:

- Focusing on repeat victims of domestic burglary.<sup>8</sup>
- Providing a free-to-user target hardening scheme.<sup>9</sup>

It was felt that both of these aims could be combined into a single scheme which offered free home security surveys and 'target hardening' style upgrades to all repeat victims (those reporting a second offence within 12 months of a prior offence) across the borough and all households reporting a single burglary in the priority neighbourhoods (which, by this point, had been slightly expanded to allow each town in the area to be represented).

At the same time, one of the authors was using local police data to test for the presence of near repeats, a method which had been recently proposed by Johnson and Bowers<sup>10</sup> and Townsley et al.<sup>11</sup> Initial results suggested that the concept held both in the borough as a whole and within many of the individual neighbourhoods. That is to say, in many of the small areas being studied, there was an increased risk of burglary for those premises that were geographically close to ones which had already been burgled. This risk was temporally bounded, being greatest when closest in time to the recorded offence. The degree to which this was the case and the distance and time within which risk was heightened could be determined from historic data for each neighbourhood and a risk 'profile' produced [?DAN?]. It was felt that there would be scope to build the findings of this work into the proposed target hardening scheme, allowing the service to be offered *proactively* to households at increased risk of near repeats within the priority neighbourhoods.

A social housing agency with a local presence successfully tendered to produce a bid with the CDRP for Neighbourhood Renewal funding to support such a scheme for two years. The programme officially started in early July 2004. The reactive service (offered to those reporting a burglary to the police) was expanded to cover the whole borough. The proactive service, whilst focusing on the priority neighbourhoods, was allowed to consider locations outside these, thus adapting to the crime profile as it shifted over time. The agency administering the scheme contacted all burglary victims who had agreed for their details to be passed on. Those who accepted the service were provided with a home security survey and offered free upgrades or repairs where these were identified as being necessary to reduce their risk of further burglary. This would often cover such things as the addition of window locks and improved door locks. Where it was deemed necessary, hinge bolts, peep holes and the like were fitted and, in some extreme cases, doors, windows or fencing was repaired or replaced. Crime prevention advice was also given and householders were encouraged to keep their premises secure.

Proactive visits were identified differently. Every few months the research team would use the latest burglary data to assess those areas at greatest risk of near repeats. These were narrowed down to a manageable number of streets and all the houses in that area were leafleted by the agency. Those householders who contacted them were then offered the same survey and upgrade service as that received by burglary victims. In both reactive and proactive cases, the service was entirely free of charge, regardless of the means of the householder or the status of their occupancy (i.e. tenant, owner-occupier, etc.).

Due to the nature of the project, there was a good deal of communication between the researchers, the project team and the BTG. To facilitate this further, a project steering group was established with at least one representative from these three bodies. In addition, a number of other interested parties (such as the local authority repairs manager) often attended.

As with many such schemes, over the almost two years of its life the way in which it was run varied. In fact, it went through a number of stages from the initial set-up and feet finding, through an established and then self-managed scheme, to the point where it began to deviate from the original approach until it was completed in its original form and evolved into a sustainable, albeit slightly different, programme. As researchers, we were most heavily involved during the earlier stages and continued to feed information on proactive areas through the middle stages. We were effectively 'phased out' during the latter stages as our funding changed and the scheme began to self-manage 'risk' identification. Whilst we provided proactive lists there was a request by the project workers to reduce the frequency of these so as to increase the time spent in any one area. This did not satisfy the original, short-lived proactive risk criteria and was partly a result of our reduced involvement. Finally, the proactive element of the scheme deviated from this original method and switched to a 'five-a-side' approach, whereby the service was offered to five houses on either side of a burgled property receiving a reactive upgrade. Had we been in a position to do so, we would have advised against this approach, but our contribution had all but ceased by this point.

During the life of the scheme we produced two interim reports on the status of the project (at the completion of 500 and 1,000 upgrades) and a final evaluation.<sup>12</sup> The two earlier reports were produced to satisfy the requests of the BTG for an interim evaluation, which the research team did not believe was appropriate. Instead, we focused these analyses on the proportion of burglaries, the demographics of occupiers and the work carried out at premises which were upgraded. These reports proved to be more useful than we had anticipated as they highlighted a number of issues. Most notably, some of the data needed for the final evaluation was not being recorded. Moreover, a number of one-off initiatives had been carried out, which may have skewed the profile of households being target hardened away from those most at risk in favour of older people, who were incorrectly *perceived* as more vulnerable.

The project evaluation was carried out immediately after the project ended which, as researchers, we found less than desirable. However, the BTG hoped to continue running the scheme under a slightly different guise and needed to know if it had been 'successful' or not. With no follow-up period and significant time constraints, we approached the evaluation from a number of angles in order to provide the best picture possible of the effects of its operation.<sup>13</sup> These were:

- A time series approach, comparing the monthly count of offences over a period of 40 months to see how burglaries fluctuated over time, not simply for a total period before and during the project.
- A quasi-experimental approach, using the 'rest of force area' as a control.<sup>14</sup> This control was not truly comparable in terms of a matched profile, nor was it devoid of any intervention.
- A 'realistic' approach,<sup>15</sup> where the context of the project, the mechanisms by which it was expected to have an effect and the outcomes this would produce were considered, albeit briefly.

It can be seen from the points made above that the latter two methods were not applied in what we would consider an ideal way. Further, despite requesting that all the necessary data be recorded, this was not done in a manner which allowed us to produce a comparison group of those being offered the proactive service but not taking it. At the same time, we could only identify those who had the reactive service and those who did not, we could not determine why this was the case, or even if it had been offered to every burglary victim. With these limitations in mind, the evaluation simply aimed to determine whether the project had led to a reduction in the number of dwelling burglaries recorded in the borough and whether it had led to fewer people being repeat victims of such an offence. The results were varied, but overall it was felt that the scheme had been a success. To summarise, we found that:

- During the period July 2004 to March 2006, there were 1,137 reactive upgrades and 4,221 proactive upgrades carried out under the scheme. We estimated (due to difficulties with the data) that between 28 and 41 per cent of burglary victims received a reactive visit and that around four and a half per cent of the households in the borough had been visited either reactively or proactively during the period studied.
- There were significantly fewer recorded domestic burglaries in the borough during the 20 months the scheme was in operation than in the 20 months prior to this. However, this decrease had begun some time before the project started and offences seemed merely to level out during the period it was running.
- Compared to the 'control' area the decrease in domestic burglaries in the project borough was greater and the proportion of such offences occurring in this borough was lower for the period the project was running (there was, of course, no follow-up period)
- The victimisation rate for those receiving any type of upgrade was lower than the overall estimated victimisation rate for the borough.
- The 'repeat' victimisation rate for those receiving a reactive upgrade (i.e. those already burgled) was considerably lower than the rate of 'repeat' victimisation for all burgled households.<sup>16</sup>
- The necessary data and post-project period required to carry out an effective evaluation were not available.<sup>17</sup>

We concluded, therefore, that it was not possible to identify the contribution the project had made to the recorded decrease in burglaries in the borough, but that the comparative victimisation rates suggested the project should: "...be seen as a success, contributing towards a reduction in dwelling burglaries."<sup>18</sup> Those properties which had been upgraded had a lower burglary rate than the general population of the borough, despite the fact they would have previously been at greater risk by virtue of already having been burgled or being near such a property.<sup>19</sup> Within the described constraints, it was not possible to determine the mechanism(s) operating during the programme. At a micro-level, these may have been the perceived increase in effort and risk to the offender as a result of: more secure properties (target hardening and property marking); the presence of project workers in high risk areas (surveillance); and/or an increased awareness and caution of householders visited under the scheme (surveillance and guardianship).<sup>20</sup> On a wider, scale, there is an argument that crime rates, including for domestic burglary, have been dropping for many years and the decreases seen in both the recorded crime statistics and the British Crime Survey in recent years are simply a continuation of this trend which would have occurred regardless of crime prevention activity or crime and disorder legislation.<sup>21</sup> Whilst this is not the subject of this paper, we did find that decreases in domestic burglary in the borough studied were greater than in the rest of the force area. Although the evidence to refute this argument is not provided here, the technological and social changes which are acknowledged as contributing to this long-term decline, can be seen to include security and target hardening techniques or devices.<sup>22</sup>

The evaluation was delivered in the form of a final report and a presentation to the BTG. The results appeared to be well received, although media announcements had already been made - without the benefit of any evaluation - that the scheme had reduced burglary in the area. As a research team, we were generally pleased with how our findings and suggestions had been put into practice. We had been frustrated by the need to 'water down' the proactive element of the scheme and, even more so, by the missing data which hampered our ability to carry out a more thorough evaluation. Overall, however, the collaboration appeared to have been reasonably successful and we took a number of considerations from it. It is to these we now turn.

### **Researcher-practitioner Collaborations**

The main purpose of this paper is to consider the benefits of researcher-practitioner collaborations as experienced in the reported project. There has been much discussion in the field of crime and crime prevention of evidence-based policy<sup>23</sup> and 'what works',<sup>24</sup> but less often do we see published work exemplifying such a close working relationship as described here. Such commissions are, of course, carried out, both by academic institutions (universities) and other experienced organisations (such as Crime Concern) and consultancies. We believe it is rare, however, for the research team to continue working with and advising the practitioner team from the conceptual to evaluation stages.

Evidence-led policy (and policy-focused research) requires the sharing of information between policy-makers (or practitioners) and the research community. Although this should be a two-way relationship it is often difficult to achieve.<sup>25</sup> Despite the proliferation of the internet and the various toolkits and publications of bodies such as the Home Office, it would appear that at least some of those involved in auditing, tackling and prevent crime still do not know where to find this information or, perhaps more ominously, what to do with it.<sup>26</sup> The wheel continues to be re-invented. Whilst there remains, therefore, more than enough scope for 'pure' academic research and policy-oriented work, we believe that more research-practice collaborations can help narrow this information gap, by bringing evidence directly to those people who need to use it, ensuring it is locally relevant and assisting practitioners in applying it appropriately.

There are, of course, a number of practical issues which make this proposal less simple than it may seem. We now consider, from the experience reported here, some of these possible considerations.

### **Funding**

Academic research is reliant on funding, with the majority of research posts being for a fixed-term and the result of a successful bid, usually to a research council or, perhaps, a charity. Academic research is also expensive; certainly in terms of the funds available to CDRPs (and, to a lesser extent, police forces and local authorities). We were in a very fortunate position in that the CDRP with whom we worked (for two years) had been able to secure funding for this dedicated academic research facility and the research team was housed by West Midlands Police and further supported by the local area Drug Action Team and Government Office West Midlands. Such funding will not always be readily available. Indeed, despite the Economic and Social Research Council (ESRC) stating that research should be "...of value to potential users outside *or* within the research community",<sup>27</sup> published lists of successful bids rarely include crime research, let alone that which appears to be policy or practice oriented.<sup>28</sup> A more likely source of support for such research may be the Home Office, but the majority of crime prevention research published by them refers to after the fact evaluations, often of schemes for which they have provided the funding.<sup>29</sup> Obtaining funding is, therefore, the first stumbling block to be addressed and some lateral thinking may be required.

### **Time-scales**

Another issue which arose during this project was the disparity between operational, quick time analysis and what could be thought of as academic thoroughness. When funding is available to practitioners, there is often limited time to develop a project on which it can be spent. Therefore, initial analysis needs a short turnaround time. Realistically, this is likely to mean a collaboration will already have to be in place. In other situations where we have worked with practitioners or policy makers, we have negotiated a period of time for the researcher which is acceptable to both parties and still allows for a thorough analysis of the data. As with any research, not all the analyses need be included in the final report and the focus can, and probably will, be different to any publications one may wish to produce.

During the running of the project, practitioners may also require interim research to be carried out; both ensuring the project is 'on track' and that the problem is still being addressed in the most appropriate way (such as the right geographical area being targeted). This process proved very useful during our project and can be a good way to iron out any data issues which may affect the final evaluation. Such reports usually require caveats, however, so that they are not seen as more than they intend to be. Researchers will need to build in the capacity to produce such reports, which are valuable to:

- the project team - to ensure things are working as they should and to provide reassurance
- the scheme as a whole - as new intervention targets can be highlighted should the crime profile have altered and to highlight any *process* related issues that need addressing
- the research team - to 'test' the suitability of the data being collected for future evaluation, to provide an overview of how the scheme is being operated and to allow a method for re-iterating the theoretical and evidentiary impetus of the project.

### **Data Access**

A key consideration for any researcher is data. For those of us who predominantly use secondary analysis, this means securing a source. Whilst some data are freely available for criminological research,<sup>30</sup> much of what we do requires access to other organisations' datasets, such as crime recorded by the police. There is much debate about what such data can be said to represent,<sup>31</sup> but it remains a fact that much research into crime phenomena could not take place without secondary analysis and the use of police data.<sup>32</sup> Covering the period which included the discussed project, the research team was physically based in a police station with access to networked computers. In order to facilitate our research, all members of the team were security cleared by the Force to what was considered a satisfactory level. A high-ranking officer was responsible for overseeing the projects we worked on and agreeing our access to data for this purpose.

Usually police data is provided to researchers at some level of aggregation or with key individual details removed. When working towards a prevention project with practitioners, more detailed information may be required. For example, when producing the interim reports we needed to know the age, gender and individual addresses of those who had been burgled and those who had received the target hardening service. We further needed individual address and crime records for the evaluation. This process was facilitated by the prior agreement on data access and our research location. Establishing a suitable data protocol should be a key consideration for any researcher embarking upon such a collaboration. This can be difficult, but our experience suggests that it is certainly possible and to the benefit of all those involved.

### **Publication**

The practitioners and funders we have worked with have been supportive of our desire to publish our research in academic journals, but this may not always be the case, particularly if the paper is critical or appears to show those involved in a negative light. Where the funding has been obtained from an academic research source, there should be an assumption of the right to publish. When the research is commissioned and, therefore, funded by the other party to the collaboration, this cannot be taken for granted. We would suggest that such issues should be established at the outset of any collaboration or project with, for example, an agreement on who to seek permission from, a timeframe within which decisions will be made and, where possible, a statement that publication will be allowed except in certain, specified circumstances, most usually related to operational sensitivity or data protection. Careful wording, protection of identities and adopting an appropriate focus for the paper should normally prevent any refusals. As alluded to above, the way in which an academic paper is written and its main proposals are likely to be different to that required in a report to the project team; what is useful operationally may be different to what is useful for policy, which may also be different to what is of interest academically. Researchers should build in time for producing these different reports and construct them appropriately. There is obviously a duty to the practitioner partners to ensure the project reports receive due commitment.

### **Evaluation**

As we worked throughout the project as part of the steering group, we were in an excellent position to carry out the final evaluation. As an external evaluator it can often be difficult to ascertain exactly how the programme worked. Further, if the theoretical impetus or aims of the project have not been clearly

defined it can be nigh on impossible to measure its success. Eliciting this information is particularly important when carrying out a realistic evaluation and may involve interviews with *key informers*, who may be subjects, practitioners or stakeholders.<sup>33</sup> Often intervention programmes will evolve during their lifetime and this may confound the evaluation if such changes are not communicated. These were not problems for us, although we still faced some issues with the availability and appropriateness of data.

On the other hand, it could be argued that we were in the worst position to evaluate the project as we were too involved in its conception and operation. Had it been a full evaluation, this would probably be the case. However, we did not attempt to assess the successfulness of the proactive identification method, simply whether the project, as a whole, had contributed to a reduction in burglaries and repeat victimisation. In this way, we were able to remain objective whilst taking advantage of our 'insider knowledge' of how the project worked. We would suggest, therefore, that unless an innovative or novel research finding is being applied - and thus tested - by the intervention, it is perfectly possible, with the correct balance of detachment and reflexivity for a researcher involved in the project to carry out an evaluation.

### Concluding remarks and recommendations

<sup>1</sup> Department of Transport, Local Government and the Regions *Indices of Deprivation 2000*, DETR, London, 2000.

<sup>2</sup> Home Office *Crime and Disorder Reduction Partnerships: Recorded Crime for Key Offences 2001/02 to 2002/03*, Home Office, London, 2003.

<sup>3</sup> J Simmons and T Dodd *Crime in England and Wales 2002/2003, Statistical Tables*, Home Office, London, 2003.

<sup>4</sup> Neighbourhoods were geographically determined areas which were identified, and used, by the local authority. They represent natural communities which are understood by local residents and were, therefore, considered preferable to voting wards or police beats for our analysis.

<sup>5</sup> Unpublished reports to the CDRP BTG; details available from the authors.

<sup>6</sup> See, for example, R V Clarke *Situational Crime Prevention: Successful Case Studies 2<sup>nd</sup> edn.*, Harrow & Heston, New York, 1997; M Felson and R V Clarke *Opportunity Makes the Thief. Practical Theory for Crime Prevention* Police Research Series Paper 98, Home Office, London, 1998.

<sup>7</sup> *op cit*, note 5.

<sup>8</sup> For an overview of repeat victimisation see, for example, G Farrell and K Pease (eds) *Repeat Victimization* Crime Prevention Studies Vol 12, Criminal Justice Press, Monsey, NY, 2001. For using repeat victimisation as a crime prevention strategy for domestic burglary see, amongst many other examples, S Chenery, J Holt and K Pease *Biting Back II: Reducing Repeat Victimization in Huddersfield* Crime Detection and Prevention Series Paper 82, Home Office, London, 1997, where reductions of 30% were achieved over a two year period.

<sup>9</sup> For example, P Ekblom, H Law and M Sutton *Safer Cities and Domestic Burglary* Home Office Research Study 164, Home Office, London, 1996 reports a reduction in burglaries of 25% after a high dose target hardening intervention in a high crime area.

<sup>10</sup> S D Johnson and K J Bowers 'The Burglary as Clue to the Future: The Beginnings of Prospective Hot-spotting' *European Journal of Criminology* Vol 1, No 2, pp237-55, 2004.

<sup>11</sup> M Townsley, R Homel and J Chaseling 'Repeat Burglary Victimization: Spatial and Temporal Patterns' *Australian and New Zealand Journal of Criminology* Vol 33, No 1, pp37-63, 2000.

<sup>12</sup> M Wellsmith *Interim Review of the Focus Home Security Project* unpublished report, March 2005; M Wellsmith *A Second Review of the Focus Home Security Project* unpublished report, June 2005; M Wellsmith *Final Evaluation of the Focus Home Security Project* unpublished report, June 2006. All reports are available from the corresponding author.

<sup>13</sup> There is currently some ongoing debate in criminology about the most appropriate methods of evaluation. These predominantly focus on the relevant benefits (or otherwise) of a quasi-experimental approach which aims to mimic the randomised control trial and a 'realistic' approach which focuses more on the 'individuality' of an approach, drawing out its context, mechanisms and outcomes in an attempt to determine its replicability to other circumstances. See, for example, R Pawson and N Tilley 'What Works in Evaluation Research?' *British Journal of Criminology* Vol 34, No 3, pp291-306, 1994 and the subsequent responses in the same journal that this article attracted.

<sup>14</sup> In other words, the whole force with the borough in question removed. Although this is not ideal, it was not feasible, under the circumstances, to identify a suitable 'matched' borough. Nor would it have

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been possible to find one which had not received some sort of domestic burglary reduction programme.

<sup>15</sup> R Pawson and N Tilley *Realistic Evaluation*, Sage Publications, London, 1997.

<sup>16</sup> It should be noted that, for this analysis, a repeat victim was any household which was burgled for a second time during the period of study. The more usual definition applied by the police is a second offence during a 12 month period.

<sup>17</sup> Wellsmith *Final Evaluation of the Focus Home Security Project*.

<sup>18</sup> Wellsmith *Final Evaluation of the Focus Home Security Project*, p5.

<sup>19</sup> Wellsmith *Final Evaluation of the Focus Home Security Project*, p5.

<sup>20</sup> For the most recent matrix of situational crime prevention techniques, see D B Cornish and R V Clarke 'Opportunities, Precipitators and Criminal Decisions: A Reply to Wortley's Critique of Situational Crime Prevention' in M J Smith and D B Cornish (eds) *Theory for Practice in Situational Crime Prevention* Crime Prevention Studies Vol 16, pp41-96, 2003; specifically p90.

<sup>21</sup> *Crime Statistics: An Independent Review* carried out for the Secretary of State for the Home Department, November 2006, available online at [www.homeoffice.gov.uk/rds/pdfs06/crime-statistics-independent-review-06.pdf](http://www.homeoffice.gov.uk/rds/pdfs06/crime-statistics-independent-review-06.pdf) [last accessed 22 January 2007].

<sup>22</sup> *Crime Statistics: An Independent Review*, p32; A Walker, C Kershaw and S Nicholas *Crime in England and Wales 2005/06*, Home Office, London, p85, 2006.

<sup>23</sup> See, for example, N Tilley and G Laycock 'Joining up Research, Policy and Practice about Crime' *Policy Studies* Vol 21, No 3, pp213-27, 2000.

<sup>24</sup> Such as N Tilley and G Laycock *Working Out What to Do: Evidence-based Crime Reduction* Crime Reduction Research Series Paper 11, 2002; L W Sherman, D P Farrington, B C Welsh and D L MacKenzie (eds) *Evidence-based Crime Prevention*, Routledge, London, 2002.

<sup>25</sup> Tilley and Laycock 'Joining up Research, Policy and Practice about Crime' *Policy Studies* Vol 21, No 3, pp213-27.

<sup>26</sup> R Erol, M Wellsmith and A Burrell *Improving Performance for Crime and Drug Partnerships: Gap Analysis* unpublished report, 2006. Available from the corresponding author.

<sup>27</sup> Economic and Social Research Council *General Guidance Notes on Constructing a Good Proposal to the ESRC Research Grants Scheme*, available from [www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Support/research%5Faward%5Fholders/FAQs2/index1.aspx](http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Support/research%5Faward%5Fholders/FAQs2/index1.aspx) [last accessed 22 January 2007].

<sup>28</sup> See

[www.esrcsocietytoday.ac.uk/ESRCInfoCentre/opportunities/current\\_funding\\_opportunities/research/index.aspx?ComponentID=11696&SourcePageId=5964](http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/opportunities/current_funding_opportunities/research/index.aspx?ComponentID=11696&SourcePageId=5964) for links to pdfs of successful awards from recent meetings [last accessed 22 January 2007].

<sup>29</sup> G K Laycock *Property Marking: A Deterrent to Domestic Burglary?* Crime Prevention Unit Paper 3, Home Office, London, 1985 would be one of a small number of notable exceptions.

<sup>30</sup> Examples include data from the British Crime Survey and General Household Survey. These, and others, are available from [www.data-archive.ac.uk](http://www.data-archive.ac.uk).

<sup>31</sup> Such debate is far beyond the scope of this paper. Interested readers should consult, for example, M Maguire 'Crime Statistics: the 'data explosion' and its implications' in M Maguire, R Morgan and R Reiner (eds) *The Oxford Handbook of Criminology* 3<sup>rd</sup> edn, Oxford University Press, Oxford, pp322-75, 2002 which provides both an overview and extensive references for further reading.

<sup>32</sup> M Riedel *Research Strategies for Secondary Data: A Perspective for Criminology and Criminal Justice*, Sage Publications, Thousand Oaks, CA, 2000

<sup>33</sup> Pawson and Tilley *Realistic Evaluation*, pp159-64.