

CRIME VICTIMS SURVEYS IN AUSTRALIA

**PROCEEDINGS OF A CONFERENCE
HELD AT GRIFFITH UNIVERSITY
28-29 NOVEMBER 1994**

Conference Sponsors:

**Criminal Justice Commission
Centre for Crime Policy and Public Safety, Griffith University
Queensland Government Statistician's Office**

© Criminal Justice Commission, 1995.

Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the COPYRIGHT ACT, no part may be reproduced by any process without permission. Inquiries should be made to the publisher, the Criminal Justice Commission.

ISBN 0-7242-6573-2

Printed by The Print People, Brisbane.

PREFACE

In November 1994 the Queensland Criminal Justice Commission (CJC), the Queensland Government Statistician's Office (GSO) and the Centre for Crime Policy and Public Safety, Griffith University jointly sponsored a two day researchers' symposium on crime victims surveys in Australia. The symposium was attended by crime researchers from throughout Australia, representatives of the Australian Bureau of Statistics (ABS) and other federal agencies, and a leading international expert on crime victim surveys, Dr Pat Mayhew of the British Home Office.

Our decision to organise the symposium was prompted by the publication in May 1994 of the results of the 1993 Australian Bureau of Statistics (ABS) National Crime and Safety Survey (NCSS). Release of these data enabled crime researchers to compare victimisation rates across States and to assess whether there had been significant changes in victimisation rates since 1983, when the last national survey had been undertaken. The 1993 NCSS was also of particular interest from a methodological point of view, because it had been conducted using a self-complete 'drop-off - mail-back' methodology, whereas other surveys of this type, including the 1983 national survey, have employed face-to-face interviews. This shift in methodology raised issues about the comparability of the 1983 and 1993 surveys, and the general cost effectiveness and utility of mail-back surveys for measuring victimisation.

More generally, we saw the release of the 1993 NCSS as providing a convenient opportunity to review other crime victims surveys - and research based on these surveys - undertaken in Australia in recent years. Since 1990 all Australian mainland States have funded at least one large scale crime victims survey and several jurisdictions have committed themselves to conducting such surveys on a regular basis. The growing use of these surveys represents a very substantial investment of resources, especially when compared with the limited funds available for other forms of applied criminological research. For example, the 1991 Queensland Crime Victims Survey, which was jointly funded by the CJC and the GSO, cost around \$350,000. The 1993 NCSS cost around \$750,000. Recent State-level versions of the 1993 national survey have cost between \$40,000 and \$165,000, depending on the size of the jurisdiction. Given the large sums of money being expended in this area, it seemed an appropriate time to consider whether the surveys were providing 'value for money', and to discuss how to maximise the value of this type of research.

In putting together the program for the symposium, our aim was to ensure that a diversity of interests were represented: statisticians responsible for designing and administering crime victims surveys; funding bodies; researchers and users from academic, government and quasi-government organisations; and critics, as well as proponents, of this form of research. Reflecting this diversity, the 14 papers presented at the symposium addressed a wide range of issues relating to the design, interpretation, uses and future direction of crime victims surveys in Australia.

This volume contains, in revised form, all of the papers presented at the symposium, plus a paper on 'The Future of the ABS Crime and Safety Survey' prepared after the symposium by Ian Crettenden, Director of the ABS National Courts Statistics Unit (which will be responsible for future national ABS surveys). The volume also includes an extremely useful summary table of all crime victims surveys conducted in Australia since 1975, prepared by the Crime Statistics Unit of the Queensland GSO. Collectively, the papers reproduced here represent a significant contribution to the literature on crime victims surveys and should serve as a valuable resource for researchers, statisticians and policy-makers, interested in this field of inquiry.

On behalf of the symposium convenors, I would like to thank all of those who contributed to the symposium and took the time to revise their papers for inclusion in this volume. I would also like to acknowledge the contribution of Katrina Erueti, David Reiter and Karen Murphy of the CJC who assisted in preparing the papers for publication, and Griffith University, which provided the venue for the symposium.

DAVID BRERETON

Director

Research and Co-ordination Division

CONTENTS

PREFACE	i
SOME METHODOLOGICAL ISSUES IN VICTIMISATION SURVEYS	1
<i>Pat Mayhew</i>	
USES AND ABUSES OF CRIME VICTIM SURVEYS	25
<i>Don Weatherburn and Bronwyn Lind</i>	
WHAT DO VICTIMISATION SURVEYS MEASURE? AN EXAMINATION OF TRENDS IN ROBBERY AND ASSAULT VICTIMISATION IN WESTERN AUSTRALIA AND AUSTRALIA	33
<i>David Indermaur</i>	
COMPARING CRIME LEVELS AND CRIME TRENDS IN SOUTH AUSTRALIA USING CRIME SURVEYS AND POLICE DATA	51
<i>Frank Morgan</i>	
COMPARISON OF VICTIMISATION RATES REPORTED IN THE 1991 QUEENSLAND CRIME VICTIMS SURVEY AND THE 1993 NATIONAL CRIME AND SAFETY SURVEY	67
<i>Ranjit de Mel and Carlos Carcach</i>	
COUNTING CRIME: ARE VICTIMS SURVEYS THE ANSWER?	83
<i>S. J. Egger, D. B. Brown, R. Hogg, B. O'Toole, J. Stubbs, G. Travis</i>	
MEASURING DOMESTIC VIOLENCE BY CRIME VICTIM SURVEYS	97
<i>Julie Gardner</i>	
CORRELATES OF VICTIMISATION FOR CRIMES AGAINST THE PERSON: AN ANALYSIS OF THE 1991 QUEENSLAND CRIME VICTIM SURVEY	111
<i>Anna Stewart and Ross Homel</i>	
STATE DIFFERENCES IN BURGLARY VICTIMISATION IN AUSTRALIA: AN EXPLORATORY ANALYSIS	139
<i>Timothy Phillips</i>	
EXPLAINING TRENDS IN REPORTED RAPES: AN ALTERNATIVE TO CRIME VICTIM SURVEYS	157
<i>Stuart Ross and David Brereton</i>	

APPLICATION OF THE FEAR OF CRIME AND INCIVILITY MEASURES BASED ON THE 1991 QUEENSLAND CRIME VICTIM SURVEY: ILLUSTRATING METHODOLOGICAL ISSUES IN CRIMINOLOGY	173
<i>Kay Thomas, Maarten Post and Carlos Carcach</i>	
REFINING VICTIMS OF CRIME SURVEYS: THE AGED AS A CASE STUDY	187
<i>Simon Petrie</i>	
THE FIRST AUSTRALIAN NATIONAL SURVEY OF CRIMES AGAINST BUSINESSES: A RETROSPECTIVE AND A FEW THOUGHTS ABOUT THE FUTURE	203
<i>John Walker</i>	
NON-RESPONSE ADJUSTMENTS IN THE 1993 NATIONAL CRIME AND SAFETY SURVEY	213
<i>Bernard Wong</i>	
THE FUTURE OF THE ABS CRIME AND SAFETY SURVEY	223
<i>Ian Crettenden</i>	
AN OVERVIEW OF VICTIMS OF CRIME SURVEYS 1975 – 1995	233
<i>Lineke Quartel and Fiona Boorman</i>	

SOME METHODOLOGICAL ISSUES IN VICTIMISATION SURVEYS

Pat Mayhew
*Home Office Research and Planning Unit
London*

INTRODUCTION

Victimisation surveys are now well established, their results widely disseminated, and further advances in the offing. When developed, they were subject to close methodological scrutiny, particularly in the United States, and particularly with regards to response issues. The conclusions were not altogether reassuring, leaving some fairly big questions marks over the ability of respondents to remember all incidents and place them accurately in time, over their willingness to report some incidents which were known to have been notified to the police, and over how well surveys count domestic violence and sexual assault (see, for example, Penick & Owens 1976; Skogan 1981). Methodological work has subsequently continued, but in much weaker focus against the background of the manifest benefits of surveys in providing an alternative measure of crime and a very rich set of data about 'what crime is like' and who is most harmed by it.

I do not intend to discuss methodological issues in any systematic way: some issues are parochial (eg, sampling frames), and much of the technical literature will already be known. Rather, I will take up some issues pertinent to the Australian situation at the moment, and to which I have something to offer from the British Crime Survey (BCS). The issues are as follows:

- The problems involved in comparing independently organised surveys.
- The degree to which survey data can and should tie up with police figures.
- The value of changing subject components.
- Some issues to do with measuring trends in risks, and attitudes to crime. These concern: (a) understanding whether the victimisation "take" may have changed; (b) the position of questions in the questionnaire, and (c) changes to screener questions.
- The current consensus about the value of Computer Assisted Personal Interviewing (CAPI), the experience of the BCS with CAPI, and ways in which CAPI might adventurously be used to provide better measures of sensitive topics.
- The need to make some advance in understanding what victimisation means.

THE COMPARABILITY OF SURVEYS

Victimisation surveys have grown at national level, at state level, or within states at local level. Indeed, very few are the same and many are strikingly different. Survey researchers often pay lip service to the problems of design difference in terms of comparing survey results, but more often than not ignore them when demand arises for comparing one set of results with another. In Australia, victim surveys have developed with State interests as paramount as national ones. This has led to national instruments running

alongside State instruments. In addition, changing interests (and budgets) have meant lack of consistency in measurement over time. Almost inevitably, though, interest in survey-to-survey comparisons has gained ground, disregarding the hazards of methodological differences.

My purpose here is to caution very strongly against making comparisons between independently designed surveys, or between surveys which have changed methods over time. The problems of comparison are formidable. Mail surveys will draw in different samples from those with face-to-face interviews. Telephone interviews could well produce different answers from face-to-face interviews (at least on some questions). Surveys which use only 'screener' questions to count victimisation are likely to give a different picture to surveys with more detailed Victim Incident Forms. Where recall periods differ (as well as bounding frames) results will differ also (with shorter recall periods producing higher victimisation estimates). The age-range of those interviewed will influence results (especially as risk levels for 'elderly teens' are high). By whom a survey is said to be sponsored by may well make a difference. One can go on and on.

The pitfalls of comparing radically different instruments are the more obvious. Less obvious are the pitfalls of comparing results from questionnaires which are the same, or nearly the same. The difficulties often arise from the computational procedures for estimating risk levels – typically hidden from view. I will illustrate this with my own experience. It is salutary.

I spent a year trying to align the national surveys of the United States, Canada and England and Wales to make reasonable comparisons about the level and nature of residential burglary in each country (see Mayhew, 1987). To do this, I manipulated each data set to take account of known differences in survey design. The NCVS of the United States was by far the most difficult to deal with. It is less important here to report the substantive conclusions of this comparison, than to underline the methodological traps. At the end of a year's work, my conclusion was that Canada had a higher rate of residential burglary than the United States. Criminologically, I was not entirely happy with this, but as far as I could see, it seemed fairly inescapable technically. A report was written – with some degree of academic ingenuity – when by chance I spotted a difference in computer coding which suggested that the conclusion was spurious. Bear in mind that the NCVS questionnaire and that used in the Canadian National Survey were *identical*. However, programmers had taken difference decisions about the classification of attempted burglary. The detail is not important, but basically the Canadians had included incidents for which the respondent had given no clear evidence of an attempt (a question specifically asked); the Americans had disregarded these, their reasoning being that if the respondent could not point to some evidence of attempted entry, then there was insufficient proof that a crime had occurred. It was the higher rate of attempted burglary in the Canadian data which produced the conclusion that burglary levels exceeded those in the United Kingdom. The probably correct conclusion was reached only by a stroke of luck.

The bottom line, then, is that analysts who try to align estimates of victimisation from different surveys risk reaching very misleading conclusions. There are all manner of dangers, one of which is computational procedures for estimating risks, which are usually unknown, even when questionnaires appear the same. The pitfalls of comparing instruments which are *radically* different should be obvious. It was for this reason, incidentally, that the International Crime Survey was mounted with strict comparability in mind (see van Dijk & Mayhew 1993).

Is there any way around these problems from an Australian perspective? Perhaps the best way forward is to get a panel of State experts to **agree** on a common methodology, **stick to it**, keep tight control of **instrumentation**, and agree on **common data analysis**. However, I can readily anticipate the problems with this approach: States will think they "know best"; analysts will not be in close enough touch; States will want their own focus to be pursued (eg, defining 'burglary' as with entry, rather than with entry and attempts); and in the last resort they will put local ownership over national consistency.

LINKING SURVEY AND POLICE FIGURES

Victim surveys complement police figures, but there are decisions to be made concerning the two sources as regards to levels and trends in crime. Most surveys are designed in such a way (or at least the design decisions go by default) that the comparisons that can be made are rather loose. Thus, little attention is paid to the fact that the coverage of crime will be different, and that definition of offences will diverge. (For instance, police figures will include offences committed against children, who are rarely covered in surveys; and police definitions of different types of assault are unlikely to be carried through in surveys.)

Surveys designed with no close tie-up with police figures in mind are more parsimonious and – as will be seen – avoid some problems. But there is another model, of which the BCS is an example, where direct comparisons between survey and police figures are sought. This involves two main procedures. The first is to classify offences in the way the police do. This is done by using detailed information in the Victim Incident Form, which is designed to be able to distinguish, for instance, between a common assault and a wounding, or a burglary rather than a theft from the house by someone with permission to be there. Strict offence coding principles are laid down in liaison with the police, and coding is done by a few specially trained coders; when there are difficult decisions they are referred to the police. The second procedure involves making adjustments to police figures to maximise comparability with the BCS. For instance, crimes against those under 16 are excluded as they are not covered by the survey; recorded vehicle thefts are adjusted to exclude commercial vehicles; and vandalism against public and corporate property is also excluded from police figures. These adjustments are made on the basis of a questionnaire sent to all police forces in England and Wales. The two procedures mean that the police count of residential burglary, for instance, can be matched with the survey count (derived from grossing up risk estimates to the total household population). In the 1994 BCS, the burglary count in 1993 was 1.75m offences – reflecting unreported and unrecorded offences – as against 0.73m in police figures (Mayhew, P. et al. 1994). What can also be done is to estimate the number of *reported* offences *not recorded* by the police. Thus, for instance, an estimated 1.21m offences were reported, against 0.73m recorded – a shortfall of some 40 per cent.

Is this precise tie-up worthwhile? I find it rather difficult to say. There are some advantages: more confidence can be placed in trends in crime from the two sets of figures, and it is possible to estimate the extent of the “dark figure” for different forms of offences. There can also be some measurement of possible changes in recording practices, by comparing over time the difference between the number of reported and recorded offences. For instance, robbery and wounding offences recorded by the police almost doubled between 1981 and 1991, whereas the BCS showed an increase of only a fifth. Reporting levels rose through the 1980s, but not enough to account fully for the divergence in trends. This suggests that the police were increasingly tending to give higher priority to some types of violent crime, such as domestic violence and street robbery, and where there were options for classification (for example between wounding and common assault, or between robbery and theft from the person), they may have chosen the more serious. In the other direction, the BCS and police figures show broadly similar trends in acquisitive crime between 1981 and 1993. Given that more such offences were reported to the police over this period, this also implies that fewer reported offences were being recorded, or that they were being recorded as other types of crime which may not necessarily appear in police figures as notifiable offences. Obviously, the possible fall-off in recording by the police was a sensitive finding, especially given the introduction of performance indicators for the police, a principle one of which was the ‘clear-up’ rate.

But the tie-up between survey and police figures also has disadvantages. This approach involves the separate exercise of canvassing police forces for information to adjust recorded crime figures. Coding of survey offences needs to be very carefully done, and with scrupulous regard to consistency of coding over time (something which is more difficult with changes in survey companies). The inevitable shortfall between the number of reported and recorded offences also causes problems. It is presentationally difficult, as said, to show that not all reported offences are recorded, and that recording by the police can

change over time. But robust statements that this may well have happened are difficult to make given that the estimated shortfall is somewhat statistically fragile because of sampling error on the number of reported offences, and the inability to be certain that survey offence classifications are absolutely consistent with those of the police.

In sum, then, there is certainly some value in a close tie-up with police figures, although it involves extra work, more careful survey management, and the need to deal with political 'fall-out' from showing a recording shortfall. A much looser tie-up between survey figures and those of the police is the alternative. This would, for instance, allow a comparison of the trend in survey-defined assaults with the trend in police-defined assaults, without being able to show a reliable 'dark figure' of assaults in any one year, or track possible recording changes.

CHANGING COMPONENTS

The BCS carries a basically unchanging "crime counting" core of questions. These comprise, first, a large number of "screener" questions to identify probable victims and sort out whether the incident was an isolated event, or part of a series of offences. Second, there is a battery of questions in a Victim Incident Form. These verify whether what happened is within the survey coverage, ascertain the date of the incident, check again the number of incidents in any series, and then collect details of the crime. These latter details are, of course, critical in classifying offences, but they are also important in terms of the value of the survey.¹ Each sweep has also collected basic socio-demographic information, and details of household and personal 'lifestyle' (including, for instance, drinking habits and household occupancy patterns).

The comparative rarity of victimisation (or at least some forms of it), means a large financial outlay to ensure adequate samples. The return on this has, in our view, been greater by using the BCS to cover a number of other issues, in separate subject components. These components have varied quite widely in content. Some are repeated intermittently, with some question staying the same, some modified, and other, new ones being introduced in the light of developing theory and interests. Table 1 shows the main coverage of the five BCS sweeps, leaving aside the 'crime counting' questions, and the socio-demographic and lifestyle questions (which themselves have changed somewhat). Since attitudinal questions usually need a smaller sample size than needed for victimisation estimates, these have frequently been spilt across two halves of the overall sample. Components which have been most fully developed are in shaded cells.

Changing components is not resource neutral of course: it adds to the development time for the survey, and leads researchers into difficult meetings with policy colleagues who sometimes fail to appreciate that representative sampling techniques will not yield enough cases within their interest. This approach also increases survey costs, because of the longer interview; and it can pose a much more difficult task for interviewers, who have to choose between a number of alternative questionnaires (albeit a problem eliminated with Computer Assisted Personal Interviewing, see below). It also has implications for analysis effort. This is especially so when the components are new; there will be no established computational procedures, and relationships between variables need to be carefully checked, whether they show the expected or the unexpected.

¹ The details include: location, time of day, the offender's *modus operandi*, details of offender(s) if known, what was stolen in any theft, amount of financial loss through theft or damage, the victim's assessment of personal culpability, degree of injury and medical attention (if any), whether the incident was reported to the police, how it was reported, the police reaction, emotional and practical effects, contact with support services, an assessment of the seriousness of the incident and the sanction that the victim would recommend for the offence.

TABLE 1 – TOPIC COMPONENTS IN THE VARIOUS SWEEPS
OF THE BRITISH CRIME SURVEY

	1982	1984	1988	1992	1994
Attitudes to crime in the neighbourhood		✓		✓	✓
Fear of crime	✓	✓	✓	✓	✓
Fear of other misfortunes	✓				✓
Contacts with and attitudes to the police	✓		✓	✓	✓
Awareness of Police Complaints Authority				✓	
Attitudes to crime and sentencing		✓		✓	
Attitudes to the seriousness of crime		✓		✓	
Membership of Neighbourhood Watch		✓	✓	✓	✓
Security behaviour		✓	✓	✓	✓
Car parking patterns			✓	✓	✓
Witnessing crime			✓	✓	✓
Experience of household fires			✓	✓	✓
Experience of obscene telephone calls	✓			✓	
Self-reported cannabis use	✓	✓		✓	✓
Use of and attitudes towards drugs				✓	✓
Self-reported offending	✓	✓			
Handling stolen goods					✓
Self-reported drunken driving and attitudes	✓		✓		
Sexual victimisation since age 16					✓
Victim and witness intimidation					✓
Racially motivated crime			✓	✓	✓
Experience of other misfortunes	✓				✓
Experience of low-level street harassment		✓			✓

But the disadvantages of changing components are far outweighed by the benefits. This strategy has meant that the BCS – a major part of Home Office research expenditure – has been responsive to policy needs. Thus, the survey is used to provide national “benchmark” figures on fear of crime, attitudes to the police, and Neighbourhood Watch. More recently, it is used to monitor use of illegal drugs. Home Office policy divisions use the BCS to take up topical issues (albeit, sometimes swayed more by it being available, rather than the best research instrument – *pace* victim and witness intimidation). But topical policy interests have been fairly well served through, for instance, questions on racially motivated crime, changes in patterns of security behaviour, and attitudes to crime and sentencing. The questions on household fires look at first sight odd in the context. But they reflect an area of Home Office responsibility, and in the event have had some criminological interest because of the apparent overlap between experience of fires and crime at the level of individual households.

Those involved in the BCS has been given a fair degree of autonomy in survey development (and they have taken a degree more). The result has been that concepts have been measured that promise to be theoretically relevant to understanding victimisation. Questions on self-reported offending are a case in point: many policy customers may well have argued against their inclusion if they had overriding control of survey content. Moreover, there has been considerable leeway given to use external academics as consultants in developing topic components.² Leaving survey development in the hands of academic criminologists leads, in my view, to a more theoretically rich instrument. But I accept this is an unusual reality.

TREND ISSUES

The need to provide a reliable trend line is highly important for victim surveys. This means that those who run surveys risk trouble in changing the mode of interview, changing the questions, or indeed changing in any fundamental way the structure of the questions asked. Changes will nearly always upset consistent measurement. Yet, of course, the need to keep procedures the same conflicts with the realities of everyday survey life to do with budgets, policy concerns and available expertise. More importantly, it is often the case that we make decisions about survey design, then realise they were not very sensible. In the interests of trend analysis, we then have to proceed with measures we know we could improve.

The BCS has had to contend with a number of changes. Tight financial management has meant competitive tendering. This has resulted in several changes of survey company, with consequent dangers of "company" effects. The growing inadequacy of the Electoral Register as a sampling frame forced a change to the Postcode Address File, which produced a "better" sample and fractionally higher victimisation rates because of this (see Aye Maung 1994). The change to Computer Assisted Personal Interviewing (CAPI) in the 1994 survey has also meant changes in responses, (see below).

For the moment, I shall pick up three points. The first concerns the value of measuring the seriousness of offences experienced by victims as a way of tracking whether changes in survey instrumentation have changed the profile of offences captured. The second relates to the positioning of questions, an issue which may not have been considered seriously enough in terms of trend measurement. The third point relates to screener questions. Here I shall draw on both the BCS and the National Victimisation Crime Survey (NCVS) of the United States.

OFFENCE SERIOUSNESS SCORES

One way of testing consistency of results over time, or the consistency of victimisation measurement between surveys, is to include a measure of the seriousness of offences experienced by victims. Such "seriousness scores" are derived by asking victims what degree of seriousness they accord the incident that had happened to them.³ The scores provide a very effective way of assessing whether the "take" of incidents in different surveys is roughly the same; they also provide an extremely useful analysis variable.

² Crime seriousness was a case in point (with help from Ken Pease at Manchester University); another was fear of crime in the 1984 survey (Michael Maxfield of Indiana University); yet another was contacts with the police (Wesley Skogan from Northeastern University, Chicago).

³ In the BCS, the scale is 0 to 20, where zero represents a very minor crime like theft of milk bottles, and twenty, murder. Obviously no meaning can be attached to isolated scores, but the scale allows one to distinguish *groups* of offences according to seriousness. There is considerable variation within crime categories in ratings of seriousness, in that most have large standard deviations. This variation will reflect in part differences between respondents in the use of the scale, albeit previous work has shown a fair degree of consensus between people in judgements about seriousness. The variations, then, may be more to do with the fact that offences *within* crime categories will vary considerably in nature.

The 1994 BCS involved both a change to CAPI and yet another change of survey company. The results from the 1994 sweep showed a marked increase in victimisation risks over the previous survey in 1992. For the comparable sub-set of offences, survey figures increased by 18 per cent over the two years, as against a smaller increase of 7 per cent in police figures – reversing the previous pattern of lower survey increases in crime. One obvious possibility was that the bigger “take” of victimisations simply reflected a change in the type of incidents being reported to interviewers – either because of the use of computers, or perhaps because of better interviewer performance. The assumption was that the bigger ‘take’ of incidents might mean that a greater number of less serious offences were being reported in interviews.

An essential first task, then, was to look at the distribution of seriousness scores by offence. Bypassing the detail, the conclusion was that the seriousness scores did not support the case that any substantially greater number of lower level offences had been drawn into the survey; the scores were reasonably consistent. Of course, public assessment of crime seriousness might change over time, but on balance we felt shifts in views were unlikely to have been substantial over two years. Given the politically damaging nature of the 1994 BCS results, it was with some relief that we could use the seriousness scores to argue that the substantial increase in risks was not likely to be an artefact of survey methods. It was helpful, too, that results for 1991 and 1993 from the General Household Survey, which had not yet moved to CAPI, showed an even bigger increase in burglary than the BCS.

Seriousness scores can also be used to analyse victimisations captured in surveys. One principle use is to show that crime surveys are not just simply extra capturing offences ‘not worth worrying about’. There is obviously a strong relationship between higher seriousness scores and higher levels of reporting to the police, in that seriousness ratings are influenced by objective factors such as financial loss, degree of injury etc. However, the scores typically show that the decision to report is not wholly a function of the seriousness of what happened. Table 2, based on 1992 BCS results, divides offences into three levels of seriousness, and show the percentage of each reported to the police. The table shows the estimated *number* of offences in each seriousness category which were reported, and those not. In the ‘most serious’ category, some 1.9m offences went unreported, as against 3m *reported* offences considered similarly serious. It is evident that although the majority of incidents judged particularly serious came to police attention, a significant number of those which had most impact on victims did not.

TABLE 2 – OFFENCE SERIOUSNESS AND REPORTING TO THE POLICE (1992 BCS)

	LEAST SERIOUS	MORE SERIOUS	MOST SERIOUS	ALL OFFENCES
% reported	25%	48%	62%	62%
Number reported	1,400,000	2,100,000	3,500,000	6,500,000
Number not reported	4,400,000	2,300,000	1,891,000	8,600,000

Source: 1992 BCS (weighted data)

Note: The ‘least serious’ offences (39% of all offences) were those with scores of 0–3; the ‘more serious’ offences (29%) were those scores of 4–6; and the ‘most serious’ (33%) were those with scores of 7–20.

Seriousness scores can also be used to compare which types of offences are most seriously regarded by victims, and which type of victim regards what happened to them as of greater impact. The BCS has introduced a typology of violence, for instance, and has looked at different types of violent offences in seriousness terms (Mayhew, P. et. al. 1993). Overall, women regarded violent offences rather more seriously than men (cf. Pease 1984). Incidents of domestic violence reported by women were most

seriously regarded, even though only one in five was notified to the police. Mugging was regarded nearly as seriously, by both men and women. Any notion that male victims will take a rather indifferent view to pub brawls is somewhat belied by the data; they were viewed as of at least average seriousness.

ORDER OF QUESTIONS

Those involved in questionnaire design are probably, in my view, less aware than they should be of the implications of where in a questionnaire particular items are placed. It is usually recognised that surveys should start with some not overly-important "warm-up" questions, and that questions which could fall prey to respondent fatigue are best at the end of the interview. There are indications, however, that question position can be quite important in influencing observed frequencies. This is important both for comparing results of similar questionnaires over time, and for comparing results from independently-organised surveys, which may include the same questions but in different positions. There are two useful illustrations from the BCS. The first concerns attitudes to the police; the second women's fear of rape.

ATTITUDES TO POLICING

The BCS has contained a number of questions on people's attitudes to policing. Some have changed over time, but a question in all five sweeps is: 'Taking everything into account, would you say the police in this area do a good job or poor job?'. (If respondents say 'good job', they are asked 'a very good job or fairly good'; similarly for 'a poor job'). In 1988, the question was included twice! It would be face-saving to say this was a deliberate methodological ploy; in fact, it was a mistake. The question was first asked early on in the questionnaire (after some "warm-up" questions and items about fear of crime); for half the sample it was also asked two-thirds of the way through a set of questions on policing, late into the interview.

The results are interesting. Among the half of the sample asked the question twice, the answers of one-third changed. Rather more gave a more positive rating the second time of asking than the first (Table 3). This is perhaps somewhat surprisingly given that by this time respondents had also been asked extensive questions about criminal victimisation, which may well have alerted them to the "problem" of crime. But the pattern was not consistent across different groups. Those who in the detailed questions on contacts with the police reported an unsatisfactory experience were more likely, at the second time of asking, to give a less favourable view of overall police performance than those who had reported satisfactory experience. This may be because respondents give an "off-the-cuff" answer early on, but having talked through their own experiences with the police, subsequently revise their opinions downwards.

**TABLE 3 – OVERALL SATISFACTION WITH LOCAL POLICING:
EFFECT OF QUESTION POSITION CHANGE (1992 BCS)**

	All	EXPERIENCE WITH THE POLICE		
		Satisfactory	Unsatisfactory	Mixed
PERCENTAGES				
No change	66	67	58	55
Improved	22	22	23	26
Worsened	13	11	18	19

Source: 1992 BCS (weighted data).

Note: Respondents have an *improved* rating if (a) they gave a valid answer at each question, with a higher rating on the second than the first; (b) they answered don't know or refused the first question, but subsequently said the police did a good job; (c) they said the police did a poor job on the first question but answered don't know or refused later. Respondents had a *worse* rating if (a) they gave a valid answer at each question, with a lower rating on the second than the first; (b) they answered don't know or refused the first question, but later said the police did a poor job; (c) they said the police did a good job on the first question but answered don't know or refused on the second.

RAPE

A second example from the 1994 BCS relates to a question to women about their fear of rape. In previous sweeps, the 'worry about rape' question was in a battery of questions about worry about different forms of crime, early on in the questionnaire. In the 1994 survey, which had a particular focus on fear of crime, "worry" questions were split into two. Some were in the same position as in previous years; others – asked of half the sample – were much later in the questionnaire along with, but before, new questions on fear of non-criminal misfortunes (eg, a wage-earner in the family being made redundant). Table 4 shows a drop in worry about rape evidenced in the 1994 survey; the figures for worry about burglary among women, for which there was no change in question position, are also shown. The change in the rape figures seems almost certainly artefactual. Tentatively, one might assume that greater worry is registered in a more "off-the-cuff" answer early on in a questionnaire before women have gone through questions which remind them of the mundanity of most criminal victimisation. In any event, though, it is clear once again that measurement can be sensitive to question position.

TABLE 4 – WORRY ABOUT RAPE (WOMEN): 1992 AND 1994 BCS

	1992	1994
% very worried about rape	30	25
% very worried about burglary	22	30

Source: 1992 and 1994 BCS (weighted data). Base includes 'don't know' answers

SCREENER QUESTIONS: BRITISH CRIME SURVEY

As said, a perennial problem is being locked into design decisions which prove to be less than perfect. This often happens in relation to initial "screening" questions designed to prompt respondents into remembering incidents of crime over a given recall period. In the BCS, "screeners" on sexual victimisation and domestic assault have been most problematic. The 1982 sexual victimisation screener produced very low counts. A deliberate change to the question in the next (1984) survey doubled the 'take' of sexual victimisations, and further changes have altered the count yet again. We do not now publish sexual victimisation risks: clearly, with the deliberate changes made to the screener questions, it is meaningless to do so. Changes to screener questions have also been made in relation to assault, where we tried to improve the count of domestic violence incidents. The three conventional assaults, threats and sexual assault screener questions used prior to the 1992 survey are shown below, together with the additional 'domestic assault' screener question used in the 1992 and 1994 surveys. (This was on a show card, and asked where there were more than one adult in the household.)

Conventional Assault Screener

'Apart from anything you have already mentioned, has anyone, including people you know well, deliberately hit you . . . fists . . . weapon . . . kicked . . . used force or violence in any other way?'

Conventional Threats Screener

'Apart from threatened to damage . . . or threatened to use force or violence on you in any way that actually frightened you?'

Conventional Sexual Assault Screener

' . . . been sexually interfered with, assaulted or attacked either by someone you know or by a stranger?'

New Household Violence Screener [More than one adult in household] [show card]

'Apart from anything you have already mentioned, has any member of your household (aged 16 or over) deliberately hit you either with their fists or with a weapon of any sort, or kicked you, or used force or violence on you in any other way?'

In the 1992 survey, affirmative responses to the household violence screener were not followed through to a Victim Incident Form, and thus the effect on final risks of victimisation cannot be judged. However, of 7,300 respondents not living alone, 33 responded affirmatively to the new screener, many fewer (not surprisingly) than had done to the assault screener. Of these, just under two-thirds had not answered affirmatively to any of the previous three screeners. In the 1994 survey, out of 10,000 respondents not living alone at present, 65 answered affirmatively to the new screener, of which over three-quarters had not answered affirmatively to the other screeners. (The new screeners identified more new male victims than female ones.) In 1994, affirmative responses to the household violence screener *were* followed through to a Victim Incident Form. Table 5 shows how risks of victimisation changed for the category of domestic violence within the BCS typology of violent crime.⁴

⁴ The violence typology draws on offences of wounding common assault, robbery and snatch thefts. 'Domestic incidents' are those involving partners, ex-partners, household members and other relatives, irrespective of location. On this definition, domestic violence nearly always took place in or just outside the victim's home, or sometime at the home of a friend, relative or perhaps the offender him/herself.

**TABLE 5 – EFFECT OF INCLUDING EXTRA HOUSEHOLD VIOLENCE SCREENER
(1994 BCS)**

	EXCLUDING NEW HOUSEHOLD VIOLENCE SCREENER		INCLUDING NEW HOUSEHOLD VIOLENCE SCREENER		% DIFFERENCE	
RATE PER 10,000 ADULTS						
	Men	Women	Men	Women	Men	Women
Domestic violence	82	276	147	396	79%	44%

Source: 1994 BCS (weighted data).

SCREENER QUESTIONS: THE NCVS REDESIGN

A reassessment of the United States NCVS methods and questionnaire content used since 1972 began as early as the late 1970s by a Redesign Consortium, which reported in 1985.⁵ A number of *non-rate-affecting* changes to the NCVS instrument were introduced in 1986, mainly concerned with expanding the information collected in the Victim Incident Form. Changes which were *rate-affecting* were tested over some time, and introduced on a more gradual basis. A new questionnaire and some other changes in procedure were phased in from January 1992 to mid-1993, in half the sample areas. Since July 1993, the redesigned methods have been in use in all sample areas.⁶ The new instrument includes a number of changes:

- fairly radical changes to the screener questions
- the use of Computer Assisted Telephone Interviewing (CATI) for 30 per cent of the sample (previously it was only used for 5%)
- “Series” incidents redefined to relate to five or more related incidents (previously “series” were three or more related incidents, and – oddly – had never been included in the NCVS victimisation count).
- Population estimates adjusted for the Census undercount.
- A redefinition of theft. Theft was divided into personal and household theft on the basis of location. The new NCVS classifies all non-contact thefts as household thefts.

The changes to the screeners were various. One was the avoidance of the ‘yes/no’ question-and-answer format of the old screeners; another was an extended range of short memory cues, referring to a wide range of situations to prompt recall. Explicit reference is also made to offenders known to the victim, and to rape and sexual assault (although otherwise criminal terms and concepts found in the old screeners are excluded). Sexual assault is a new category. The new questions encourage respondents to report

⁵ The issue of measuring sexual crime and domestic violence was looked at by a special committee associated with the American Statistical Associations committee on Law and Justice Statistics.

⁶ Initially, it was planned that the new and old instrument would run alongside for some time to allow a “splicing” of victimisation risks, and thereby a continuation of a consistent trend in risk measurement. It is now rather unclear whether this plan will be realised – costs may be a major consideration. Rather, the Bureau of Justice Statistics say that “techniques to extend historical trends with estimates from the new methods will be developed”.

victimisations they themselves may not define as crimes. In publications that I have seen so far, no quantification of the effect of screener changes has been given, although other changes have been quantified to a degree. Thus, increasing use of CATI is said to have increased violence and theft rates by 15-20 per cent and burglary rates by about 10 per cent. This is put down to a combined effect of the ability to monitor interviewers better, and "computer effects" which "help standardise the interviewer-respondent interaction" (Bureau of Justice Statistics 1994). The re-definition of "series" incidents is said to have affected the count of most crimes, in the region of one per cent to two per cent. The adjusted population estimates, which are race and age sensitive, had a relatively small effect of about one to two per cent.

Table 6 shows NCVS crime rates in 1992 measured by the old and new instruments. The changes in risks are striking. For instance, risks for rape increased by 162 per cent; those for aggravated assaults increased by a quarter; simple assault by 77 per cent and burglary by 20 per cent. The effect of changing the screener questions (and/or the other changes) has clearly altered the composition of offences being reported to interviewers. This is evident, for instance, in relation to levels of reporting to the police (Table 7). The drop in reporting is indicative of less serious offences being drawn into the survey as a result of the redesign.

TABLE 6 - 1992 NCVS CRIME RATES: NEW AND OLD INSTRUMENT

	NEW INSTRUMENT	OLD INSTRUMENT	% DIFFERENCE
RATES PER 1,000 HOUSEHOLDS OR PERSONS AGED 12 OR MORE			
Rape	1.8	0.7	1.62
Sexual Assault (1)	1.1	0	-
Robbery	6.2	5.9	0.04
Aggravated Assault	11.1	9	0.24
Simple Assault	29.1	16.5	0.77
Burglary	58.7	48.9	0.2
Vehicle Theft	18.6	20.1	-0.08
Theft	248	195.4	0.27

Source: Bureau of Justice Statistics 1994.

Note: Sexual assault is a new crime category.

TABLE 7 – 1992 NCVS LEVELS OF REPORTING TO THE POLICE:
NEW AND OLD INSTRUMENT

	NEW INSTRUMENT	OLD INSTRUMENT	% DIFFERENCE
% OF OFFENCES KNOWN TO THE POLICE			
Rape	32.2	52.5	-39%
Sexual Assault	32.2	-	-
Robbery	58.4	51.1	-14%
Aggravated Assault	54.7	61.6	-11%
Simple Assault	36.2	42.8	-15%
Burglary	50.8	53.5	-5%
Vehicle Theft	76.5	74.7	2%
Theft	26.7	28	-5%

Source: Bureau of Justice Statistics 1994.

Note: Sexual assault is a new crime category.

COMPUTER ASSISTED PERSONAL INTERVIEWING (CAPI)

I move now to the use of CAPI in victim surveys. CAPI is already expanding in face-to-face social surveys. It seems highly likely that most large-scale surveys will convert to CAPI, probably within the space of a few years.⁷ With CAPI, interviewers enter responses into a laptop computer; the questionnaire is a computer program which specifies the questions, the range and structure of permissible answers, and the routing instructions which determine which questions are asked, and in what order. We were keen to try CAPI in the 1994 BCS given that it claims to be cheaper, faster, and likely to lead to better data especially with highly filtered paper and pencil interviews (PAPI).⁸ I shall consider the current consensus, and report some of our experience with the BCS. (I leave aside the purported advantages of CAPI in relation to fieldwork management and interviewer supervision.)

As far as costs are concerned, CAPI carries new expenditure: hardware (which has to be replaced about every three years); case management data handling systems; interviewer training; and the costs of converting paper surveys to CAPI. Programming costs are also high. But other costs associated with PAPI no longer apply or are much reduced: printing, data entry, and data editing. The experience of the Office of Population Censuses and Surveys (OPCS) in England is that CAPI is cheaper over the long-term for organisations that conduct numerous different surveys across which the hardware investment can be spread. Costs are also lower for continuous surveys when investment costs can be recuperated through lower running costs. For complex one-off surveys, however, CAPI is judged to be more expensive. The costs

⁷ Computer Assisted Telephone Interviewing (CATI) has become even more common in telephone interviews, perhaps because the delays that occur in interviewers deciding which is the next relevant question are more damaging during a telephone call.

⁸ The section after the screener questions brought even the best interviewers to their knees. If there were affirmative answers here, the interviewer had to decide, amongst other things, in which order screener 'yesses' were to be dealt with in the Victim Incident form, and which 'yesses' were not to be followed up.

for the 1994 BCS – conducted by OPCS which was set up with appropriate hardware – were lower with CAPI than they would have been with PAPI (although not strikingly so since the BLAISE programming costs were high).⁹ Moreover, quoted CAPI costs from companies without existing expertise and hardware were higher than PAPI quotes.¹⁰

Is CAPI **faster**? In general, probably yes. Less time is spent on data processing, and according to OPCS the time savings for large, continuous surveys have been significant and directly proportional to the sample size. In the case of the BCS, however, results were not in the event available any sooner. This was due to some technical problems mainly to do with transmission problems with down-loaded information, which might have been simply a matter of bad luck. Also, the BCS carries the large, independent additional coding task of classifying offences which had to be done after all the data were available.

A disadvantage of CAPI – and one that is probably insufficiently recognised – is that more time is needed for questionnaire development, programming, and some of the data checks and editing which in PAPI are done post-interview. This can lead to problems, especially if fieldwork timing is critical. A clear lesson is that the tendering process needs to be brought forward in time. With foresight this should cause no problem – but we often lack it.

Does CAPI produce **better data**? The literature on this is now growing rapidly and I do no more here than give the bare bones (see Nicholls et. al. (forthcoming) for a comprehensive review). The general consensus is that it does. Interviewers are enthusiastic about CAPI, and – more importantly – the evidence is that CAPI has no deleterious effect on contact or refusal rates: respondents tend to be rather indifferent to mode of interview (eg, Lynn & Purdon 1994). The automatic routing and on-line editing can both improve data quality, although post-interview editing can still be required, particularly when extensive post-coding is needed, as was the case with BCS. CAPI seems to have a considerable positive effect in reducing *item non-response* due to interviewers failing to record answers. Data loss in CAPI also seems generally rare. Little is known about the extent of keying error. One disadvantage encountered in the BCS was that CAPI affected the amount of text interviewers wrote into the computer for subsequent coding. In relation to the general description of the offence, recorded at the beginning of the Victim Incident Form, this posed a substantial problem in coding offences, when the general description often provides vital clues. This experience, however, goes somewhat against the consensus of a small number of studies examining the quality of text answers recorded by interviewers, which showed no meaningful or consistent differences between CAPI and PAPI.

Data quality, then, can be improved in CAPI through “technical” procedures such as automatic routing, in-built data and range checks, consistency checks etc. In the context of victim surveys, these technical advantages might have an effect in terms of increasing levels of reported victimisation when the questionnaire is lengthy and repetitious, or involves “trailer” questions (cf. Denny & Galvin 1993). But the question of data quality in terms of “response” effects is equally critical. Such effects can be of several kinds, but are essentially related to whether respondents give different answers when faced by an interviewer with a computer than by an interviewer with a paper questionnaire. Nicholls et. al. (forthcoming) conclude on the basis of about a dozen studies that the type of answers given vary little between computer-assisted interviewing (CATI and CAPI) and PAPI with regard to personal and household characteristics, labour force participation, political opinion, social attitudes, scales from psychological tests, etc. However, they cite two exceptions, both of which are relevant for victim surveys.

⁹ BLAISE is one of about six software systems for CAPI. Developed in the Netherlands, it was selected some time ago by OPCS. Other systems have their own advocates, but I cannot comment on their respective merits.

¹⁰ The 1994 BCS was seen, of course, as an ideal opportunity for companies which had not moved wholesale to CAPI to finance the move through the BCS. But the fact of their having inadequate CAPI experience penalised them in consideration of tenders.

First, equivalence of answers from CAPI and PAPI may not necessarily apply to sensitive items such as sexual behaviour, drug and alcohol use, offending, and income. Evidence on this point is still in short supply, and some of it contradictory. On balance, though, the evidence points to respondents probably being marginally more forthcoming on sensitive questions in CAPI. This conclusion is backed up by respondents actually saying that they view CAPI as a more confidential interviewing method (eg, van Bastelaar et. al. 1988). One might speculate, too, that computers could enhance the appearance of professionalism of interviewers, and that being involved with the screen and keyboard, interviewers themselves could appear more neutral to respondents.

A critical issue is clearly whether respondents are sensitive about mentioning experience of crime. Sensitivity may not be much of a consideration in relation to property crime, although for assaults, especially involved related parties, it may be more so. As said, analysis of levels of offence seriousness in the 1992 and 1994 BCS sweeps did not provide any strong evidence of CAPI having prompted respondents to mention more incidents at the trivial end of the range; nor did the distribution of scores vary in a way that suggested more *serious* offences were reported. However, comparing affirmative answers in the 1992 and 1994 BCS to the conventional assault, threats, and sexual victimisation screeners, showed that there were marginally higher levels of admission under CAPI, as well as more responses to the additional domestic assault screener. However, a "real" increase in risks cannot be ruled out; nor can 'company effects'. Questioning on sensitive issues through the use of *self-keying by respondents themselves* is a separate concern, taken up a little later.

A second exception to the conclusion that the answers given vary little between CAPI and PAPI questionnaires relates to 'don't know' answers and responses to attitude scales. Martin *et al.* (1993) found more extreme values in scales in CAPI than PAPI administration; so too did a fuller test in the 1993 British Social Attitudes Survey (Lynn & Purdon 1994) In this, an even more marked CAPI effect was evidenced in a drop in 'don't know' responses. There are also numerous examples in this regard from the 1994 BCS itself, although company/interviewer effects cannot be entirely ruled out. Table 8 gives an example in relation to the question mentioned earlier on respondents' overall assessment of the police. There is evidence of "company" differences in these results, but the results are also consistent with a CAPI effect.¹¹ For whatever reason, faced with a computer, respondents appear to be pulled towards a definite response, rather than uncommitted 'don't know' answers.¹² More generally, these results should remind us that – whatever the interview mode – the distribution of 'don't know' answers, and whether or not they are included in the base, will be relevant to measuring trends in attitudes over time, or between different surveys using the same question.

¹¹ In PAPI versions of the BCS 'don't know' is usually printed on the questionnaire. In BLAISE 'don't know' is not on the screen in the coding frame, but instead the left square bracket key is designated as the 'don't know' key, and the instruction "[: Don't know]" is displayed on an instruction line at the foot of the screen. It is difficult to say whether this also affects the use of 'don't know' responses somewhat. In Blaise the *right* square key bracket is designated as the 'Refused' key. There is a suggestion from the BCS data that some interviewers may have mixed these up. That is, there are values for 'refused' on some questions for which a 'refused' answer would seem implausible. Analytically, this can make it troublesome in deciding whether 'refused' and 'don't know' answers should be excluded.

¹² What remains unclear is whether at the same time "middling" answers are pulled out to extremes (e.g. to *very satisfactory*, or *very unsatisfactory*), with the 'don't knows' moving in to occupy the middle ground.

**TABLE 8 – ‘DON’T KNOW’ RESPONSES TO ATTITUDES TO THE POLICE QUESTIONS:
ALL BCS SWEEPS**

	1982	1984	1988	1992	1994
PERCENTAGES					
Very Good	35	31	22	20	22
Fairly Good	40	52	53	49	55
Poor	5	7	9	11	12
Very Poor	2	2	3	5	5
Don't Know	19	7	13	15	5
Companies	1	2	1+2	1+3	4

Source: BCS 1992, 1984, 1988, 1992 and 1994 (weighted data).

Notes: Questions: "Taking everything into account, would you say the police in this area do a good job or poor job?" (If good: "Very or fairly good?"; if poor: "Very poor or fairly poor?") Responses from the 1988 survey taken for the later question asked, to maximise comparability with other sweeps.

In sum, then, some of the evident advantages of CAPI suggest that it will become a feature of many social surveys in the future. For my part, I would see the major advantage of CAPI for victim surveys as being its suitability for complex instruments which, first, involve interviewers having to make on-the-spot decisions about "where to go from here" (as victim surveys typically do given that extra questions are required of victims) and which, second, require interviewers to check previous answers to decide how to proceed. The BCS, as said, presented interviewers with a particularly difficult job in these regards. A major gain of the switch to CAPI was to eliminate this complexity: the burden was transferred to programmers, and away from interviewers, who apart from anything else were relieved of a huge weight of paper.

For those involved in victim surveys, I would see the main warnings, based on BCS experience and other research, as follows:

- There is a need to plan for a longer lead-in time for questionnaire development and programming.
- It is sensible to reduce the amount of post-interview coding to a minimum in order to capitalise on the speed advantage of CAPI.
- Account needs to be taken of the fact that at the moment CAPI programs do not cope well with producing a readily understandable paper version of the questionnaire. Though improvements are in hand here, to my knowledge none of the main programs still deliver a readable paper questionnaire easily. In practice, this is a considerable disadvantage, both in the development stage when one wants to see how the questionnaire is shaping up, and later.¹³

¹³ Without considerable extra work to translate a CAPI program, output is basically a word processed 'translation' of the program. The more complex the routing, the more difficult the translation. It was some months after fieldwork began until OPCS generated a paper version of the questionnaire for the 1994 survey. And this has been constantly revised as inconsistencies with the program are revealed. Blaise V.3, promised better facilities for producing hard copy of questionnaires, although current testing at OPCS is proving disappointing.

- One has to be careful about long coding frames which cut across two screens. Several important trend questions in the BCS were compromised because previously heavily used codes were under-used in 1994 because they were on the second screen.
- Careful consideration should be given to the possibility that higher levels of affirmative answers to sensitive questions can result from CAPI.
- Finally, one needs to be careful also about a probable CAPI effect in relation to 'don't know' answers in particular for attitudinal questions.

SELF-KEYING

One by-product of CAPI in victim surveys concerns the potential for allowing the respondent to use the computer to answer questions of a particularly sensitive nature. Self-keying is still a relatively little used procedure, with the main precedents in "diary keeping" and television audience ratings. A few surveys have tested self-keying against other modes of completion, with mixed results. A survey in Edinburgh in 1982 on alcohol consumption used two matched samples of about 150 respondents each and found that those who keyed in answers on a computer reported a mean consumption some 30 per cent higher than those interviewed face-to-face with the same questionnaire (Waterton & Duffy 1984). This says something only about the likelihood of admission with self-keying rather than having to reveal drinking patterns verbally to an interviewer; very often, self-completion pencil and paper questionnaires are used for sensitive topics. One American study found no difference in the reporting of college grades in a self-completed computer exercise compared to pencil and paper self-completion (Mitchell (1993) quoted in Nicholls et. al. forthcoming). A recent, more sophisticated study of paper self-completion, self keying from questions on a computer screen, and self-keying from questions read to the respondents by a digitised voice through a headset showed significant differences in relation to sexual behaviour and drug use, but not income. (O'Reilly et. al. 1994).

As far as I know, the 1994 BCS is the first victim survey to test self-keying. Respondents did so on three occasions if they were aged 16-59 (we felt "techno fear" might overcome those older). The first set of questions related to self-reported drug misuse; another to being offered and buying goods known to be stolen; and a third asked women about their experience of sexual assault since the age of 16.

The results were encouraging. Relatively few respondents refused to complete the questions although some, particularly the more elderly, asked the interviewer to complete the questions on their behalf (Table 9). A great many respondents positively enjoyed the self-keying and, indeed, asked for more. The change of procedure was also useful in alleviating an otherwise interviewer-led response task.¹⁴ Current work is in hand in testing audio-assisted computer self-keying, in which questions are shown on a screen as well as being read out through headphones. This promises to overcome some of the problems of refusal that may be due to poor eyesight, or lack of literacy.

¹⁴ Of those who refused to use the computer, the most common reason (41%) was that the respondent said they did not have time; 21% cited problems with English. It is hard to know whether 'having no time', may have been an excuse for not wanting to answer questions on a particular topic.

TABLE 9 – COMPLETION OF SELF-KEYED CAPI QUESTIONS: 1994 BCS

	COMPLETED THEMSELVES	INTERVIEWER COMPLETED	REFUSED TO COMPLETE
% OF THOSE OFFERED COMPUTER			
16-29 year olds	92	6	2
50-59 year olds	82	14	4
All	89	9	2

Source: BCS 1994 (weighted data).

More pertinently, what answers did self-keying provide? The questions on stolen goods were new ones, and thus there are no previous pointers from BCS results. (Eleven per cent who answered the question said they have been offered stolen goods in the past year, and 11% admitted to having bought something they believed to be stolen over the last five years.) The questions about sexual victimisation since the age of 16 allow some comparisons with the conventional BCS questions on sexual victimisation as regards experience in the last year – producing much higher rates of rape and attempted rape. Table 10 shows the responses achieved. Over one in 50 young women admitted to a rape or attempted rape in the last year, while about two in 50 admitted to these experiences since age 16.

TABLE 10 – SEXUAL VICTIMISATION AMONG WOMEN SINCE AGE 16:
SELF-KEYING (1994 BCS)

	AGE 16 – 29	AGE 30 – 59
RAPE (PERCENTAGES)		
Last year (1+)	2.2	1.5
Yes, not last year	3.9	4.6
Refused	0.6	0.5
ATTEMPTED RAPE (PERCENTAGES)		
Last year (1+)	2.7	1.3
Yes, not last year	4.3	4.9
Refused	0.6	0.5

Source: 1994 BCS (weighted data).

The best test of the equivalence of answers in self-keyed CAPI as against an alternative mode comes from the questions on drug misuse. In 1992, the questions were administered via a self-completion questionnaire completed while the interviewer was still in the home, and handed back in a sealed envelope to the interviewer (see Mott & Mirrlees-Black 1993). In 1994, respondents used the computer themselves. Table 11 shows results on admissions for two of the several drugs asked about; the figures refer to the proportion who admitted to 'ever having' used the drugs. Admission rates increased appreciably among both younger and older respondents, though particularly among the younger group.

TABLE 11 – SELF-ADMITTED DRUG MISUSE: 1992 AND 1994 BCS

	16-29 YEAR OLDS		30-59 YEAR OLDS		ALL	
	1992	1994	1992	1994	1992	1994
PERCENTAGES						
Cannabis						
Ever took	21.9	32.9	9.1	14.8	13.3	20.3
Refused question(1)	4.5	1.6	2.4	0.4	3.1	0.8
Don't know	na	-	na	<0.1	na	<0.1
Amphetamines						
Ever took	8.2	13.8	2.5	5.4	4.4	8.0
Refused question(1)	4.5	1.3	2.4	0.3	3.1	0.6
Don't know	na	-	na	<0.1	na	<0.1
Refused task (2)	2.4	1.9	3.2	2.6	3.0	2.4
Unweighted N	2,060	2,830	4,788	7,057	6,848	9,887

Source: BCS 1992, 1994 (weighted data).

Notes:

1. In 1994, this was those who keyed 'refused'. In 1992, 'refused question' was taken as those who missed out the answer to the 'ever taken' question.
2. In 1992, those who refused to complete the booklet were categorised as 'refused task'; in 1994, it was those who refused to accept the computer. In both years, various reasons were given for refusal, many of which did not centre on subject matter. It cannot be known, though, how many people used other excuses for refusing in order to avoid mentioning the subject matter.
3. The figures in this table seek maximum comparability across the 1992 and 1994 surveys in terms of assessing CAPI effects. Slightly different procedures need to be adopted to produce best estimates of drug-taking (eg, by excluding those who refused the task). Therefore, other published 'ever used' figures from the two surveys may differ slightly.

The results from these drug questions suggest a strong mode effect, if one assumes it unlikely the "real" drug misuse had increased to this extent over two years. Two effects seem to be at work. One is that with the 1992 paper self-completion, more respondents refused either the task, or the specific questions on use of drugs. It is difficult to know whether this was tantamount to their having used the drug in question but not wanting to admit it; but if this assumption is made, then the differences in estimates of users would narrow somewhat. CAPI produced marginally fewer refusals, perhaps because of the novelty of the task. Secondly, as said, admitted use increased in 1994 among those who answered the questions. It seems highly likely that some of the increase is because respondents felt that answering to a "black box" afforded additional privacy (cf. van Bastelaar et. al. 1988) and/or because the technical formality of a computer screen prompted more thoughtful and honest answers. (In Waterton and Duffy's (1984) study, 30 per cent of those who self-keyed said they gave more accurate answers than if they had been verbally questioned, while 65 per cent said they concentrated harder.)¹⁵ However, the case does not rest there. In 1992, each drug was listed in a long column (albeit with amphetamines and cannabis first and second), with the

¹⁵ Apart from self-completion paper questionnaires, another approach often taken to sensitive areas of question involves being asked to say which code applies from a showcard handed over by the interviewer. Levels of admission from this approach *versus* self-keyed CAPI merits further testing.

respondent required to show an affirmative answer with a tick. In 1994, each drug came up separately on the screen, each therefore requiring an answer before it was possible to proceed. Irrespective of any "black box" effect, it seems likely that the higher admissions in 1994 were also in part due to another CAPI effect: that of more complete responses.

As a final aside on computer technology in surveys about crime, we might do well to think about self-keying in relation to self-report juvenile delinquency studies. Certainly, laptop costs are such that many university-based surveys could not at present bear them although costs will come down. And misuse may be more of a problem with teenagers than with adults although not necessarily theft (given that interviews will be closely scrutinised). The burden of much work to date is that the teenagers with the most delinquency to report may well be those from whom co-operation is hardest to get. However, computer literacy amongst teenagers, however, is high, and possibly so even among those with poor pencil and paper skills. The familiarity of computer screens – aligned with the novelty of their being used in relation to "undesirable" tasks – might well prompt the reticent to take part with a modicum more enthusiasm, and to answer honestly with a modicum more good grace.

UNDERSTANDING WHAT VICTIMISATION MEANS

I end with a comment less to do with the technicalities of measurement than the *sense* of it. In my view, a major task now for victim survey researchers to stand back and assess just what we are measuring – in particular from the point of view of those in whose experiences we are interested. We ask adults about vandalism to their property, for instance; we usually define this as crime, but we rarely assess whether the victims do so too, except insofar as we presume that they will not mention incidents if they did not consider them deviant. (Incidentally, in self reported delinquency studies we also ask about the commission of acts which we define as illegal, but we rarely ask whether the perpetrators do so as well.)

The force of this measurement point has been illustrated recently in the 1992 British Crime Survey, which carried a new sample of 12–15 year olds living with those selected for the main adult sample (see Aye Maung 1995). The rationale for looking at teenagers was mounting evidence that they might run substantially higher risk of personal crime than adults (see, eg, Whitaker & Bastian 1991; Anderson et al. 1994). The BCS results themselves showed extremely high victimisation risks (Aye Maung 1995). This was in part because we used very broad screening questions to tap incidents at school and on the streets (ie, *not* at home), deliberately included lower level incidents. But it was also, I believe, because we tapped the trials and tribulations of ordinary teenage life. Thus, for instance, most incidents uncovered against the 12–15 year olds were committed by others of the same age, many of whom the victims knew well. Many incidents which the teenagers experienced might well have been treated as crime had the offender and victims been adults, but given that victim and offender were both school children and that many incidents were fairly trivial, they are best seen as falling within the penumbra of criminality; arguably, crime in little other than a formal sense.

More important to the point in hand, however, is that only a minority of the victimisations counted were seen as crimes by victims *themselves*. Only a quarter of the incidents mentioned in a crime survey context were actually considered criminal; even six out of ten incidents of theft of personal property (school bags, trainers, etc) were not what the teenagers themselves definitely considered a crime (see Table 12). There is clearly scope for asking adults who we have defined as victims of crime about their own assessment of the criminality of the behaviour involved. There is no doubt merit, too, in asking those who report delinquent acts in self report studies how delinquent they themselves feel the acts to be. "Techniques of neutralisation" will obviously be an issue, but the answers might well give pause for thought.

TABLE 12 - THE 'CRIMINALITY' OF TEENAGE VICTIMISATION (1992 BCS)

	% OF INCIDENTS JUDGED			
	A Crime	Wrong, but not a Crime	Just Something That Happens	Not Sure
Theft of personal property	39	26	26	10
Theft from person	60	16	15	9
Assault	12	32	46	10
Harassment by young people	9	39	44	8
Harassment by adults	24	33	33	11
Sexual harassment by men	54	23	17	6
All incidents	24	31	36	9

Source: 1992 BCS (teenage 'booster' sample), from Aye Maung 1995.

REFERENCES

- Anderson, S., Kinsey, R., Loader, I. & Smith, C. 1994, *Cautionary Tales*, Avebury, Aldershot.
- Aye Maung, N. 1995, *Young People, Victimization and the Police*, Home Office Research Study no. 140, HMSO, London.
- 1995, 'Survey Design and the Interpretation of the British Crime Survey', in Walker, M. (ed.), *Interpreting Criminal Statistics*, Clarendon Press, Oxford.
- Bachman, R. & Taylor, B. 1994, 'The Measurement of Family Violence and Rape by the Redesignated National Crime Victimization Survey', *Justice Quarterly*, vol. 11, pp. 701-713.
- Bureau of Justice Statistics 1994, 'Technical Background on the Redesignated National Crime Victimization Survey', *Bureau of Justice Statistics Fact Sheet*, NCJ-151172, Bureau of Justice Statistics, Washington DC.
- Denny, M. & Galvin, L. 1993, 'Improved Quality at the Touch of a Button. The Use of Computers for Data Collection', *Market Research Society Conference Papers*, pp. 121-126.
- Lynn, P. & Purdon, S. 1994, 'Time Series and Lap-tops: the Change to Computer-assisted Interviewing', in Jowell, R., Curtice, J., Brooks, L. & Ahrendt, D. (eds.), *British Social Attitudes 11th Report*, Aldershot, Dartmouth.
- Martin, J., O'Muircheartaigh, C. & Curtis, J., 1993 'The Use of CAPI for Attitude Surveys: An Experimental Comparison with Traditional Methods', *Journal of Official Statistics*, vol. 9, pp. 641-661.
- Mayhew, P. 1987, *Residential Burglary: a Comparison of the US, Canada and England and Wales*, National Institute of Justice, Washington DC.
- Mayhew, P., Aye Maung, N. & Mirrlees-Black, C., 1993, *The 1992 British Crime Survey*, Home Office Research Study No., 132, HMSO, London.
- Mayhew, P., Mirrlees-Black, C. & Aye Maung, N., 1994, *Trends in Crime: Findings From the 1994 British Crime Survey*, Research Findings No. 14, Home Office Research and Statistics Department, London.
- Mott, J. & Mirrlees-Black, C. 1993, *Self-reported Drug Misuse in England and Wales: Main findings from the 1992 British Crime Survey*, Research Findings No. 7, Home Office Research and Statistics Department, London.
- Nicholls, W.L., Baker, R. P. & Martin, J., (Forthcoming), 'The Effects of New Data Collection Technologies on Survey Data Quality', To be published in the Proceedings of the Conference on 'Survey Measurement and Process Quality', Bristol, April 1995.
- O'Reilly, J., Hubbard, M., Lessler, J., Biemer, P. & Turner, C., 1994, 'Audio and Video Computer Assisted Self-interviews: Preliminary Test of New Technologies for Data Collection', *Journal of Official Statistics*, vol. 10, pp. 197-214.
- Pease, K.P. 1984, *Judgements of Offence Seriousness: Evidence from the 1994 British Crime Survey*, Home Office Research and Planning Unit Paper No. 44, Home Office, London.

- Penick, B. & Owens, M. 1976, *Surveying Crime. Final Report of the Panel for the Evaluation of Crime Surveys*, Committee on National Statistics, National Research Council, National Academy of Sciences, Washington DC.
- Skogan, W.G. 1981, *Issues in the Measurement of Victimization*, Bureau of Justice Statistics, US Department of Justice, Government Printing Office, Washington DC.
- Van Bastelaar, R.A., Kessemakers, F. & Sikkel, D., 1988, 'A Test of the Netherlands Continuous Labour Force Survey with Hand-held Computers: Contributions to Questionnaire Design', *Journal of Official Statistics*, vol. 4, pp. 141-154.
- Van Dijk, J.J.M. & Mayhew, P. 1993, *Criminal Victimization in the Industrialised World: Key Findings From the 1989 and 1992 International Crime Survey*, Directorate of Crime Prevention, Ministry of Justice, The Hague.
- Waterton, J.J. & Duffy, J.C., 1984, 'A Comparison of Computer Interviewing Techniques and Traditional Methods in the Collection of Self-Report Alcohol Consumption Data in a Field Survey', *International Statistics Review*, vol. 52, pp. 173-182.
- Whitaker, C. & Bastian, L. 1991, *Teenager Victims: A National Crime Survey Report*, US Department of Justice, Government Printing Office, Washington DC.

USES AND ABUSES OF CRIME VICTIM SURVEYS

Don Weatherburn and Bronwyn Lind
New South Wales Bureau of Crime Statistics and Research

INTRODUCTION

In this discussion we consider the uses and abuses of crime victim surveys. Since these are too manifold to bear unified treatment in a short paper it is important to outline the limits of our discussion. What follows does not amount to a considered view of when, how, where, and why crime surveys should be conducted. The discussion touches on the question of "when", but only insofar as it affects the question of how frequently one should conduct certain kinds of crime victim surveys. It touches on the question of "where", but only in the sense of evaluating the relative merits of large versus small scale surveys. The question of "how" is ignored altogether; there are plenty of others who have greater expertise in the methodology of crime victim surveys than I have. The focus of the discussion is on the question of "why" one should conduct crime victim surveys.

In a sense, however, even with this last caveat the scope of the present discussion requires further restriction. The justifications which might be given for conducting crime victim surveys depend upon whether one considers the issue from an academic or public policy perspective. We are interested only in the latter. To some, the distinction between the two perspectives will appear tendentious, if for no other reason than the fact that criminology as an academic discipline has always had a practical focus. Be that as it may, we argue that there is a practical difference in the information needs of policy makers and the questions an unfettered criminologist might like to pursue. That difference, moreover, carries important implications for the character and frequency with which crime victim surveys should be conducted.

One other introductory point is in order. The simplest approach to this topic would be to consider and evaluate various alternative crime victim survey justifications. In the present context, however, we could justifiably be accused of holding views on crime victim surveys which are at variance with our past practice in sponsoring or participating in them. The explanation for this apparent conflict between private opinion and public practice is that our views on the uses and abuses of crime victim surveys have altered with each of the crime victims surveys in which we have been involved. Rather than offer an historical account of the justifications for crime victim surveys, therefore, we thought it might be more appropriate to offer a developmental account of how each of the crime victim surveys we have been directly involved in shaped our views on the uses and abuses of crime victim surveys generally.

BACKGROUND

Up until 1988, the only regular source of information about crime trends in New South Wales was the *New South Wales Police Service Crime Statistics*. This document was a godsend to anyone who wanted to obscure the truth about crime. It contained no formal analysis of trends and no critical commentary on their interpretation. It contained no warnings on how misleading trends in recorded crime can be as a guide to actual crime trends. The Ministerial press releases accompanying its annual release to the public, moreover, were always biased, selective in their attention to detail and extravagant in the claims made on behalf of Government law and order policy.

Opposition and media comment on the Police Crime Statistics Report was, if anything, even more biased, selective and misleading than that of the government. To make matters worse, sectional interests such as the Police Association regularly exploited police crime statistics as a means of arguing for increased police resources or greater police powers. The result of all this was a community far more worried about crime than it needed to be and a government far too responsive to demands for additional police and far too willing (in my opinion) to trade off legal protections for accused persons in the interests of looking tough on crime.

In the lead-up to the 1988 State election, the Liberal/National Party Opposition made a great play of law and order issues. Claims of corruption were regularly supplemented with leaked police crime statistics purporting to show alarming increases in rates of serious crime. The impression of a general breakdown in law and order was fuelled by other vested interests, such as the National Rifle Association. It was also fuelled by the inability of senior police to present a credible rebuttal of claims that crime rates were increasing. The Labor Government lost office at the 1988 election, in large part because of community hysteria about law and order.

Once in Opposition, the Labor Party, perhaps understandably, set about doing to the Liberal Government what had been done to it; using and abusing leaked crime statistics in order to suggest a general breakdown in law and order. One of the trends very effectively exploited by the Opposition was a substantial increase in recorded rates of assault. Between 1983 and 1988/89, the recorded rate of aggravated assault in New South Wales had more than doubled. Over the same period the recorded rate of non-aggravated assault had nearly tripled. Following its election, the new Liberal/National Government found it increasingly difficult to pass this increase off as due to the inept handling of law and order by the previous Labor administration.

In fact, in the first year of the new Liberal Government the recorded rate of aggravated assault jumped from 292/100,000 of population to 338/100,000 of population, a larger year to year jump than at any point in the previous ten years (New South Wales Police 1989, p. 123). In 1988 we were inclined, along with everyone else, to think that at least some of the increase reflected a real increase in the incidence of assault. In 1989, though, we completed an analysis of police non-aggravated assault incident reports over the period 1982 to 1988/89 (Bonney & Kery 1991). This revealed that most of the increase had arisen from a growth in the number of domestic violence incidents being reported to or recorded by police and a growth the number of police putting in reports of assault on themselves.

Soon after we completed the study the Australian Bureau of Statistics (ABS) agreed to replicate at state level an earlier national crime victim survey carried out by the ABS in 1983. We had asked for the replication, among other things, as a further means of seeing whether assault rates were really increasing. The design of the ABS survey could not be described as criminologically interesting. It made very little attempt to identify risk factors associated with criminal victimisation. Its unabashed aim was simply to obtain accurate estimates of the incidence and prevalence of a number of personal and household offences. All the same, when the results of the survey came out, they produced two major surprises.

Firstly, despite the huge increase in reported assaults, a comparison of the 1983 and 1990 ABS Crime and Safety Survey results for New South Wales suggested that, if anything, the incidence of assault had fallen.¹ Secondly, despite what many commentators thought, most members of the public professed not to have a crime problem. What is more, those who said they had a problem rated 'dangerous, noisy driving' significantly above any other kind of crime as their principal source of concern. For the first time in anyone's memory the release of crime statistics in New South Wales was actually accompanied by newspaper headlines announcing that the crime rate had fallen and news stories highlighting the contrast between past police claims about crime trends and the results of the ABS Crime and Safety Survey.

¹ For the consolidated results of all past State surveys see ABS 1994b.

The reception accorded the first ABS Crime and Safety Survey results in New South Wales might have been regarded as a matter of passing interest had it not led to some subtle but important changes in the treatment of law and order issues. As it happened, the new crime data were released in a climate of public sector reform which placed a premium on the rational evaluation of government policy. News coverage of the ABS crime survey data was accompanied by newspaper editorials urging the government to continue the surveys as a better means of evaluating public investment in law and order. Central agencies, such as Treasury and the Cabinet Office, acquired a sudden interest in the results of the ABS Crime and Safety Survey when they realised that, for the first time, they had an independent means of subjecting police demands for more resources to critical scrutiny.

The benefits flowing from this development are quite significant, even if not generally well known. Police claims for additional resources have historically been based upon levels of recorded crime. This, of course, meant that every increase in police numbers brought with it an increase in the number of recorded offences. Every increase in police numbers therefore carried within it the seeds of a fresh demand for additional resources. The ABS surveys have helped put a stop to this. Of course, as recent events have shown, the State Crime and Safety Survey is no magic wand. The election climate which recently descended on New South Wales temporarily put paid to rational discussion of crime trends. However, there is no doubt that the Crime and Safety Survey helped the State Government resist unjustified police claims for increased spending on law and order.

The impact of the State Crime and Safety Survey (now conducted annually), has also impressed us with its effect on media treatment of law and order issues. No-one would dare suggest that media treatment of these in New South Wales has suddenly become rational. There are still a number of media commentators, particularly on radio, who have a vested interest in "milking" public concern about crime. They remain steadfastly indifferent to evidence contradicting their claims about crime. In the three years following the commencement of the State Crime and Safety Survey, however, the percentage of the population 'with no perceived crime problem' actually rose from 45 per cent to 55 per cent. It is impossible to say, with any assurance, that the publicity surrounding the results of each survey produced this effect. We think it reasonable to suppose, however, that a growth in public scepticism about law and order crises was at least partly influenced by the frequent media references to the results of the surveys.

These are not effects to be dismissed lightly. At a price tag of just \$150,000 and with a sample size of 14,000, the survey represents good value for money. At the same time we would be the first to admit that the value of the State Crime and Safety Survey in fashioning crime prevention policy has so far been next to zero. This would not surprise anyone enamoured of the British and USA national crime surveys. Compared to these surveys the New South Wales survey provides only the crudest picture of how criminal victimisation risk varies from one group in the community to another.

THE NSSS/AIC AND ABS NATIONAL CRIME VICTIM SURVEYS

Around the time the New South Wales Crime and Safety Survey was getting under way, the Australian Institute of Criminology and the National Social Science Survey Centre (NSSS) at the Australian National University were attempting to organise a national crime victim survey. The development process for this survey occasioned a great deal of discontent for reasons not worth going into here. What is important is that the NSSS under the guidance of the Australian Institute of Criminology (AIC), came up with a survey proposal which departed radically from the approach adopted by the ABS toward either State-based crime victim surveys or previous national crime victim surveys. Where the ABS Crime and Safety Survey attempts to provide accurate data on victimisation risk but largely ignored the correlates of risk, the NSSS and AIC survey attempted to identify the neighbourhood and lifestyle factors which shape that the risk of criminal victimisation.

The author of the NSSF survey report (Kelly & Evans 1992), Johnathon Kelly ended up making claims about victimisation risk which would stir the interest of anyone looking for a clear course of action in crime prevention. He suggested that, after age and gender, neighbourhood characteristics play the most important role in shaping the risk of criminal victimisation. This much was unsurprising. Kelly, however, went much further. To put it in his inimitable words at the time, Kelly concluded that: "the presence of unruly young people loitering about the neighbourhood appears to be a crucial factor in shaping the risk of criminal victimisation in Australia". The unstated but clear implication was that efforts to reduce the number of "unruly young people" loitering about a neighbourhood would produce immediate crime reduction dividends.

It is easy to find fault with this conclusion and with the NSSF survey. At the time we all did. The NSSF/AIC survey report, for example, did not even address the question of whether the correlation in question should be regarded as signifying a causal relationship, let alone provide any explanation for why the presence of "unruly young people loitering about the neighbourhood" might increase the risk of criminal victimisation. In fairness to the NSSF survey, however, it did make a much more serious attempt to obtain information that would be useful in framing crime prevention policy than the State-based ABS crime victim surveys. For this reason, even if for no other, we began to wonder whether we may not have been short-changing our investors, especially as both the US and British Crime Victim Surveys were much more akin to the NSSF than to the ABS survey.

At about this time, the ABS began taking soundings on interest in conducting its own National Crime Victim Survey. The original plan (of the ABS) was simply to conduct a national version of the New South Wales Crime and Safety Survey. Conscious of the limitations of this survey, however, several of us suggested to the ABS that, instead of just seeking good estimates of risk it should also be seeking more systematically to identify the correlates of risk. The argument was put that the ABS should follow the approach it had pursued in its own health surveys; that is, instead of confining itself to the 1975 National Crime Survey approach of carefully charting of the interjurisdictional variations in risk by crime type, it should also try to identify the influence of factors which governments might manipulate to reduce that risk.

In asking the ABS to include these questions our hope was that, as well as collecting national-level data on the prevalence of various offences, we would also obtain information on patterns of victimisation risk which might be useful in guiding crime prevention policy. It has to be said, in all honesty, that at the time the national ABS survey was being formulated, no-one had actually sat down and thought through the question of *how* the information derived from the national survey would actually be used to guide policy. Instead the argument in favour of more detailed analysis of risk was put in general terms: if we knew more about the factors which influenced criminal victimisation risk, it stood to reason we would be in a better position to suggest policies which might reduce that risk.

As it turned out, the interjurisdictional differences in victimisation risk which appeared in the national survey seemed to spark more debate about law and order policy than the survey findings on the relationship between lifestyle and victimisation risk. Victoria, for example, is demographically very similar to New South Wales, but the survey results indicated that it enjoyed much lower rates of both personal and household victimisation (ABS 1994a). From a policy point of view this was extremely useful information. It was already well known that New South Wales had a per capita imprisonment rate which was more than double that of Victoria; yet here was unmistakable evidence that the higher imprisonment rate did not yield lower crime rates. Criminologists might not have needed the evidence, but the ABS survey data convinced at least some hardened New South Wales bureaucrats that there may be much more to business of achieving lower crime rates than maintaining high imprisonment rates.

By contrast, the findings on victimisation and lifestyle raised more questions about crime prevention policy than they answered. The results told us, for example, that households in rented accommodation have a higher risk of victimisation than households which owned or were purchasing their properties. The survey also told us that: those who had spent less than one year in their current address have higher rates of

victimisation than those who had spent one year or more at their current address; that people who use public transport or go out to places of entertainment after six p.m. have higher personal victimisation rates than people who do not do these things; and that one parent families have much higher rates of victimisation than couples with children.

These findings are in broad agreement with those revealed in US and British Crime Victim surveys; they are also in broad agreement with the expectations of lifestyle-exposure or routine-activity theorists. Still, such findings have two important limitations from the vantage-point of crime prevention policy. The first and most obvious one is that some of the factors may be significant predictors of risk only because they are proxies for other, unmeasured, causal factors. Those who rent their accommodation may be at greater risk of victimisation, for example, simply because rented accommodation is more poorly secured. The second and more deep-seated problem is that much of the information on risk, even if accepted at face value, provides insufficient insight into the causal process underpinning victimisation to be of much use.

This latter point can be illustrated by considering the practice of going out after six p.m. more than one night a week. Respondents who fall into this category may in fact engage in a wide variety of lifestyle activities, only some of which would materially increase the risk of personal victimisation. It seems unlikely that Sydney-siders who go to the church two nights a week, for example, are at much enhanced risk compared with those whose evening entertainment is to go to Selina's nightclub at the Coogee Bay Hotel. Without knowing more about the particular patterns of behaviour which attract an increased risk of victimisation, we are forced to propose risk avoidance strategies which are probably far too constraining in their effect to be of practical use.

It would be possible to overcome some of these obstacles by changing both the design and method of analysis of the ABS National Crime Survey results. The existing design might be criticised for failing to ask the questions necessary to unravel the victimisation patterns more clearly. More questions should have been asked, it might be argued, about the activities of those who go out after six p.m. or who live in rented accommodation. Some attempt could have been made to apply multivariate analysis to the task of determining the interrelationship among various victimisation risk factors. Such analyses, which are never conducted by the ABS, would have enabled researchers to separate out the contribution of one criminal victimisation risk factor from that of another.

We concede that additional questions and multivariate analysis would have helped refine our assessment of victimisation risk, though probably not without forcing a prohibitively large increase in either the survey questionnaire or sample size. There are positive arguments, though, in favour of separating the process of monitoring crime trends and prevalence from the process of assessing the factors underpinning victimisation risk.

CRIME SURVEYS AND THE EPIDEMIOLOGY OF CRIME

It is interesting to contrast the potential uses of population survey data in the field of public health with the uses of population crime victimisation data in the field of crime prevention. The field of public health is an area where the process of determining risk and the process of determining the factors which affect it may both be meaningfully carried out at a population level.

There are at least two reasons for this. The first is that, generally speaking, whatever constitutes a health risk for one person almost invariably constitutes a health risk for another. Another reason is that whatever reduces the risk of a health problem for one person will very often reduce the risk of such problems in the population as a whole. The successful use of health survey data to fashion public health policy might therefore be seen – and sometimes is seen – as evidence that crime survey data can perform the same function in relation to crime prevention policy.

The epidemiology of crime, however, differs in significant ways from health epidemiology. Changes in the distribution and rate of a particular offence can be driven by different factors in different areas. High assault rates may be caused by a serious breakdown in police-aboriginal relations in one area, binge drinking in another area and fights between rival teenage gangs in a third area. High robbery rates might reflect a major drug problem in one area, a concentration of businesses with a high cash turnover in another area and a combination of both in a third area. High rates of malicious damage to property may reflect hostility between residents and tourists in one area while reflecting boredom and alienation among young people in another area.

The appropriate strategy for dealing with the crime problem in each area will vary according to its dynamics. British studies have shown the value of having uniformed police regularly patrolling licensed premises as a means of deterring assaults between drinkers. The same strategy could be a disaster if adopted as a means of dealing with assault among aboriginal communities in Bourke, Brewarrina or Walgett. Of course, there will invariably be factors relevant to the risk of criminal victimisation which affect all strata in a population. There seems to be little doubt, for example, that having a high percentage of empty, unguarded households puts any urban area at a higher risk of break, enter and steal. However, even where there are some common factors underpinning risk across a large segment of the population, the optimal strategy for reducing the influence of these factors may vary considerably from place to place. For example, the western suburbs of Sydney experience much higher rates of theft involving garden and industrial tools than the eastern suburbs, where jewellery theft is much more common. Engraving is one demonstrably successful way of reducing theft rates. It is easy to engrave garden and industrial tools but it is hard to engrave jewellery. So, even though the supply of empty unguarded households may be one of the structural determinants of break and enter victimisation rates across New South Wales, the best approach to reducing break and enter may vary from one local government area to another within New South Wales.

Some might be tempted to regard the existence of general theories of criminal victimisation as evidence that it is possible to fashion useful crime prevention policies out of national victimisation survey data. It needs to be remembered, however, that the existing general theories of criminal victimisation are not really theories in the proper sense of the word. Theories offer only a schematic framework within which to view the facts of criminal victimisation. They do not really provide a detailed theory about victimisation which could be used to fashion meaningful policy.

This much may be established simply by trying to derive policy implications from any of the currently popular theories of criminal victimisation. Cohen and Felson's Routine-Activity Theory (1979) provides a typical example. According to this theory every crime requires motivated offenders, suitable targets and the absence of capable guardians. The theory offers no general account, though, for any category of offence, of the factors which control the supply of motivated offenders, the distribution of suitable targets and the presence or absence of capable guardians. It is therefore impossible to prescribe, on the basis of the theory, which strategies will work to reduce the incidence of which offences.

CONCLUDING COMMENTS

Motivated offenders, suitable targets and capable guardians come in all shapes and sizes. We can hide this organic variety by conducting population level crime victim surveys and letting the dominant victimisation pattern shape our thinking about crime prevention. However, we would argue that if we are interested in making crime victim surveys work for crime prevention policy, local area or crime specific surveys offer far more potential than large scale omnibus crime victim surveys such as those carried out in the United Kingdom or the U.S.A. Whatever their merits in allowing us to gauge crime trends and prevalence, national population surveys provide a blunt instrument through which to obtain information of use in fashioning effective crime prevention policies. There is nothing stopping us asking detailed

questions on patterns of victimisation risk in national surveys. However, the limitations of sample size are likely to cloud subtle but important variations in the factors underpinning that risk in different areas.

In our view the best way to obtain information on these factors is to carry out surveys of particular areas or, where there is reason to expect broad uniformity in the dynamics of a particular crime problem, to carry out detailed studies of particular crime types. Of course, unlike surveys designed to measure the prevalence and incidence of offending, there is no need to repeat crime-specific or local area crime surveys anything near as frequently as a survey designed to provide national-level time series data on crime incidence and prevalence. We would therefore prefer to see the ABS carry out annual national crime surveys designed primarily to obtain basic prevalence and incidence data and supplement these surveys with an occasional series of purpose-built surveys designed to address specific crime problems. There is, after all, a need for annual data on trends in crime incidence and prevalence. There is no need for an annual analysis of the risk factors associated with particular patterns of criminal victimisation.

REFERENCES

Australian Bureau of Statistics 1994a, *Crime and Safety, Australia*, Cat. no. 4509.0, ABS, Canberra.

— 1994b, *Crime and Safety Survey, New South Wales*, Cat. no. 4509.1, ABS, Canberra.

Bonney, R. & Kery, L. 1991, *Police Reports of Non-Aggravated Assault in New South Wales*, New South Wales Bureau of Crime Statistics and Research, Sydney.

Cohen, L. & Felson, M. 1979, 'Social Change and Crime Rate Trends: A Routine Activity Approach', *American Sociological Review*, vol. 44, pp. 588-608.

Kelly, J. & Evans, M.D.R. 1992, *The Australian National Crime Survey, 1990, The National Social Science Survey*, Research School of Social Sciences, Australian Institute of Criminology, Canberra.

New South Wales Police Service 1989, *New South Wales Police Service Crime Statistics, 1988-1989*.

WHAT DO VICTIMISATION SURVEYS MEASURE? AN EXAMINATION OF TRENDS IN ROBBERY AND ASSAULT VICTIMISATION IN WESTERN AUSTRALIA AND AUSTRALIA

David Indermaur
Crime Research Centre
University of Western Australia

INTRODUCTION

The aim of this paper is to examine victimisation surveys conducted in Australia and West Australia to ascertain what may reasonably be said in regard to trends in assault and robbery. Police figures will be contrasted with the results of victimisation surveys. The results of the Australian surveys will also be compared to other information on crime in an attempt to develop a perspective on the reliability of victimisation survey data. The focus throughout will be on the trends in Australia as a whole and in Western Australia in particular.

INTERPRETING VICTIMISATION SURVEY RESULTS

As with police statistics, the results of victimisation surveys need to be interpreted very carefully. There are two categories of error associated with victimisation surveys. The first, sampling error, concerns the problems of estimating population rates from samples. Estimates of population prevalence and incidence are made from the responses provided by the sample questioned. These estimates can be considered a "best guess" on the extent of crime in the community based on the results of the survey. Mathematical laws governing relationships between samples and populations allow the estimate to be accompanied with a figure known as the standard error of the estimate which tells us how accurate the estimate is. Typically, where the estimate is large (such as with household theft) there is a small standard error and we know that the estimate is likely to be close to the true population figure. However, when the estimate is small (for example with sexual assault) the standard error is likely to be large and the estimate needs to be interpreted with caution. Because estimates can be accompanied by a standard error the reliability of the estimate can be gauged. However, the other sort of error associated with victimisation surveys, "non sampling error", can not be easily quantified and therefore is of much greater concern. Non sampling error covers issues such as respondent recall, misunderstanding and conscious falsification of responses.

The most important form of non sampling error has to do with the definition of the crime. The central issue concerns the ability of the respondent to clearly categorise incidents in the same way that was intended by the survey designers. This problem is greatest for those surveys that rely on the respondent filling out a form (such as the Australian Bureau of Statistics (ABS) surveys conducted since 1983). In surveys where responses are recorded by an interviewer, the respondent can be guided by the interviewer and the meaning of the question can be clarified. Even with surveys completed by means of interviews respondents often have different interpretations of common words like "force", "violence", "attack", "assault" etc. These different interpretations can not be completely controlled for even with detailed questioning.

In order to get a meaningful indication of victimisation it is important that the precise kind of event (crime) under consideration be defined plainly and consistently. Words such as force, threat, violence and assault, rather than describing clearly agreed on pieces of behaviour, are highly subjective and dependent on the respondent's personal interpretation (eg he 'forced' down the door or 'he just knocked me a bit' – see Morgan 1994). For example, there is widespread misuse of the word 'robbery' and it is often used to describe any theft including burglaries (e.g. 'I was robbed').¹ The word 'robbery' is also routinely used by the media and security industries to create dramatic effect. This dramatisation of crime may have some spill over into the way ordinary citizens think about crime. Furthermore, it is possible that respondents may interpret a question designed to measure robbery such as 'did anyone steal anything from you by threatening or attacking you?' as referring to the 'threat' and 'attack' experienced when their house was broken into and may respond 'yes' to the question when the event being thought of is legally classified as a burglary.

Comparison of the results of different victimisation surveys is particularly difficult where different words are used in the definition of a particular crime. Sometimes the question used in a victimisation survey to define a robbery includes only "successful acquisitions" by the offender, but at other times it includes attempts that are foiled or abandoned. Sometimes violence occurs in the course of an offender escaping the scene of a property crime. Such an event may be classified by one police officer, or one victim, as a robbery and by another police officer or victim as an assault following a burglary. Because of the importance of definition, any comparison between victimisation surveys needs to look carefully at the precise definition used in each survey and consider what events are being "captured". An examination of these definitional problems will be offered below. Firstly, however, it will be valuable to attempt to get a sense of how well the estimates provided by the victimisation surveys matches the police crime figures and vice versa.

COMPARING VICTIMISATION SURVEY RESULTS WITH POLICE FIGURES

The comparison of victimisation survey results and police figures (reconciliation) may be useful in highlighting some of the definitional and counting difficulties associated with both sources. The comparison is also helpful in our attempt to estimate the "true" prevalence of certain offences in the community. The rationale for, and importance of, attempts at reconciliation have been established by Biderman and Lynch (1991) and Strangland (1994). Biderman and Lynch considered the situation in the United States and Strangland examined the figures in Spain. Table 1 shows the estimates of victimisation provided in the 1993 ABS survey (ABS 1994) and calculates the number of offences that should have been reported to the police based on the proportion of victims who said they reported the crime to the police.² This 'expected number of reports to the police' is then compared with the number of such offences recorded by the police.

To arrive at an estimate of victimisation that may be used for comparing with police figures we need to seek discrete incidents of victimisation. The figures in the Police Department Annual Report are for all offences in a certain category, regardless of how many times the same incident happened to a victim in the 12 month period (incidence). However the victimisation figures are estimates of prevalence, that is,

¹ The insurance and media industries "beat up" the drama of burglary by describing them as 'robberies'. For example consider this from a brochure from Lockwood, the lock company, quoting from the Insurance Council of Australia: '*The cold hard facts, are enough to give any householder a chill. The number of robberies committed on private homes in Australia is around 170,000 a year – that's one every 3 minutes. And it's getting worse.*' (Practical ways to protect your family, your home and your possessions Lockwood. Ogden Industries Huntingdale.) The need of the media and others to dramatise crime may lead to confusion about how much robbery there really is.

² Reporting rates provided by the ABS are given in terms of 'the last incident'. Victims of multiple victimisation will only be included as having reported the offence if they reported the last incident. There is no available information which indicates whether this limitation will significantly affect the reporting rates cited and in terms of the current purpose of the comparison there is no reason to suspect it would.

they count only up to a maximum of one victimisation per individual for the 12 month period. Therefore, to allow the comparison we are attempting we must first try and adjust the victimisation prevalence figures to more closely approximate the incidence figures used by the police. The ABS has provided figures on multiple victimisation for Western Australia but records only up to three victimisations per individual and is, therefore "conservative", in that it leads to a slightly lower estimate than would be the case if figures on more than three victimisations per individual were available.

The discrepancy between the estimated number of reports based on the victimisation survey and the actual number of reports can be used to reflect on what both sources are measuring. The victimisation figures are taken from the ABS survey completed in April 1993 (about events occurring in the previous 12 months). The police figures are taken from the Western Australia Police Department Annual report for 1993 citing offences recorded for the 1992/93 year. The two month discrepancy is not considered large enough to substantially affect the comparison.

In terms of victimisation survey estimates, when adjustments for multiple victimisation are made the number of robberies goes from the prevalence estimate of 15,800 to a conservative incidence estimate of 20,271. Similarly the estimated number of assaults goes from the prevalence estimate of 27,900 to an incidence estimate of 47,681. The difference between the prevalence estimate and the incidence estimate reflects the extent of repeat victimisation, which is clearly greater with the offence of assault. Close to 80 per cent of most crime victims are victimised only once in the 12 month period under consideration, but 43.3 per cent of assault victims suffered repeat victimisation according to the victimisation survey. There is another particular difficulty which affects the comparison of victimisation survey estimates of the incidence of assault with the police figures. The definition of assault used in the victimisation survey, as will be discussed in more detail later, includes "threats" as assaults. The police figures on assaults are restricted to actual physical contact or attempted physical contact. Data from the 1983 ABS victimisation survey (ABS 1986) and others suggest that "threats" and/or verbal attacks make up about half of the number of assaults estimated by the victimisation survey. Therefore, in attempting reconciliation with police figures the victimisation survey estimate should be considered to be double the figure it would have been if the definition was limited to "actual" assaults. Both figures are included in the reconciliation table (Table 1), the estimate of the number of actual physical assaults appears in brackets.

The definition of robbery used in the victimisation survey questionnaire corresponds almost exactly with the legal definition of robbery. The question asked in the victimisation survey was 'In the last 12 months did anyone steal anything from you by threatening or attacking you?'. In Western Australia the legal definition of robbery is contained in the Western Australian Criminal Code (s. 391):

Any person who steals anything, and, at or immediately before or immediately after the time of stealing it uses or threatens to use actual violence to any person or property in order to obtain the thing stolen or to prevent or overcome resistance to its being stolen is said to be guilty of robbery.

The question for assault - 'In the last 12 months has anyone threatened you with force or attacked you?' casts the net wider than the legal definition of assault because it includes threats. Although the Western Australian Criminal Code definition of assault includes threatened assault, it is restricted to instances where 'the person making the attempt or that has actually or apparently a present ability to effect this purpose. (s. 222 WA Criminal Code). The victimisation survey question is not as specific. Furthermore, the police in Western Australia will only classify a "threat" as an assault if it constitutes a movement toward the person, in other words, if it has clearly gone beyond the "threat" stage and has become 'physical'. (Personal communication, A/Espector Evan Cooper, Crime Information Unit).

The incorporation by victimisation surveys of "threats" into definitions of assault is perhaps balanced by the use of the word "attack" which is likely to suggest to respondents rather more serious forms of assault than are necessary to qualify an event as an assault to the police. The categories included in the police figure include 'serious assaults' (2,891), 'common assaults' (4,833) and 'assault public officer' (735).

The comparison between victimisation survey estimates of the number of offences reported to the police and the number of offences recorded by the police is specified first in terms of a 'recording rate': the proportion of the estimated number of reported offences that are recorded by the police. Only nine per cent of the number of robberies that the victimisation survey predicted would be reported to the police were recorded by the police, suggesting either massive under-recording, misrepresentation by respondents or definitional disparity. More heartening is the figure for assault. If we restrict our definition of assault to those incidents involving physical contact then the victimisation estimate is halved (see earlier discussion) and this estimate matches almost perfectly with the number of assaults recorded by the police. The second comparison statistic is the rate of under-recording (the number of estimated reported offences not recorded for every offence recorded). For every one offence of robbery that the victimisation survey estimated was reported to the police there were 10.24 not recorded by them.

Although Table 1 can only provide a rough guide to the numbers of offences involved it does suggest that if we assume that respondents are honest and the police record all the offences reported to them it is the differences in the definition of robbery (or more precisely how respondents interpret that definition) between the victimisation survey and the police that accounts for the large difference. There were approximately 10,582 robberies estimated by the victimisation survey to be reported to the police in excess of those recorded by the police. Presuming that these events were reported to the police, what were they recorded as? It may be, as speculated earlier, that these were recorded by the police as a theft or a burglary but because the words "threat" and "force" were used in the victimisation survey the victim responded to the question for robbery.

TABLE 1 – RECONCILIATION OF VICTIMISATION SURVEY ESTIMATES OF THE NUMBER OF CRIME INCIDENTS REPORTED TO THE POLICE AND POLICE RECORDS FOR CRIMES IN WESTERN AUSTRALIA IN 1992/93

	CRIME	
	Robbery	Assault ³
A. Victimisation estimate	20,271	47,681 (23,840)
Proportion of victims who reported to the police	57.3%	35.3%
B. Expected number of reports to the police	11,615	16,831 (8,415)
C. Number of offences recorded by the police	1,033	8,459
Recording rate	9%	50%
[1-B(-C/B)]		(100%)
Rate of under recording		0.16
[B-C/C]	10.24	(0)

The attempt at reconciling police figures with victimisation survey results helps to highlight the importance of definitions and respondents' interpretation of questions. Another comparison which can help us in gauging the true prevalence of offences in Australia, and also the methodological limitations of our instruments, involves comparing the results of victimisation surveys between Australia and other countries.

³ Victimisation survey definition includes threats, police recording does not. "Threats" can be estimated to make up about half of all assaults in victimisation surveys. The figure in brackets relates to the corrected figure (threats removed).

COMPARING AMERICAN AND AUSTRALIAN VICTIMISATION SURVEYS

The National Crime Victim Survey (NCS) run by the US Department of Justice (eg US Department of Justice, 1991) is one of the world's most advanced victim surveys. It is useful, therefore, to compare Australian victimisation survey results with the US counterpart and contrast this comparison to the more common international comparison of police recorded crime. It is generally accepted that robbery is more prevalent in the United States than in Australia. This accepted wisdom develops in the first place from comparisons of police recorded crime. However, police recorded crime is a particularly suspect instrument for interjurisdictional comparison, because how much crime gets recorded depends not only on the definitions of crime operating in the different jurisdictions but also the different police practices.

Comparisons of police recorded robbery, such as the one shown in Table 2, suggest that the Australian rate is less than one-fifth of the rate observed in the United States. However the figures from victimisation surveys do not concur with this picture. The Australian rate for robbery as measured by the ABS victimisation surveys increased from a low of three per 1,000 persons aged 15 and above in 1975 to 12 per 1,000 in 1993. The US rate for robbery as measured by the NCS decreased from 6.7 (victimisations per thousand people aged 12 and above) in 1973 to 5.6 in 1991. To explore this apparent paradox we need to look more closely at the two victimisation surveys.

**TABLE 2 - RATE OF ROBBERIES RECORDED BY THE POLICE
PER 100,000 OF TOTAL POPULATION FOR SELECTED COUNTRIES**

	Australia	Canada	New Zealand	England and Wales	USA
1972	23.3	54.2	11.4	18.2	180.7
1977	24.3	83.6	11.9	28.0	187.1
1982	42.9	110.6	19.2	46.0	238.9
1987	48.3	88.0	40.5	65.2	212.7

Source: Mukherjee and Dagger 1990, p. 29.

In comparing robbery rates between Australia and the United States, cognisance must be taken of the different terminology used to describe the same event in both countries. One of the most common robbery-type events is bag snatching. In the way Australian surveys are generally structured this would be classed as a robbery. However, the way the question is posed in the NCS this event is classed as a personal larceny (with contact). The question posed by the NCS is 'did you have your pocket pinched/your purse snatched?'. Therefore, even to get a rough comparison, personal larcenies (with contact) must be added to robbery victimisation rates in the United States before they are compared to Australian rates. Although simple adding will slightly inflate the estimate of prevalence (because it counts twice those victimised by both personal larceny and robbery in the period) when this is done the paradox remains; the augmented 'robbery' rate was 9.8 per thousand persons aged 12 and above in 1973 and 8.2 in 1992 (US Dept of Justice 1991, 1994). The robbery rate in the US in 1973 was much higher than the ABS estimate for Australia of three per 1,000 but the US 1992 figure is considerably lower than the figure of 12 per 1,000 found in the 1993 ABS survey (ABS 1994a). The denominators used in the comparisons are roughly comparable; the NCS interviews those aged 12 years and older and therefore uses the population aged 12 and above as a denominator. The ABS surveys those 15 years and above and therefore uses the population aged 15 and above as a denominator. Because the 12 to 15 year old age group actually suffers one of the

highest victimisation rates for robbery, the inclusion of this group in the American survey, should serve to slightly elevate the US figure in comparison to the Australian counterpart.⁴ However, the problem we are seeking to address is why the Australian rate should appear so large in contrast to the US figure.

How can we explain the high robbery victimisation rate in Australia compared to that observed in the United States? To get a better understanding of the comparison between the NCS and the ABS estimates we need to compare the two questions that define robbery in each survey. The NCS question is asked directly following one on personal larceny 'Did anyone take something (else) directly from you by using force, such as by a stickup, mugging or threat?'. The ABS question uses different language and emphases: 'In the last 12 months did anyone steal anything from you by threatening or attacking you?'. A further contrast is in the methodologies used. The NCS gets its responses from a personal interview between a trained interviewer and the respondent while the ABS relies on the respondent reading and filling out a questionnaire and mailing it back.

The emphasis in the NCS question on 'taking . . . directly by force', and the use of words such as "stickup" and "mugging" before mentioning that the use of a threat also qualifies, may prompt respondents to think of more serious events. It thus could be argued that the question may actually work to underestimate the true extent of robbery in the United States because less serious forms of robbery may not be considered valid by the respondent. In contrast the question used by the ABS puts the idea of "stealing" first followed by the notion of a threat and finally the notion of "attacking". The sequence and choice of words used in the ABS survey may result in an overestimation of the true extent of robbery. For one thing the word "attack" is not precise and may be interpreted as meaning both physical and non physical contact.

It should also be noted that the NCS instrument (like the British Crime Survey) is much more specific and extensive in its coverage of crime-like events than the ABS counterpart. The NCS is, therefore, likely to produce a clearer and more differentiated view of the distribution of crime than the ABS surveys. The 1991 Queensland survey conducted by the Government Statistician's Office also adopted a detailed style of questioning but did not publish statistics on the prevalence of robbery that could be compared with police figures or other victimisation survey results. However de Mel and Carcach (1994) have analysed the data and estimate robbery victimisation to be between only two and three per thousand. Morgan (1994) has discussed the superiority of the personal interview over a self administered questionnaire and pointed to the advantages of obtaining descriptions of the incidents referred to by respondents. There are many ways in which a properly trained interviewer can standardise responses and advise and instruct interviewees about the meaning of the terms used. However, the interviewer may also consciously or unconsciously direct respondents to answer, or not answer, certain questions in a certain way.

The problems in comparing between the US and Australia that we have noted can be overcome if the same definition of robbery is used in the surveys applied to the two countries. Fortunately the International Crime Victim Survey conducted in 1988 and 1991 (van Dijk & Mayhew 1993) allow for just such a comparison. The surveys relied on telephone interviews and thus had some of the advantages of a personal interview. The results to the question in these surveys concerning robbery ('Has anyone taken something from you personally, by using force or threatening you, or tried to do so?') are shown in Figure 1.

The results of the International Crime Victim Surveys suggest that using police figures on crimes reported to them exaggerates the difference between the robbery rates in Australia and the United States. The International Crime Victim Survey results suggest that the United States has a robbery rate only one and a half times that of the Australia. It is interesting to note that the estimate from the International Crime Victim Surveys falls very much in line with the estimates provided by the ABS victimisation surveys of the prevalence of robbery in this country (see Table 3). However, the estimate of victimisation in the

⁴ The rate for this group (10 per 1,000) was almost double the overall rate of 5.6 per 1,000 in 1991 (US Department of Justice 1992).

United States (1.67 per cent) is twice as high as the estimates provided by the NCS. This suggests that the definition of robbery being used by the NCS is at odds with the definition being used in both Australian and the International Crime Victim Surveys. However, the International Crime Victim Survey has also been criticised on methodological grounds principally because the survey is restricted to telephone owners and has an overall response rate that is lower than the standard victimisation surveys (Travis, Brown, Egger, Hogg, O'Toole & Stubbs 1994). The reconciliation of rates between victimisation surveys must therefore remain a matter of some contention.

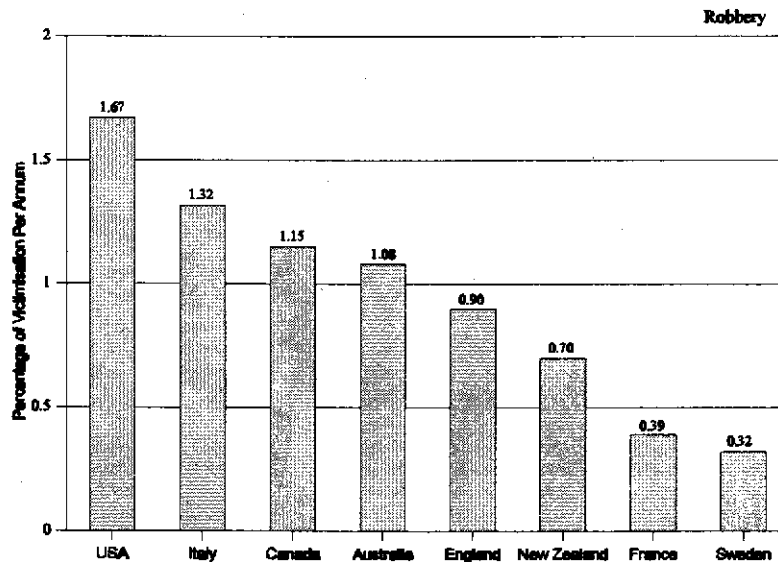


FIGURE 1 – RATES OF ROBBERY VICTIMISATION ACCORDING TO THE INTERNATIONAL VICTIMISATION SURVEYS IN 1988 AND 1991

Source: Walker 1994.

COMPARING VICTIMISATION SURVEYS IN AUSTRALIA

ROBBERY

The preceding discussion on the limitations of the victimisation survey estimates of robbery has highlighted the importance of words used to define the event called "robbery". Any slight change in definition will have a marked effect and because the words "burglary", "theft", "mugging" and "robbery" have such a wide range of meaning their direct use in surveys is more likely to exacerbate the problems rather than reduce them. Whatever the problems associated with a particular definition, for the sake of allowing comparisons many Australian criminologists have argued in favour of repeating the same question in a series of victimisation surveys. Presumably if the same question is asked, defining the crime in the same way, comparisons can be made even if the event under consideration may not tally precisely with police definitions. The estimates of the prevalence of robbery based on Australian victimisation surveys (see Table 3) indicate a relatively high degree of agreement amongst the surveys conducted in the 1990s.

In comparing Australian victimisation surveys, including the ABS surveys, definitional differences must be accounted for. Some surveys have combined attempted robbery with robbery, others have specified the nature and severity of the violence needed to qualify the event as a robbery. The problem in comparing surveys using different definitions was pointed out in an Appendix to the 1983 ABS survey:

Respondent perception surveys depend heavily upon the interpretation placed on questions by the respondent. Changes in the wording of questions can produce dramatic changes in responses. For robbery, the 1975 survey asked 'have you been robbed? That is, did anyone use violence or threaten violence to *take* anything from you?'. The 1983 survey asked 'did anyone *try and take* something from you by threatening or attacking you?'. The emphasis in the earlier survey was on something being actually taken during the robbery with imminent or actual use of violence. In fact, in 1983 only one third of robbery victims actually had something stolen, suggesting strongly that the change in wording influenced the number of respondents who replied positively to being the victim of robbery. The 1983 survey found almost five times as many victims of this offence as the 1975 survey. (ABS 1986, p. 73)

Although the ABS has generally been quite rigorous in informing the careful reader of definitional differences, this is not always the case. For example in the most recent and most extensive survey the ABS has undertaken (1994) comparison tables were included for victimisation rates between the various surveys. However, the reader was not alerted to the very important definitional change for robbery between 1983 and 1993. The 1983 survey included attempted robbery, whereas the 1993 survey did not. This definitional disparity will distort the comparison considerably, as noted in the quote from the 1986 report cited above.

The ABS report on the 1983 survey (ABS 1986) suggests that based on the survey results for that year only one-third of robbery victims had something stolen. Therefore the 1983 figure can be taken as being three times as large as it would have been if attempts were excluded from the question. An informed comparison between 1975 and 1983, allowing for the inflation of the 1983 figure, therefore would conclude that the robbery rate did not change substantially in Australia or Western Australia through these eight years.

Figure 2 plots the victimisation estimates shown in Table 3. In all figures unless stated otherwise prevalence is stated in terms of the rate per 1,000 of the population aged 15 years and above. To bring the 1983 figure in line with the other estimates which do exclude attempts, the estimate for the 1983 survey used in Figure 2 was calculated by assuming that half of the robberies reported in 1983 were attempts. This calculation errs on the conservative side; that is, it may overstate the number of completed robberies (because the ABS (1986) found only one third were completed). The later ABS state surveys conducted in the 1990s have reverted to a simple definition of robbery which excluded attempts, so comparisons can be made directly between the 1990 surveys and the 1975 survey.

There are a number of distinct technical problems affecting victimisation surveys that also affect comparisons between the victimisation surveys listed in Table 3. The first concerns sampling errors. To balance sampling limitations from the 1975 survey, weighted estimates were produced and reported in Braithwaite and Biles (1980). Braithwaite and Biles' compilation of victimisation rates is more consistent than the tables produced in the original report of the 1975 ABS survey (ABS 1979) and their figures will be used in the tables to follow. Another significant difficulty, which does not affect the ABS surveys, except in low frequency crimes, is the size of the sample. Good estimates depend on large samples. As many crimes are low frequency events, large samples are needed to include a substantial number of victims. Some of the non-ABS surveys have sample sizes that are simply too small to allow a reliable estimate to be calculated.

A separate, but in some ways more important, problem than sample size is the actual response rate. A small sample size may lead to an unreliable estimate while an inadequate response rate will actually distort the nature of the estimate. The information we do have about victimisation suggests that those at the lower socio-economic level suffer greater levels of victimisation. It is also more likely that the lower socio-

economic group will contain greater proportions of people that are transitory, illiterate and non phone owners. Each of these factors will act to reduce the likelihood of a response to a telephone and/or mail out survey. An unfortunate trend of some recent non-ABS surveys (such as the International Crime Victims Surveys) is to simply disregard those in the original sample that can not be reached and only count as non-respondents those that actually refuse to be interviewed (in standard survey methodology, "refusals" make up only a small percentage of 'non-respondents'). This clearly distorts the statistical accuracy of the estimate.

TABLE 3 – COMPARISON OF THE RESULTS OF AUSTRALIAN VICTIMISATION SURVEYS REGARDING THE PREVALENCE OF ROBBERY

Survey	Coverage (persons)	Method	% Crime Reported	Prevalence (per 1,000)	Defn.
ABS 1975 WA Aust	18,694 ^a	Face to face	54.0	3.3 1.7	1 1
ABS 1983 WA Aust	18,000 hshlds	Face to face	42.6	7 ^b 6 ^b	2 2
International Age 16+ 1989	2,012	Telephone	52.4	8 ^c	3
NSSS 1990	Age 18+ 4,513	Mail out		14 ^d	4
ABS-NSW 1990	12,400	Drop/mail ^e	59.7	16	5
ABS-NSW Apr 1991	14,100	Drop/mail	58.7	15	5
ABS - SA Apr 1991	4,400 hshlds	Drop/mail	66.0	14	5
Queensland May 1991	6,315 hshlds	Face to face	73.0	1.8 ^f	6
ABS - WA Oct 1991	7,691	Drop/mail	62.7	17	5
ABS - NSW Apr 1992	13,950	Drop/mail	58.6	11	5
International Age 16+ 1992	2,006	Telephone	54.0	12 ^g	3
South Australia 1992	Age 15+ 3,000	Face to face		11	5

WHAT DO VICTIMISATION SURVEYS MEASURE?

Survey	Coverage (persons)	Method	% Crime Reported	Prevalence (per 1,000)	Defn.
ABS 1993	52,300	Drop/mail			
WA			57.3	13	5
Aust			52.1	12	5
NSW			45.6	13	5
SA			66.8	13	5
Qld			54.2	12	5

Notes:

- a. This figure represents the residents at 8,414 households that were reached by the survey.
- b. Caution, this figure *includes* 'attempted' robbery - unless specified otherwise estimates in the Table exclude attempted robbery. The 1983 ABS survey estimated that the ratio of 'actual' to 'all' robberies is 1:3.
- c. This estimate was based on only 15 respondents and is therefore subject to high standard error (Walker 1991). Furthermore, this figure includes attempts (see definition '3' below). The estimate is based on incidents reported in the 12 month period.
- d. This figure represents the actual robberies as reported on in the summary of the report, based on a data set of 4,513 cases. In this summary all attempted crime has been separated from completed crimes. The report does not make it clear what proportion of such crimes were reported to the police.
- e. In the 'drop-mail' technique, the questionnaire is personally delivered to the respondent by an ABS interviewer who is usually at the residence as part of another survey. The respondent is instructed to fill out the questionnaire and return it in the mail. The authority associated with the ABS probably results in a greater response rate than would otherwise be achieved by a mail out survey. This technique has become the preferred method in ABS crime surveys because it is less expensive than face to face surveys.
- f. Likely to be a slight underestimate because of the way the prevalence figure was calculated. True rate estimated to be between two and three per 1,000 (de Mel, personal communication).
- g. This estimate is based on only 24 respondents and includes attempted robbery, in almost half the cases nothing was actually stolen (i.e. they were attempts) (Walker 1993). One year estimate used.

Definitions:

1. 'Within the last 12 months have you been robbed? That is, did anyone use violence or threaten violence to take anything from you?' [attempts excluded]
2. 'During the last 12 months did anyone try and take something from you by threatening or attacking you?' [i.e attempts included]
3. 'Disregarding incidents which happened to other members of your household, over the past five years has anyone taken anything from you by using force or threatening you, or tried to do so, If yes, how often did this happen in 1988?' [thus five year and one year estimates are obtained, the figures in the table relate to the one year estimates].
4. '... mugging and robbery - people taking things from you by force or by threatening to harm you, such as a hold up or purse snatching. Besides those has anyone *tried* to rob you...' ['attempts' and 'actuals' measured separately]
5. 'In the last 12 months did anyone steal anything from you by threatening or attacking you?' [i.e attempts excluded]
6. The figure is derived from an analysis of responses to those questions asked of all personal crime victims: (1) 'During this incident was anything stolen?'; (2) 'Did the offender(s) harm or use force or violence on you in any way?'; (3) 'Did the offender(s) threaten to harm or use force or violence on you in any way?'

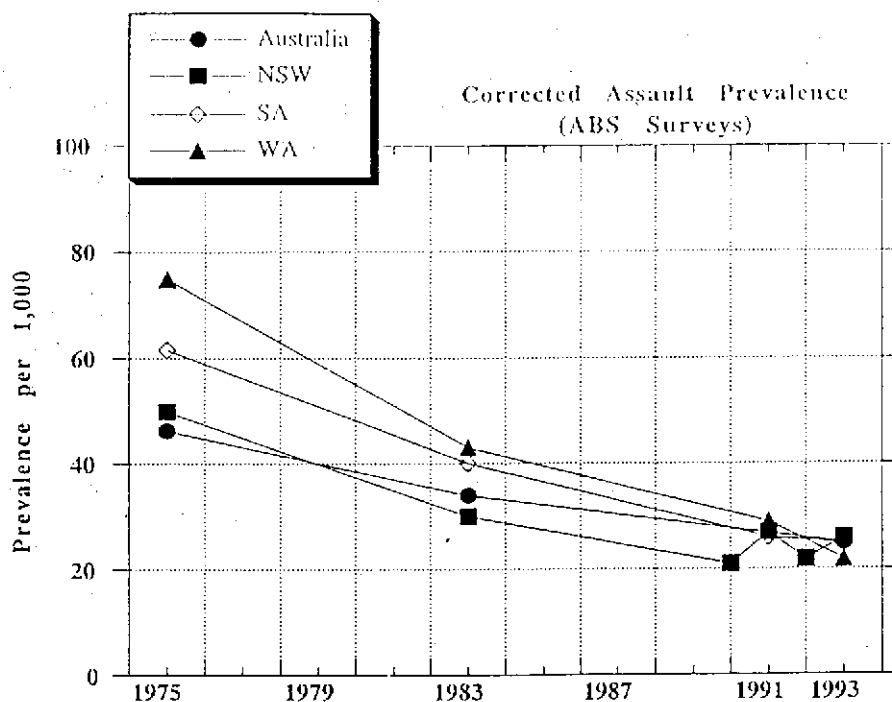


FIGURE 2 – AUSTRALIAN VICTIMISATION TRENDS IN ROBBERY USING ‘CORRECTED FIGURES’

Note: In this figure attempted robbery has been excluded so that the 1983 survey figure has been adjusted.

To sum up, the data from the ABS victimisation surveys (considered with the qualifications and cautions discussed) supports the proposition that the kind of events measured by the ABS victimisation survey definitions of robbery have increased about four fold in the last 20 years in Australia and that most of the increase has occurred in the last decade. However there remains some concern whether this apparent upward trend (that mirrors the trend in offences reported to the police) is an artefact of the tendency to use brief questions in a mail out survey. For example, the evidence from the 1991 Queensland survey suggested that the robbery rate had only risen marginally in that state from 1.05 per 1,000 in 1975 to two per 1,000 in 1991.

ASSAULT

Victimisation rates for assault are no less difficult to interpret than those for robbery, because surveys also vary in what methods they use and how they define assault. Some surveys include ‘threats to assault’ as an assault, whereas others do not. Some surveys include various types of assault including sexual assault but most do not. The estimates for assault are summarised in Table 4. The 1991 WA survey (ABS 1992b) separated two questions associated with assault: personal attack and threats with force. The question for ‘personal attack’ was ‘In the last 12 months has anyone *attacked* you?’. The question for ‘threats with force’ was ‘In the last 12 months has anyone *threatened* you with force?’. (Emphases in the questionnaire) (ABS 1992b). The prevalence rate for personal attack was 1.8 per cent, and the rate for ‘threats with force’ was 2.1 per cent. Since 1990 the ABS surveys have asked ‘In the last 12 months has anyone threatened you with force or attacked you?’ this question combines the notion of threat with the notion of attack, both in themselves imprecise descriptions. The ABS report on the 1993 survey (ABS 1994) included a prevalence figure for comparison with the (now) standard combined question. This figure was 2.9 per cent. As we know that the prevalence rate for personal attack was 1.8 per cent we may assume that threats alone make up about 40 per cent of the cited assault prevalence.

Although the ABS survey questions do not distinguish 'physical' and 'non physical' events, the 1983 survey (ABS 1986) does report that in approximately 42.8 per cent of the cases of actual or threatened attack the 'method of attack' was verbal. As noted in the report (ABS 1986, p. 73): 'in 1983 less than 40 per cent of assault victims claimed to have actually been attacked'. Apart from threats, other non-physical assaults may involve threats with a weapon or a verbal attack. The indication is, therefore, that about half of reported 'assaults' are non-physical. This estimate may even be a little conservative as the NSSS survey suggests that 'actual' assaults make up only 30 per cent of a category including threatened assaults and assaults. Walker (1993) reports that the 1992 International Crime Victim Survey found that only 46 per cent of 'assaults' reported in the Australian component of the surveys involved physical contact. Reinforcing this point, only 29.2 per cent of the assaults reported in the 1993 ABS survey and 26.7 per cent of the assaults reported in the 1983 ABS survey resulted in physical injury to the victims (ABS 1994a; ABS 1986). It is therefore safe to assume that no more than half of the number of estimated assaults actually involved physical contact, the true figure probably being somewhat less than this.

According to the 1993 ABS survey the rate of 'personal attacks' (assault) in Western Australia was 2.2 per cent. This figure is about half of the size of the estimate in 1983 and almost exactly the same as the estimate for the State in 1975 (2.3 per cent). However, the 1975 survey excluded threats. All of the other ABS surveys have included threats in the definition of assault so they may be directly compared. From the figures available where assault has been split into its two components, assault excluding threats makes up less than half of all 'assaults'. Therefore, to allow the 1975 estimate to be compared with the later ABS estimates the figure needs to be doubled. If the 1975 estimate (2.3 per cent) were doubled to approximate a comparative figure, this would suggest a trend downwards from 4.6 per cent in 1975 to 3.4 per cent in 1983 to 2.5 per cent in 1993. The adjusted figures have been plotted in Figure 3. Alluring as the notion is of society becoming more peaceful, it is enough for the moment to conclude that there is insufficient evidence, based on the patchy and inadequate victimisation data that the assault rate is increasing. However, there are some indications from independent state surveys undertaken in Queensland and South Australia that the assault rate may be higher than indicated in the recent ABS surveys. The survey undertaken by the Government Statistician's office in Queensland in 1991 found a prevalence of 73 per 1,000 (about 2.5 times the size of the estimate provided by the 1993 ABS survey for that state) (de Mel & Carcach 1994). Similarly the victimisation survey conducted by the South Australian Office of Crime Statistics in 1992 (Gardner 1994) found a rate of 50 per 1,000 (about two times the size of the estimate provided by the 1993 ABS survey for that state).

TABLE 4 - COMPARISON OF THE RESULTS OF AUSTRALIAN VICTIMISATION SURVEYS REGARDING THE PREVALENCE OF ASSAULT (ACTUAL AND THREATENED)

Survey	Coverage (persons)	Method	% Crime Reported	Prevalence (per 1,000)	Defn.
ABS 1975	18,694	Face to face	44.0	37 ^a 23 ^a	1 1
WA Aust					
ABS 1983	18,000 hshlds	Face to face	33.6	43 34	2 2
WA Aust					
International Age 16+ 1989	2,012	Telephone	52.4	46	3
NSSS 1990	Age 18+ 4,513	Mail out	43.5	50 ^b	4

Survey	Coverage (persons)	Method	% Crime Reported	Prevalence (per 1,000)	Defn.
ABS-NSW Apr 1990	12,400	Drop/mail	30.8	21	5
ABS-NSW Apr 1991	14,100	Drop/mail	31.8	27	5
ABS - SA Apr 1991	4,400 hshlds	Drop/mail	31.2	26	5
<i>Queensland</i> May 1991	6,315 hshlds	Face to face	26.8	73	7
ABS - WA Oct 1991	7,691	Drop/mail	30.4	29 ^c	6
ABS - NSW Apr 1992	13,950	Drop/mail	35.5	22	5
International Age 16 + 1992	2,006	Telephone	39.4	44	3
<i>South Australia</i> Nov 1992	Age 15 + 3,000	Face to face		50	5
ABS 1993 <i>Aust</i>	52,300	Drop/mail	32.1	25	5
<i>WA</i>			35.3	22	5
<i>NSW</i>			31.9	26	5
<i>SA</i>			31.5	25	5
<i>Qld</i>			28.6	29	5

Notes:

- a. Note this figure excludes threats and therefore can be considered to be about half of what it would be if threats were included. These figures taken from Braithwaite and Biles (1980) compilation of the 1975 ABS survey.
- b. This figure is taken from the final analysis of the results prepared by Jonathan Kelly.
- c. The 1991 survey separated questions on attack and threats of force, however, the 1993 ABS survey provided comparison tables which included the figure used here, which combines attacks and threats. The figure given in the 1994 ABS report overcame the double counting which occurs if the two events listed in the Western Australia report (ABS 1992b) were simply added together.

Definitions:

Note: Most definitions include the notion of 'threatened assault'

1. 'In the last 12 months have you been attacked in any way either with or without a weapon?' [i.e threats excluded]
2. 'In the last 12 months has anyone — Threatened you in any way with force or violence? . . . Attacked you or beaten you up?'
3. 'Apart from the incidents just covered have you over the past five years been personally attacked or threatened by someone in a way that really frightened you, either at home or somewhere else such as in a pub, in the street, at school or at your workplace? How often did this happen in 1988?' (1991) [all estimates cited for the international surveys relate to the one year estimate].
4. ' . . . Now for assault-someone beating you up, or attacking you with a weapon like a brick or a knife . . . besides the things you already told us about, has anyone assaulted you in the last 12 months . . . Besides those, has anyone else threatened to assault you.'
5. 'In the last 12 months has anyone threatened you with force or attacked you?' [i.e combines threats and actual use of force].
6. 'In the last 12 months has anyone attacked you? . . . In the last 12 months has anyone threatened you with force?' [Two separate questions but estimate combines the two-see note 'c' above]
7. This figure is derived from an analysis of responses to three questions, the first excludes incidents where things are stolen, the second two ask: (1) 'Did the offender(s) harm or use force or violence on you in any way?' (2) 'Did the offender(s) threaten to harm or use force or violence on you in anyway?'

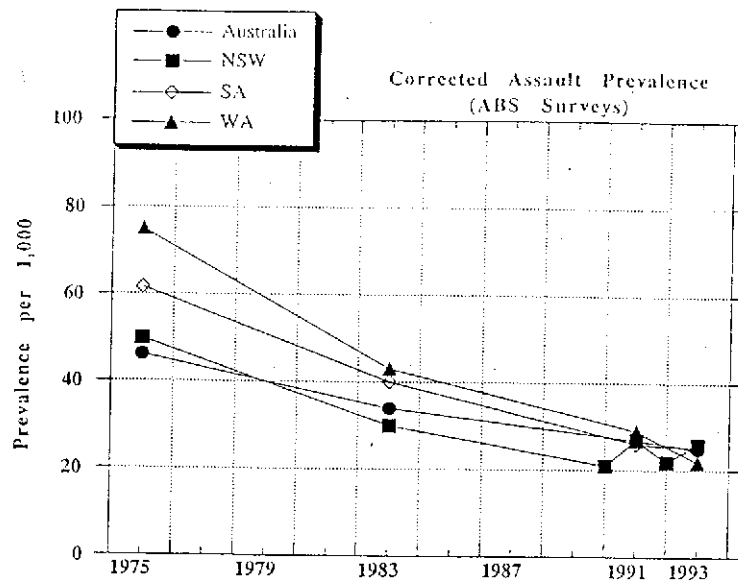


FIGURE 3 – ASSAULT (PHYSICAL AND NON PHYSICAL, INCLUDING THREATS) VCTIMISATION RATES IN AUSTRALIA

Note: The figure for 1975 has been adjusted because the question in that survey did not include 'threats'.

Another way to measure the amount of violent crime independent of agencies of the criminal justice system is to look at hospital morbidity statistics. The Health Department of Western Australia compiled a table of all cases admitted to hospital with injuries related to violent crime. Figure 4 shows the rate of such injuries (per 100,000 of the state's population). There appears to be little significant growth or decline in the rate of such injuries adding weight to the case that the assault rate in the state has not altered significantly over the last decade.

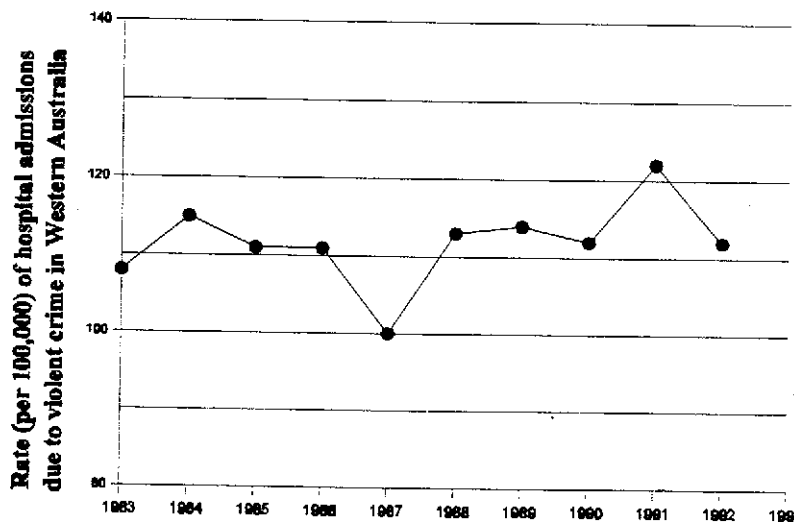


FIGURE 4 – RATE OF HOSPITAL ADMISSIONS DUE TO VIOLENT CRIME IN WESTERN AUSTRALIA

CONCLUSION

Some of the problems in comparing victimisation surveys have been highlighted in this brief paper. Despite these difficulties victimisation data is essential to allow an understanding of crime and associated phenomena. Public policy on matters to do with crime are largely driven by 'alarming' figures on crime that are simply reflect the number of offences reported to the police. As this paper has attempted to show such apparent trends may not accurately reflect what is happening in our community. However, without more thorough and more regular victimisation surveys public policy will continue to depend on the spectre reflected in the police figures.

REFERENCES

- Australian Bureau of Statistics 1979, 'General Social Survey', *Crime Victims, May 1975*, Cat. no. 4105.0, ABS, Canberra.
- 1986, *Victims of Crime, Australia, 1983*, Cat. no. 4506.0, ABS, Canberra.
- 1990, *Crime and Safety, New South Wales*, Cat. no. 4509.1, ABS, Canberra.
- 1991a, *Crime and Safety, New South Wales*, Cat. no. 4509.1, ABS, Canberra.
- 1991b, *Crime and Safety, South Australia*, Cat. no. 4509.4, ABS, Canberra.
- 1992a, *Crime Victims, Western Australia, October 1991*, Cat. no. 4506.5, ABS, Canberra.
- 1992b, *Crime and Safety, New South Wales*, Cat. no. 4509.1, ABS, Canberra.
- 1994, *Crime and Safety Australia, April 1993*, Cat. no. 4509.0, ABS, Canberra.
- Australian Institute of Criminology 1992, *The 1990 National Crime Victimisation Survey*, Australian Institute of Criminology, Canberra.
- Biderman, A. & Lynch, J. 1991, 'Understanding Crime Incidence Statistics', in *Why the UCR Diverges from the NCS*, Springer Verlag, New York.
- Braithwaite, J. & Biles, D. 1980, 'Overview of Findings From the First Australian National Crime Victims Survey', *Australian and New Zealand Journal of Criminology*, vol. 13, pp. 41-51.
- de Mel, R. & Carcach, C. 1994, 'Comparison of Victimisation Rates' reported in the *1991 Queensland Crime Victims Survey and The 1993 National Crime and Safety Survey*, Paper presented at Symposium on 'Crime Victims' Surveys', Griffith University, Brisbane, 28-29 November.
- Gardner, J. 1994. 'Violence Against Women', *Justats*, 3, South Australian Office of Crime Statistics, Adelaide.
- Government Statistician's Office 1992, *Crime Victims Survey: Queensland 1991*, Government Statistician's Office, Brisbane.
- Morgan, F. 1994, 'The Benefits of Descriptive Information in Crime Surveys', Paper prepared for the Eighth International Symposium on 'Victimology', Adelaide, 21 - 26 August.
- Mukherjee, S.K. & Dagger, D. 1990, *The Size of the Crime Problem in Australia*, 2nd edn, Australian Institute of Criminology, Canberra.
- Strangeland, P. 1994, *The Crime Puzzle: Matching Victim Surveys With Police Statistics*, Andalusian Interuniversitarian Institute of Criminology, Malaga.
- U.S. Department of Justice 1991, *Criminal Victimization in the United States: 1973 - 88 Trends. A National Crime Survey Report*, NCJ - 129392, Bureau of Justice Statistics, Washington
- U.S. Department of Justice 1994, *Criminal Victimization in the United States, 1992. A National Crime Survey Report*, NCJ 145125, Bureau of Justice Statistics, Washington.

van Dijk, J. J. & Mayhew, P. 1993, 'Criminal Victimization in the Industrialised World: Key Findings of the 1989 and 1992 International Crime Surveys', in del Frate, A. A., Zvekic, U. & van Dijk, J. J. (eds.), *Understanding Crime: Experiences of Crime and Crime Control*, Acts of the International Conference, Rome, 18-20 November 1992. Publication no. 49, United Nations Interregional Crime and Justice Research Institute, Rome.

Walker, J. 1993, *Crime in Australia. As measured by the Australian Component of the International Crime Victims Survey 1992*, Australian Institute of Criminology, Canberra.

— 1994, 'Trends in Crime and Criminal Justice', in Chappell, D. & Wilson, P. (eds.), *The Australian Criminal Justice System: The mid 1990's*, Butterworth's, Melbourne.

COMPARING CRIME LEVELS AND CRIME TRENDS IN SOUTH AUSTRALIA USING CRIME SURVEYS AND POLICE DATA

Frank Morgan
Crime Research Centre
University of Western Australia

INTRODUCTION AND PURPOSE OF THE PAPER

It is timely to consider the role of and most appropriate methodology for crime victim surveys since there are at least three recent developments of relevance. First, there has been a resurgence of interest in and implementation of the survey method of measuring crime in Australia since 1990. Second, there have been changes in the attitude of the Australian Bureau of Statistics (ABS) regarding access to unit record data from crime surveys. Third, a new sense of collegiality is developing among State agencies responsible for collecting, reporting and interpreting crime statistics and analysing crime trends. This paper touches on each of the following areas:

- substantive findings of crime surveys
- methodological issues
- uses and limitations of the crime survey
- alternative research strategies, and
- the role of future ABS surveys.

A BRIEF HISTORY OF CRIME SURVEYS FIELDED IN SOUTH AUSTRALIA

The 1975 National Crime Survey conducted by the ABS (1979) has been partially ignored because changes to the methodology of subsequent surveys has made comparison with 1975 problematic. However, one should note the comments of David Indermaur in a paper to this symposium.¹ This paper suggests to me that the 1975 survey may be comparable with some recent surveys given careful interpretation. A praiseworthy aspect of the 1975 survey was that its results did lead to a series of papers in published journals.² Subsequent surveys have not received the same level of public analysis and the resources allocated to the collection of data have not been matched by resources allocated to the analysis of results. In a sense therefore, much of the collection effort has been wasted.

¹ 'What do victimisation surveys measure? An examination of trends in robbery and assault victimisation in Western Australia and Australia.'

² See for example: Braithwaite, J. & Biles, D. 1979, 'Crime victims and the police', *Australian Psychologist*, vol. 14, no. 3, pp. 345-355; 1979, 'On being unemployed and being a victim of crime', *Australian Journal of Social Issues*, vol. 14, no. 3, pp. 192-200; 1980, 'Women as victims of crime', *Australian Quarterly*, vol. 52, no. 3, pp. 329-339; 1980, 'Overview of findings of the first national crime victims survey', *Australian and New Zealand Journal of Criminology*, vol. 13, pp. 41-51; and 1980, 'Crime victimisation rates in Australian cities', *Australia and New Zealand Journal of Sociology*, vol. 16, no. 1, pp. 79-84;

The 1983 National Crime Survey (ABS 1986) is well known among criminologists and crime statisticians. Its results have been compared with more recent State and national surveys. However, it is remarkable that Australia's national crime surveys have been conducted only at ten year intervals even though the first of them was conducted soon after the first United States national survey. That first US survey was followed by annual surveys and an extensive process of review and redesign.

In 1990 a fresh wave of crime surveys began. The New South Wales Bureau of Crime Statistics and the New South Wales Police commissioned the ABS (1990) to conduct a crime survey using a methodology known as 'drop off and mail back', where the questionnaire was left with the respondent at the end of a personal interview for the ABS' monthly Labour Force Survey. Respondents were then asked to complete the questions and return the form in a pre-addressed and postage paid envelope. A limited number of questions were asked about victimisation for the crimes of assault, robbery, and break-ins and attempted break-ins to dwellings.

A South Australian survey in 1991 (ABS) replicated the New South Wales approach and the national survey in 1993 (ABS 1994) also used the same methodology. The national survey asked additional questions about sexual assault and motor vehicle theft.

In South Australia an additional opportunity for a crime survey arose through the medium of the Health Omnibus Survey, a survey providing a sample of 3,000 persons from separate dwellings. Users of this survey include a variety of health agencies with interests in community usage of drugs, alcohol and tobacco, and others with responsibility for general health promotion and health care. The Office of Crime Statistics included several questions about break and enter victimisation, robbery and assault in 1992 and 1993. Because users share a common core of background questions the costs of participation in the survey are modest and the Health Omnibus Survey offers the possibility of being a vehicle for an annual measurement of crime victimisation. Results from these surveys have been made available in several publications of the Office of Crime Statistics and in conference papers.³

The Office of Crime Statistics asked direct questions about the relationship between victim and offender in order to determine the prevalence of domestic violence. Furthermore, it included a more detailed breakdown of the location of assaults by including 'licensed premises' as a category. This question has been further refined in the 1994 survey to separate night-clubs from other licensed premises because of a belief that this type of establishment is a more common host to violent incidents. Of most interest, however, were the responses to a 'victim supplement' to the 1993 survey which followed up victims of assault and robbery who agreed to answer further questions by telephone. The details of the victim supplement are described below.

THE VICTIM SUPPLEMENT

In the 1993 Health Omnibus main survey all victims of robbery and assault were asked if they were willing to answer further questions about these offences. These supplementary interviews were generally conducted by telephone at a later date in order to separate the crime questions from the general health questions constituting the bulk of the survey.

³ See Gardner, J. 1992, 'Violence against women', *Justus* 3, South Australia: Attorney-General's Department; and Morgan, F. 1994, 'The benefits of descriptive information in crime surveys', Paper delivered to the Eighth International Symposium on 'Victimology', Adelaide, 21-26 August.

The 1993 victim supplement was introduced:

- to gain more information about the context of robbery and assault
- to capitalise on the discovery of random samples of robbery and assault victims once found
- to obtain a better idea of what sorts of incidents attract a 'yes' answer to the questions asked in the ABS surveys – an explicitly methodological aim.

The victim supplement consisted of mainly coded response items. These questions investigated matters such as:

- the time, place and duration of the offence
- known details of offenders
- any prior connection between victims and offenders
- offence category
- if victims sought help and, if so, from whom, and how helpful they were, and
- any consequences of the offence.

In addition to these coded response items several open ended questions were included. These questions probed:

- the circumstances immediately preceding the offence
- descriptive information about the offence itself
- reasons for reporting or not reporting the event to police (this item was also coded)
- the extent and type of any emotional injury reported, and
- any other matter about the offence that the victim thought was significant.

Victims of robbery and assault provided sometimes extensive descriptive information about the circumstances of the event.

The contribution of the descriptive material was relevant to four areas. These are:

- assessment of the validity and internal consistency of the survey instruments
- understanding of the characteristics of the offences covered
- reporting or non-reporting of offences to police, and
- the context of the offence and the circumstances immediately preceding it.

COMPARISONS BETWEEN THE SURVEYS AND POLICE STATISTICS

It is of considerable interest to compare the levels of crime and also trends in crime generated by crime surveys and police statistics. The approach taken below is to take the drop off and mail back survey as the pivotal methodology and to compare its results firstly with police statistics and then with the results of surveys using a different methodology.

CRIME INCIDENCE MEASURED BY POLICE STATISTICS AND THE 1993 NATIONAL CRIME SURVEY

The National Crime Survey of April 1993 provides estimates of the *prevalence* of crime victimisation (the number of victims experiencing at least one crime) for selected offences. However, with some simplifying assumptions it can also provide an estimate of the *incidence* of these crimes (the total number of crimes occurring). The time period covered by the survey does not correspond exactly with the time period for published police statistics, but a comparison with the police statistics for the financial year 1992/93 (South Australia Police 1994) gives a highly comparable time period and the comparisons are obvious enough not to be affected by the approximation. The results are presented in Table 1.

TABLE 1 - VICTIMS, OFFENCES, REPORTED OFFENCES AND POLICE RECORDED OFFENCES:
SOUTH AUSTRALIA

Offence	National Crime Survey				Annual Report
	Individual victims	Total offences	Victims reporting last offence to police	Offences reported to police	Police recorded offences
Dwelling break-ins or attempts	45,400	64,900	29,700	42,400	21,673
Motor vehicle theft	9,500	10,400	8,500	9,300	11,299
Assault	27,900	47,200	8,800	14,900	12,242
Robbery	14,800	21,200	9,900	14,200	1,594
Sexual assault against women	4,200	5,800	1,300	1,400	1,866

Notes:

1. The *total offences* estimates are calculated by generating a multiplier for each offence type, depending on the frequency distribution for offences for victims. Victims reporting three or more offences are counted as experiencing three offences, and the frequency distribution was taken from the Australian data since state by State distributions were not provided in the ABS report.
2. With regard to *offences reported to police*, for victims with more than one offence, total offences reported were estimated using information about the reporting to police of the *last* offence, since reporting information was not collected for all offences.

The comparisons reveal some interesting differences between offences. For motor vehicle theft and sexual assault police record more offences than would be predicted by the crime survey although the differences are not large. Recorded figures for assault are similar to the number expected, but this is much lower than the number of assaults actually occurring, because of a low reporting rate to police. For break and

enter dwelling offences the police record half as many events as expected and the number of robberies is only one-ninth of what we would expect on the basis of the crime survey. Some possible explanations for these discrepancies are offered later.

CRIME SURVEYS: CHANGES IN SOUTH AUSTRALIAN VICTIMISATION LEVELS BETWEEN 1983 AND 1991

In South Australia questions asked in the 1993 national survey were asked by the ABS in the 1991 State survey. The 1993 national survey also made comparisons between these surveys and the 1983 national survey. The offences which were compared were break and enter dwellings and attempts, robbery and assault. Question wording was identical for the 1991 and 1993 surveys. However, there were some differences in wording for the 1983 national survey. These differences applied to all offence categories with different wordings for the robbery and assault questions. In particular there were separate questions about break-ins and attempted break-ins in 1991 and 1993, whereas these were covered by a single question in 1983. There must therefore be some doubt about the comparability of the 1983 survey with subsequent surveys even though the 1983 results were included for comparison in the report of the 1993 National Crime and Safety Survey. The *prevalence* measures from these surveys are compared with police statistics of crime *incidence* for South Australia over comparable time periods and are displayed in Figures 1, 2 and 3.

The police figures quoted here are for financial years and are taken from the relevant annual reports of the South Australian Police Department. In 1992/93 for example, this allows for a nine month overlap with the reference period for the ABS national survey in April 1993.

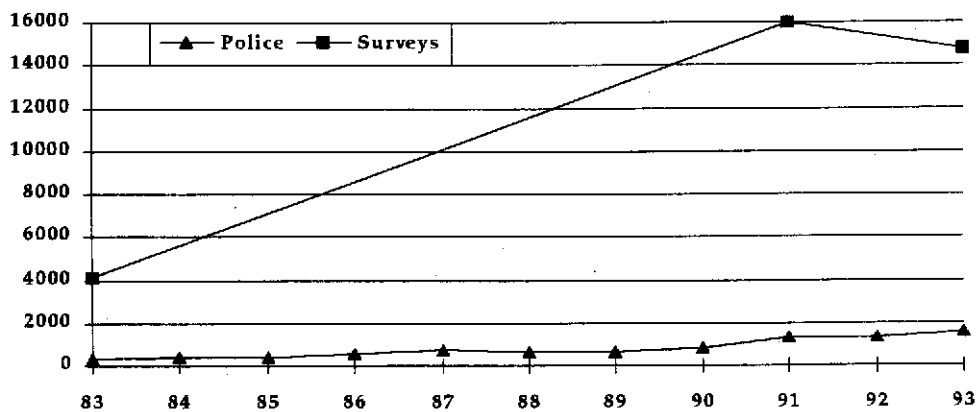


FIGURE 1 - ROBBERY TRENDS USING POLICE AND SURVEY FIGURES
SOUTH AUSTRALIA: 1983-1993

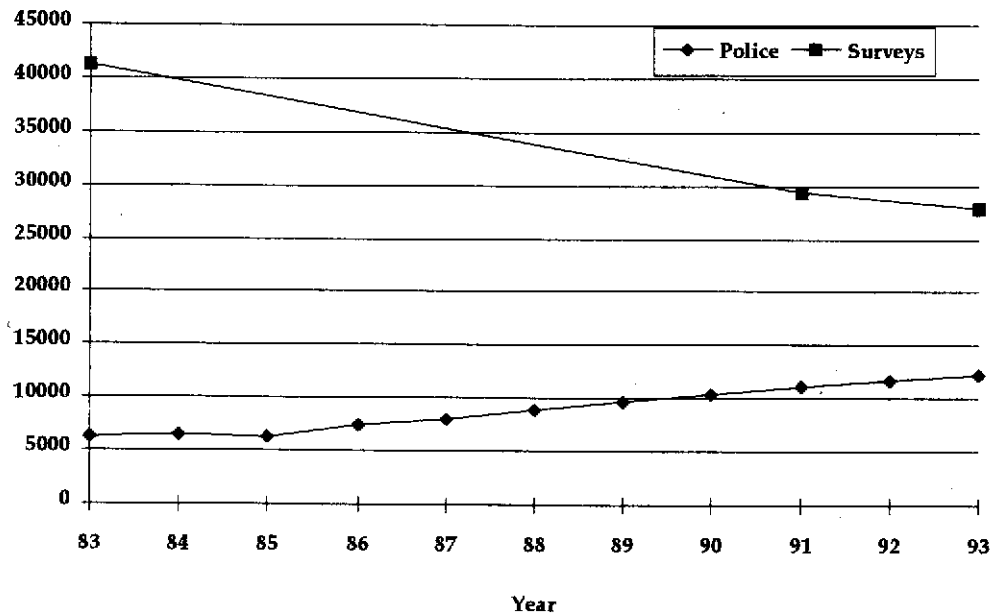


FIGURE 2 - ASSAULT TRENDS USING POLICE AND SURVEY FIGURES
SOUTH AUSTRALIA: 1983-1993

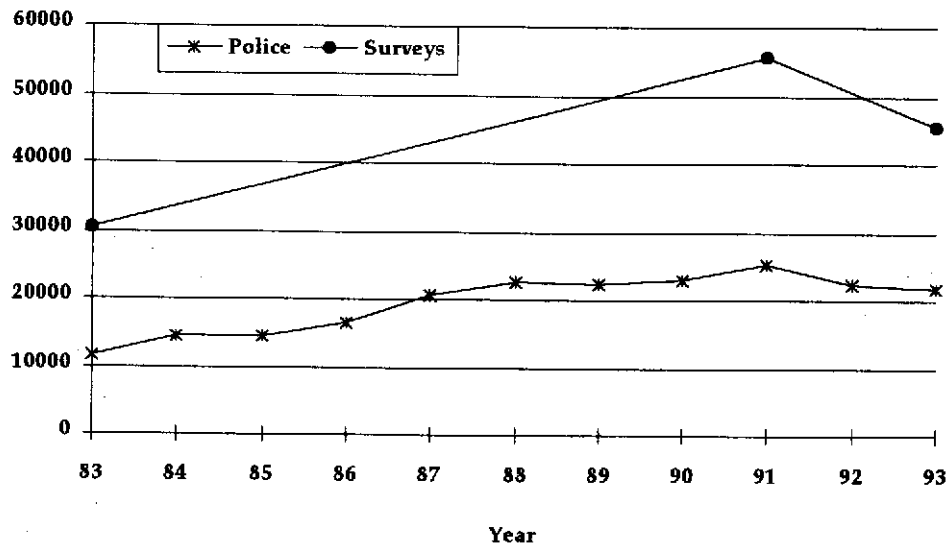


FIGURE 3 - DWELLING BREAK TRENDS USING POLICE AND SURVEY FIGURES
SOUTH AUSTRALIA: 1983-1993

The graphs indicate a convergence over time in the levels of assault as measured separately by police data and crime surveys. Between 1983 and 1991 robbery increased by almost identical percentages, according to both measures (283% for police and 290% for surveys), but the comparisons are difficult to detect in Figure 1 because of the large difference in scale between survey and police statistics. Only the figures on dwelling breaks show some consistency in trend and some comparability in scale between the two sources of data. Surveys indicate a 49 per cent increase in this offence between 1983 and 1993 while police statistics show an 88 per cent increase. There has been little evident change in the propensity of victims to report offences of break and enter and assault to police. Only for robbery is there any evidence of increased propensity to report. South Australian survey data indicate that 56.3 per cent of robberies were reported in 1983 compared with 66.8 per cent in 1993. The Australian figures show an increase in robbery reporting from 42.6 per cent to 52.1 per cent (ABS 1994).

COMPARING SURVEYS USING DIFFERENT METHODOLOGIES

Table 2 shows the prevalence of victimisation in South Australia as measured by survey methodologies. The main interest is in the surveys from 1991 onwards. The 1991 and April 1993 (ABS) surveys used the drop off and mail back methodology. The 1992 and October 1993 surveys, part of the Health Omnibus Survey, used a face to face interview method. While the questions asked were identical, they were asked in the context of a general survey which covered mainly health issues.

TABLE 2 - PERCENT OF PERSONS OR HOUSEHOLDS VICTIMISED, SOUTH AUSTRALIA, 1983 TO 1993

Offence	1983	1991*	1992	1993, April	1993*, October
<i>Dwellings</i>					
Break and enter dwelling	n/a	6.9	6.6	5.0	6.3
Attempted break and enter dwelling	n/a	5.2	6.9	3.8	4.3
Break-ins or attempts	6.4	10.3	12.2	8.1	9.8
<i>Persons</i>					
Assault	4.0	2.6	5.0	2.5	4.6
Robbery	0.4	1.4	1.1	1.3	0.7

The main conclusions are that the Health Omnibus Survey arrived at higher levels of break-ins, substantially higher levels of assault and lower levels of robbery. On the other hand, both surveys indicate decreasing levels of victimisation in all offences over the time periods covered. In this sense they provide a consistent picture.

REASONS FOR THE DIFFERENCES IN THE PREVALENCE AND INCIDENCE OF CRIME: POLICE STATISTICS AND SURVEYS

There are a number of possible reasons for the differences evident from the preceding sections. It is appropriate at this point to recall that crime surveys and police statistics use entirely different methods of collecting information. Some of these differences are explained in a text table included as the Appendix.

However, the first set of comparisons concerns the differing levels of crime indicated by surveys and police statistics. These differences may arise even when the only offences considered are those reported to police. All surveys since 1991 asked the same set of common language questions about assault, robbery and dwelling break-in. However, one reason for discrepancies between surveys and police statistics is the ill-advised equation of the crime categories generated by surveys with the legal categories used by police and other criminal justice agents. The issue of comparison is important because one motive for conducting a crime survey is to find "true levels" of crime for a particular offence and to penetrate the so-called "dark figure" of crime which is not reported to police.

Evidence for category differences comes from the telephone supplement to the 1993 Health Omnibus Survey. Respondents who agreed to the telephone follow-up described in their own words the details of the offence and the circumstances leading up to it, and these descriptions add greatly to knowledge about the types of event which may be captured by survey questions. Some descriptions of events meeting the survey classification of robbery and assault follow. Further details of such events were included in a previous conference paper (Morgan 1994).

ROBBERY

'In the past 12 months did anyone steal anything from you by threatening you or attacking you?'

A female respondent in her forties was sitting in the driver's seat of her car in a shopping centre when an offender reached into her car and snatched her handbag from the passenger seat.

A teenage boy in the company of others outside an entertainment centre had a baseball cap stolen by a youth from another group. The incident led to a fight but the cap was not returned.

A handbag was snatched from the shoulder of a woman in a shopping centre car park.

A young woman was robbed of a motor bike by a female friend who needed money for drugs. When she attempted to recover the vehicle at the offender's place she was bashed and suffered severe injuries.

ASSAULT

'In the past 12 months has anyone threatened you with force or attacked you?'

One of several incidents at sporting events involved a player from an opposing team pushing the victim because she believed she had used insulting language.

The most violent of the sporting incidents involved the victim being punched once by an opposing soccer player at the end of a game after the victim 'said something' to the offender. The incident apparently ended after some further verbal interchanges and the victim reported no injuries.

Many of the incidents involved *threats*, some made in person and others made by telephone. One incident involved a threat to kill a neighbour's pet, while others involved threats to kill the respondent.

One threat of a different kind involved a student who told a teacher that he was 'going to get him' and was subsequently suspended from school.

Several other incidents seemed more akin to *challenges* to fight than to actual threats. A bystander intervened in an incident where two alcohol-affected teenagers were 'trying to pick a fight with a third party'. The bystander was also challenged but the offenders then re-focused their attention on their first victim.

SEXUAL ASSAULT

It is important for researchers to be aware that the question about assault listed above may elicit information about sexual assault as well. The Health Omnibus Survey did not ask a separate question about sexual assault, although the 1993 national survey asked women aged 18 or over a separate question about sexual assault on a voluntary basis. This question appeared later in the questionnaire sequence than the assault question, so any sexual assaults needed to be allocated to the appropriate category.

A survey instrument without a sexual assault question may, because of this, produce higher assault prevalence than one with such a question. The standard assault category will include some assaults of a sexual nature in one case while in others sexual assaults of women will be included in a separate category. It is also possible that the assault category in both instruments will include some sexual assaults of men.

Several respondents to the Health Omnibus Survey – all of them women – reported assaults of a sexual nature. These ranged in scope from:

- a woman raped in her home by two offenders, one of whom was an ex-partner
- an assault, probably an attempted rape, by an ex-partner who was interrupted by a neighbour's knock on the door
- A young woman operating a market stall who was pushed and fondled by one of three young men who had emerged from a nearby hotel; to
- a young woman who was grabbed and fondled by a man in a city night-club.

COMPARISON WITH LEGAL CATEGORIES

The descriptive material makes it clear that there is enormous variety among the offences that are squeezed into the two categories labelled 'robbery' and 'assault' (These labels do not appear in the survey itself but are used in reports of the survey results). If these offences had all been reported to police and prosecuted in court it is certain that they many would not have remained in the legal categories of robbery and assault. In some cases it is difficult to see that an offence has occurred. In others the offence would have been re-classified into another legal category, assuming the accuracy of the respondent's account. For example, some 'robberies' would have been re-classified as theft from the person and many 'assaults' would probably not have been so labelled by police. (If accepted as offences some may have been recorded as unlawful threats.)

At issue here is the question of whether designers of surveys should attempt to replicate standard legal categories or simply accept that common language prompts will inevitably generate responses that tap into other types of incident than covered by legal definitions. Whatever one's approach to this issue, the value of the descriptive material is evident. The technical documentation of the British Crime Survey (BCS) (Hale 1993) makes it clear that descriptive material is the primary method used to categorise incidents into a detailed classification reproducing legally understood categories. Nevertheless, Hough's (1990) analysis of threats reported in the BCS argues that surveys tap into incidents which should not be thought of as "crimes" but should be more broadly conceptualised as social harms or anti-social behaviour. Hough believes that surveys apply *nominal* definitions of crime, as opposed to police who apply *operational* definitions of crime which are selective and purposive. These definitions are purposive in that they define as crimes incidents which police believe *should* be dealt with by the criminal justice system.

The role of police in defining events as crimes leads us into an area which is greatly contested and changeable over time. There is evidence that police are now recording as crimes many more incidents of a "domestic" nature. Police policies, driven by social pressures, now more frequently acknowledge that the "domestic" nature of violent incidents should not by itself provide immunity from prosecution.

OTHER REASONS FOR DIFFERENCES BETWEEN SURVEYS AND POLICE STATISTICS IN LEVELS OF CRIME

Category differences are only one of many possible reasons for the differences between surveys and police statistics. However, they are rarely mentioned in comparisons between the two data sources. Other reasons are;

- The age limitation on survey coverage (just over 50% of all police recorded sexual assaults in South Australia involve victims under the age of 18 (Office of Crime Statistics 1994, p. 8). These would be excluded by current survey practices which also exclude male victims of sexual assault).
- Police counting practices are based on the date of reporting of offences to police. The date of occurrence of offences may differ from date reported, especially for cases of abuse of children. This may lead to a number of offences which occurred several years ago being counted in the current year (Office of Crime Statistics, p. 8).
- Survey respondents may report events outside the scope of the reporting period or fail to report events falling within the relevant time period. This effect, known as telescoping, is discussed in many analyses of the survey method⁴ along with general problems of respondent recall of events.
- The victimisation may not be reported to police. This effect should be measurable from the survey itself but the fact of reporting to police may be another matter subject to memory lapses.
- Police may not record as an offence an event reported by a member of the public. There may be doubts about the authenticity of the report or the context of the offence may be seen as non-criminal. This effect may be a significant factor in explaining differences in *trends* between police and survey statistics.
- Surveys may not be effective in obtaining representative samples of the population. The National Research Council (U.S.) report on violence (Reiss, A. et al. 1993) noted that special populations such as the homeless, transient and offender populations are under-represented in crime survey

⁴ See for example Skogan, W. 1981, *Issues in the measurement of victimisation*, United States Department of Justice, Bureau of Justice Statistics.

samples. These populations have high rates of victimisation and are subject to repeat victimisation. One would expect therefore that survey estimates of crime *prevalence* in the general population would be more reliable than estimates of crime *incidence*, because relatively small sectors of the population may experience a large proportion of criminal incidents.

DIFFERENCES IN TRENDS BETWEEN POLICE AND SURVEY STATISTICS

Police recording of reported offences may be subject to several influences and may partially explain differences in trends. One type of recording influence concerns the context of the offence and there is evidence that police are now recording a greater proportion of domestic assaults than they did in the past. A report by the New South Wales Bureau of Crime Statistics and Research attributed a growth in non-aggravated assaults between 1982 and 1989/89 to a greater proportion of recorded spousal assault, particularly noticeable outside the metropolitan area of Sydney (Bonney & Kery 1991). There is some evidence from South Australian police data that increased recording of domestic assault has affected general assault trends. A further influence on police recording may be the introduction of more sophisticated computer systems which either make the recording process easier or make non-recording more evident to superiors (Reiss, A. et al. 1993).

DIFFERENCES IN PREVALENCE RECORDED BY DIFFERENT SURVEY METHODOLOGIES

Differences between surveys asking identical question are more difficult to explain. However, differences in survey results have been attributed to the survey method (telephone, face to face interview or self-completion) (Stangeland 1994).

An interesting line of investigation would pursue the role of *context* in surveys. Black (1979) argues that the context of a *crime* survey may provide a cue to respondents to mention only those incidents which meet their own definitions of crime. It is possible that the Health Omnibus Survey may provide a different set of cues from a crime survey because it includes a small number of questions about crime with many questions about health. However, the percentage of assault incidents reported to police in the Health Omnibus Survey was slightly higher (39%) than the percentage reported in the 1993 national survey (32% in South Australia); so there is little evidence of cueing effects having any significant impact on the "criminality" of the incidents recalled.

Nevertheless, recent German research on crime, fear of crime and domestic violence has implemented a survey design which changes the context of the survey when questions of domestic violence are raised. At this point the survey changes from a face to face interview to a self completed questionnaire which ensures privacy and which specifically asks for information about family conflicts "rather than" crime.⁵

⁵ See Wetzels, P. 'Victimization experiences in close relationships: another blank in victim surveys' in Bilsky, W. et al. 1993, *Fear of crime and criminal victimization*, Enke, Stuttgart; and Wetzels, P. & Bilsky, W. 1994, *Victimization in close relationships: on the darkness of "figures"*, unpublished.

The redesign of the U.S. National Crime Survey has paid specific attention to the wording of screening questions included in its new questionnaire. A screening question about assault and robbery does not use any "popular" crime terms such as "mugging" or "stickup" and makes specific reference, by example, to domestic weapons such as frying pans and scissors. It also explicitly prompts for attacks by 'anyone at all', or for sexual assaults by 'a casual acquaintance', or 'someone you know well'. The revised methodology has generated significantly higher levels of personal crime than the old one, with levels of assault incidence rising from 25.5 to 40.2 per 1,000. These assault increases were evident in the 'simple' assault category (77% increase) but relatively smaller changes were experienced in the 'aggravated' assault rates (24%). Levels of rape more than doubled as a result of the new methodology and robbery rates increased by a small amount (Bureau of Justice Statistics 1994a & 1994b).⁶

SOME IMPLICATIONS FOR FUTURE SURVEYS

This paper raises questions for the future of crime surveys in Australia. A general issue concerns the level of testing and evaluation of future survey instruments. Australian surveys have not been subject to the rigorous debate surrounding, for example, the U.S. National Crime Survey. Early versions of the survey were subject to checks on the accuracy of recall of crimes claimed to be reported to police. These shaped the design of the survey as a panel survey with six monthly scope, to assist recall of relevant events and also their proper time boundaries. Furthermore, re-evaluation of the survey has led to design changes (see above). Evaluation of Australian surveys has been far less rigorous.

The role of descriptive information is also at issue. The event descriptions generated by the Health Omnibus Survey have implications for the interpretation of all surveys using the same set of questions. It is clear that the questions on assault and robbery elicit responses which may be compared with standard legal categories only at the analysts' peril. Should future surveys include open-ended questions so that the nature of the events included are better understood? This is the approach of the British Crime Survey which uses detailed descriptions of events to correctly code offences to the appropriate legal category. The approach is apparently labour intensive, but if comparisons with police statistics are required this is one avenue of attack. An alternative approach is to include more detailed closed questions to obtain more specific offence descriptions. Information on the success of this methodology will come from a Western Australian crime survey fielded in late 1994 by the Crime Research Centre of the University of Western Australia. The redesign of the U.S. National Crime Survey is also of relevance since it seems to have resulted in a far higher reporting rate of offences against the person, through a careful approach to its screening questions. It may be that the new approach has overcome problems in gaining satisfactory estimates of violence in domestic settings.

Whatever the direction of future surveys there is evidence that the methodology of the drop-off and mail-back survey, with its existing set of questions, will not provide satisfactory answers to many questions that analysts have assumed it will address.

Two major aims of most surveys in Australia have been to compare survey estimates of crime with levels of crime reported to police and, more importantly, to assess changes in crime levels independently of police statistics. It is clear from the textual material from the Health Omnibus Survey victim supplement that assault and robbery levels generated by the type of questions described above cover a wider range of offences than those included in standard police categories of assault and robbery. Comparative police categories should include threats as well as assaults and also thefts from the person as well as robbery.

⁶ I am grateful to Pat Mayhew for sending me a copy of these reports at the Brisbane Symposium.

The determination of changes in crime levels faces similar problems. If the screening questions are not changed then changes over time in survey rates should be compared with changes over time with appropriate amalgamations of police categories. It may be difficult under this approach to make estimates of changes in more serious sub-categories of assault or robbery. This is because less serious forms of assault will occur more frequently and changes in serious forms of assault, perhaps exhibiting different trends, will be swamped by trends in the more common offences.

REFERENCES

- Australian Bureau of Statistics 1979, *General Social Survey: Crime Victims, May 1975*, Cat. no. 4105.0, ABS, Canberra.
- 1986, *Victims of Crime Australia, 1983*, Cat. no. 4506.6, ABS, Canberra.
- 1990, *Crime and Safety, New South Wales*, Cat. no. 4509.1, ABS, Canberra.
- 1991, *Crime and Safety in South Australia*, ABS, Canberra.
- 1994, *Crime and Safety, Australia, April 1993*, Cat. no. 4509.0, ABS, Canberra.
- Black, D. 1979, 'Common sense in the sociology of law', *American Sociological Review*, vol. 44, pp. 18-27.
- Bonney, R. & Kery, L. 1991, *Police Reports of Non-Aggravated Assault in New South Wales*, New South Wales Bureau of Crime Statistics and Research, Sydney.
- Bureau of Justice Statistics 1994a, *Technical Background on the Redesigned National Crime Victimization Survey*, prepared by US Bureau of the Census, Bureau of Justice Statistics, Washington.
- 1994b, *National Crime Survey Redesign*, Bureau of Justice Statistics Fact Sheet, Bureau of Justice Statistics, Washington.
- Hale, J. 1993, *Technical Report: 1992 British Crime Survey (England and Wales)*, Social and Community Planning and Research, London.
- Hough, M. 1990, 'Threats: Findings from the British Crime Survey', *International Review of Victimology*, vol. 1, pp. 169-180.
- Indermaur, D. 1994, 'What do victimisation surveys measure? An examination of trends in robbery and assault victimisation in Western Australia and Australia', Paper delivered to the 'Symposium on Crime Victims Surveys', Griffith University, Brisbane, 28-29 November.
- Morgan, F. 1994, 'The benefits of descriptive information in crime surveys', Paper delivered to the Eighth International Symposium on 'Victimology', Adelaide, 21-26 August.
- Office of Crime Statistics 1994, *Crime and Justice in South Australia 1993*, Attorney-Generals Department, Adelaide.
- Reiss, A. et al. 1993, *Understanding and Preventing Violence: Panel on the Understanding and Control of Violent Behaviour*, National Academy Press, Washington.
- South Australia Police 1994, *Annual Report of the Commissioner of Police*, Government Printer, South Australia.
- Stangeland, P. 1994, *The Crime Puzzle: Matching Victim Surveys with Police Statistics*, Andalusian Interuniversitarian Institute of Criminology, Malaga.

APPENDIX

A COMPARISON OF CRIME SURVEYS AND CRIMES 'REPORTED OR BECOMING KNOWN TO POLICE'

Police Statistics	Household Crime Surveys
<p><i>Comprehensive approach to reported crime</i></p> <p>All offences are covered including 'victimless' crimes such as illegal drug use.</p> <p>Cover all reported crimes in the jurisdiction of interest for the relevant time period.</p> <p>Cannot cover crimes which do not come to police notice.</p> <p>Cover crimes against victims of all ages.</p> <p><i>Unit of measure is the crime</i></p> <p>The basic unit is the <i>crime</i> so statistics represent the total number of crimes (<i>crime incidence</i> statistics). Most police systems are unable to report on the number of separate victims, however South Australian systems distinguish repeat offences against a single victim.</p> <p><i>Police are the arbiters</i></p> <p>Police decide whether events should be recorded as crimes even though they may be initially reported as such by members of the public.</p> <p><i>Crimes are reported as they occur</i></p> <p>Most crimes are reported to police soon after they occur or are discovered, however some police 'phone-in' operations obtain information about crimes that have occurred some time ago.</p> <p><i>Legal definitions used</i></p> <p>Police use crime definitions that fit with criminal codes or the common law.</p>	<p><i>Selective approach to all crimes with victims</i></p> <p>Only crimes with clearly defined personal victims (e.g. assaults, robberies, personal theft or break and enter dwellings).</p> <p>Select a random sample of the population and are therefore subject to sampling and non-sampling error.</p> <p>Can uncover crimes which have never been reported to police.</p> <p>Cover only victims aged 15 and over (in Australia)</p> <p><i>Unit of measure is the victim</i></p> <p>The basic counting unit is the <i>victim</i> (person or household) so the most natural measure is the percentage or number of persons or households victimised (<i>crime prevalence</i>). However incidence statistics can be generated as well.</p> <p><i>Survey respondents are the arbiters</i></p> <p>The respondents to the survey decide whether or not they have been victims of the crimes covered by the survey.</p> <p><i>Crimes are reported retrospectively</i></p> <p>In most Australian surveys respondents are asked to recall crimes occurring within the past twelve months.</p> <p><i>Non legal definitions used</i></p> <p>Victims are asked to respond to categories that use everyday language and do not mention the word crime. For example the <i>robbery</i> question is 'In the last 12 months did anyone steal anything from you by threatening or attacking you?'</p>

COMPARISON OF VICTIMISATION RATES REPORTED IN THE 1991 QUEENSLAND CRIME VICTIMS SURVEY AND THE 1993 NATIONAL CRIME AND SAFETY SURVEY

Ranjit de Mel and Carlos Carcach¹
Government Statistician's Office, Brisbane

INTRODUCTION

This paper compares household and personal victimisation rates for a number of offences reported in the 1991 Crime Victims Survey (CVS) conducted by the Government Statistician's Office (GSO) and the 1993 National Crime and Safety Survey (NCSS) conducted by the Australian Bureau of Statistics (ABS). The NCSS used self completion questionnaires, whereas the CVS used face to face interviews conducted by trained interviewers. The aim of the paper is to gain an insight into the impact of different collection methods on the accuracy of survey derived victimisation rates.

The paper proceeds in the following way. Sections 2 and 3 describe the methodologies used in the CVS and the NCSS respectively. A comparison of the victimisation rates from the two surveys for break and enter, motor vehicle theft, robbery, assault and sexual assault is presented in section 4. The main differences in the results from the two surveys relate to robberies and assaults. Analyses of these differences are presented in sections 5 and 6 respectively. The paper concludes with a summary of the main findings in section 7.

THE 1991 QUEENSLAND CRIME VICTIMS SURVEY

SCOPE AND COVERAGE

The CVS (GSO 1992) was conducted by the Queensland Government Statistician's Office as an initiative of the Criminal Justice Commission, between 8 April and 8 June 1991. Its objective was to obtain information about types of household and personal crimes occurring in Queensland, the characteristics and reporting behaviour of victims of crime and related matters.

The survey covered usual residents of private dwellings in Queensland. Visitors to private dwellings were excluded unless (i) they were staying at the selected dwelling for the entire survey period and (ii) their usual residence was in Queensland and was unoccupied for the entire survey period. Persons with holiday or second homes were considered to be usual residents of the selected dwelling if they lived there for two months or more during the year.

The household property offence questions were asked of any usual resident aged 18 years or over and the offence against person questions were asked of a randomly selected usual resident aged 15 years or over.

¹ The views expressed in this paper are those of the authors and do not necessarily reflect those of the Government Statistician's Office or the Queensland Government.

Details were only collected for offences occurring in Queensland in the 12 months prior to interview and only for the 17 selected household and personal offence types specified. Incidents relating to businesses or companies were excluded from the survey.

SURVEY DESIGN AND CONTENT

Four types of questionnaires were used in face to face interviews during the survey. The *Household Questionnaire* collected demographic details of the household from any usual resident aged 18 or over.

The same respondent was then asked questions from the *Household Crime Questionnaire*, which screened for household property offences experienced by any household member during the 12 months prior to interview.

The *Personal Crime Questionnaire* was asked of a randomly selected usual resident aged 15 years or over, in private where possible. This questionnaire asked a number of attitudinal questions and screened for offences against persons in Queensland during the 12 months prior to interview.

Details were collected for the most recent occurrence of each household property and personal offence type, excluding verbal abuse, on the *Victim Questionnaire*.

Questions about offences were asked in the hierarchical order listed below. Incidents which included more than one offence were recorded in the first relevant category.

HOUSEHOLD PROPERTY OFFENCES

- home broken into and something stolen or attempted to be stolen
- home broken into and vandalised
- attempted home break-in with intent to steal or cause damage
- theft from inside the home without a break-in occurring
- theft from outside the home
- home or garden defaced or damaged by vandals
- theft of a motor vehicle from any usual resident
- theft from a motor vehicle
- a motor vehicle deliberately damaged or vandalised.

PERSONAL OFFENCES

- deliberate use of weapon
- attack or assault (sexual or other)
- threat of force or violence that frightened, or threat to damage property
- theft from the person
- attempted theft from the person
- personal theft from elsewhere (office, school, shop or elsewhere)
- deliberate damage or tampering by vandals or thieves
- verbal abuse.

Details of the most recent offence were collected in the Victim Questionnaire. These details facilitated the classification of any incident into more conventional categories such as robbery, assault or sexual assault.

SAMPLE DESIGN

The CVS was designed as a multi-stage stratified area sample of private dwellings spread throughout Queensland.

Strata were defined in the same way as for the ABS Monthly Population Survey, such that each stratum was relatively homogeneous with respect to the socio-economic characteristics of households. Each stratum consisted of a number of 1986 Census Collector's Districts (CDs).

THE 1993 NATIONAL CRIME AND SAFETY SURVEY

SCOPE AND COVERAGE

The NCSS (ABS 1994) was conducted by the ABS as part of its Supplementary Surveys program, and covered persons aged 15 years and over who were usual residents of private dwellings included in the Monthly Population Survey (MPS), with the exception of private dwellings containing only visitors. The MPS was conducted during the two weeks commencing 12 April 1993.

Residents of non-private dwellings such as hospitals, motels and jails (included in the MPS) were excluded from this survey.

SURVEY DESIGN AND CONTENT

NCSS questionnaires were delivered to selected households by MPS interviewers for completion by respondents and return by mail. A household questionnaire (Form A) collected details relating to household property offences in the preceding 12 months period from a responsible usual resident aged 15 years or over. Details of personal offences experienced by this respondent in the last 12 months were also collected in Form A.

All other usual residents aged 15 years and over were asked to complete a questionnaire (Form B) relating to personal offences experienced by them.

A further questionnaire (Form C) asked a number of questions of females aged 18 years and over relating to sexual assaults. This questionnaire was asked on a voluntary basis only.

Questions about offences were asked in the hierarchical order listed below:

HOUSEHOLD PROPERTY OFFENCES

- break and enter
- attempted break and enter
- theft of a registered motor vehicle.

PERSONAL OFFENCES

- robbery
- assault
- sexual assault.

SAMPLE DESIGN

The NCSS used the private dwellings included in the MPS. The MPS is designed as a multi-stage area sample of dwellings throughout Australia.

A summary of the methodologies used in the CVS and the NCSS is provided in Attachment A.

COMPARISON OF NCSS AND CVS VICTIMISATION RATES

METHODOLOGICAL ISSUES

There are a number of methodological differences between the NCSS and the CVS. The main differences are:

(a) *The methodology used for data collection*

As the NCSS used self completed questionnaires, respondents were left free to interpret the meaning of questions. In the case of the CVS, which used face to face interviewing and more detailed questionnaires, better screening of offences was possible and greater control existed over the potential sources of non-sampling error present in this type of survey.

(b) *The type of offences included in the surveys*

The NCSS collected data on three household offences and three personal offences while the CVS collected data on nine household offences and eight personal offences.

(c) *Questionnaire wording*

Both surveys used similar questions to collect information about household property offences. However there were significant differences in wording of questions relating to personal offences and in particular for robbery and assault. Such differences could have a serious impact on the accuracy of survey results because the perception of such offences by the community may be considerably different to the legal definitions. Questionnaire wording in the two surveys for the offences of robbery, assault and sexual assault are examined in more detail below.

The CVS questionnaire collected details for a range of personal offences included in the survey, which were asked in the order described in section 2. The selected person was asked the following questions:

- *In Queensland, at any time during the last 12 months, has anyone deliberately used a weapon on you?*
- *(Apart from what you've already told me, in Queensland, at any time during the last 12 months) have you been attacked, punched or kicked; or assaulted, sexually or otherwise, either by a stranger or someone you knew?*
- *(Apart from what you've already told me, in Queensland, at any time during the last 12 months) has anyone threatened to use force or violence on you in a manner that actually frightened you, or threatened to damage property of yours?*
- *(Apart from what you've already told me, in Queensland, at any time during the last 12 months) have you had an item stolen from your person, e.g. a wallet, purse or watch?*
- *(Apart from what you've already told me, in Queensland, at any time during the last 12 months) has anyone tried to steal an item from your person?*
- *(Apart from what you've already told me, in Queensland, at any time during the last 12 months) have you had any property stolen from an office, school, shop or anywhere else you left it?*
- *(Apart from what you've already told me, in Queensland, at any time during the last 12 months) has anything of yours been deliberately damaged or tampered with by vandals or thieves?*

For the most recent occurrence of each offence type reported, the following questions were asked:

- *During this incident, was anything that belonged to you stolen? (GQ22a)*
- *Did the offender(s) harm or use force or violence on you in any way? (GQ46a)*
- *In what way did the offender(s) use force or violence? (Code all that apply)*
 - *Grabbed/pushed (GQ48a)*
 - *Punched/slapped/kicked (GQ48b)*
 - *Hit with weapon/something used as a weapon (GQ48c)*
 - *Sexually/assaulted/raped/attempted rape (GQ48d)*
 - *Other (specify) (GQ48e)*
- *Did the offender threaten to harm or use force or violence on you in any way? (GQ50a)*
- *What did the offender(s) threaten to do? (Code all that apply)*
- *Punch/slap/kick/bash (GQ52a)*
- *Hit with weapon/something used as a weapon (GQ52b)*
- *Sexual assault/rape (GQ52c)*
- *Kill (GQ52d)*
- *Other (specify) (GQ52e)*

The NCSS question relating to robbery was as follows:

- *In the last 12 months did anyone steal anything from you by threatening or attacking you?*

A positive answer to the NCSS question was sufficient for an incident to be coded as a robbery. However, in the CVS, no direct question on robbery was asked. In this paper, the occurrence of a robbery in the CVS was defined as a positive answer to GQ22a and a positive answer to either GQ46a or GQ50a. As these questions were only asked for the most recent occurrence of personal offences, this definition implicitly assumes that there is no significant difference in the rate derived from the most recent occurrence and the rate derived from all occurrences. It should be noted that the NCSS definition is somewhat broader in scope as it includes items stolen from the person which do not belong to the person, whereas the CVS question GQ22a relates only to items belonging to the person.

Similar arguments apply to the question relating to assault. The NCSS asked respondents:

- *Apart from those incidents mentioned already:*
- *In the last 12 months has anyone threatened you with force or attacked you?*

For comparison purposes, an assault in the CVS was defined as a negative answer to GQ22a, and a positive answer to either GQ46a or GQ50a. In addition, it was required for the respondent to report that the offender used force or violence in a way not leading to sexual assault/rape/attempted rape (GQ48a, GQ48b, GQ48c, GQ48e), or that the offender threatened to take an action other than sexual assault/rape (GQ52a, GQ52b, GQ52d, GQ52e).

In the case of sexual assault, the NCSS directly asked respondents:

- *In the last 12 months have you been a victim of sexual assault?
(Include: all incidents of a sexual nature involving physical contact – rape, attempted rape, indecent assault, assault with the intent to sexually assault.)*
- *(Exclude: sexual harassment that did not lead to an assault.)*

For comparison purposes, the occurrence of a sexual assault in the CVS was defined as a negative answer to GQ22a, and a positive answer to either GQ46a or GQ50a. In addition, it is required for the respondent to report that the offender used force or violence associated with sexual assault/rape/attempted rape (GQ48d) or that the offender threatened to sexually assault/rape (GQ52c).

The methodology used for data collection (interviewing or self-completion) and the way the questions are formulated and sequenced may have a substantial impact on the estimates of numbers of victims from crime surveys. Mail surveys are often chosen for cost reasons. However, they tend to introduce non sampling errors derived from leaving respondents to decide on the nature of incidents (Indermaur 1994). Such errors are likely to be reduced in surveys using face to face interviewing.

SURVEY ESTIMATES

The potential impact of different collection methodologies on survey estimates of victimisation rates in Queensland is discussed below. Prior to undertaking an analysis of the impact it was necessary to reconcile the offence definitions used in each survey. Accordingly for the purposes of this study CVS definitions have been brought into accord with those used in the NCSS. Attachment B provides details of definitions and equivalences which were used in the analysis.

It is not possible to precisely estimate the total number of robbery victims (i.e. prevalence as opposed to incidence) from the CVS as the Victim Questionnaire was completed only for the most recent occurrence of each offence type and a substantial proportion of victims of violence reported repeat victimisation. A lower bound for the robbery victimisation rate can be estimated from the most recent occurrence (1.8 per 1,000), and an upper bound can be estimated by using the robbery incidence rate (2.9 per 1,000).

Similarly, the victimisation rate for sexual assault from the CVS is estimated to be between 5.3 and 9.2 per 1,000.

In the case of assaults other than sexual assaults, any underestimate in the rate of 73 per 1,000 calculated from the most recent occurrence is relatively small (not more than 2 per 1,000) because it relates to persons with multiple victimisations where the most recent occurrence of each offence type was either a robbery or a sexual assault. Accordingly a rate of 74 per 1,000 for assaults was used as the estimate from the CVS.

Table 1 shows the estimates of victimisation rates for household and personal offences for Queensland, obtained from the CVS and the NCSS.

TABLE 1 – VICTIMISATION RATES FROM THE 1993 NCSS AND THE 1991 CVS ^(a)
(RATES PER 1000)

Type of Offence	1993 NCSS ^(b)	1991 Qld CVS
<i>Households</i>		
Break and enter/attempted break and enter	75	74 ^(c)
Motor Vehicle Theft ^(d)	13	13
<i>Persons</i>		
Robbery	12	1.8 – 2.9 ^(e)
Assault	29	74 ^(f)
Sexual Assault ^(g)	5.3	5.3 – 9.2 ^(h)

Notes:

- a. Households and persons counted once only irrespective of whether victimised once or more.
- b. From Table 4.9 of the NCSS publication (ABS 1994).
- c. Break-in with theft/attempted theft plus break-in with vandalism.
- d. Rate based on total number of households including those that do not own motor vehicles.
- e. Includes incidents in which something that belonged to the victim was stolen, and violence was used or threatened.
- f. Includes incidents other than robbery where violence was used or threatened, but *excludes* the incidents where the offender used force/violence to or threaten to sexually assault/rape or attempted to sexually assault/rape.
- g. Rate based on total number of females aged 18 years and over.
- h. Includes incidents reported by *females aged 18 and over* where the offender used force/violence to or threaten to sexually assault/rape or attempted to sexually assault/rape.

The above table shows that the victimisation rates from the two surveys for attempted break and enter and motor vehicle theft are almost identical. However, the NCSS robbery rate is more than four times the CVS robbery rate, whereas the NCSS assault rate is less than half the CVS assault rate. As accurate benchmark figures are not available for victimisation rates, it is not possible to adequately validate estimates from either survey. Useful insights however, may be gained by comparing the Queensland results with other ABS crime surveys, British and United States crime surveys and official police statistics. Such an analysis is included in the following sections.

ROBBERY RATES

Prior to 1993 the NCSS was last conducted in 1983. Unlike the 1993 survey, the 1983 NCSS (ABS 1986) was conducted using face to face interviews. The 1983 NCSS question on robbery asked 'During the last 12 months did anyone try and take something from you by threatening or attacking you?' and arguably included attempted robberies. At the Australian level, the 1983 NCSS found that something was stolen in only about 30 per cent of the positive responses to the above question. Applying this proportion to the Queensland robbery rate of four per 1,000 quoted in the 1983 NCSS publication, a robbery rate of about 1.3 per 1,000 is obtained for Queensland for 1983 compared with the 1993 NCSS rate of 12 per 1,000.

The 1993 NCSS rate is comparable with other ABS Crime and Safety Surveys (CSS) conducted in New South Wales, Western Australia and South Australia during 1990, 1991 and 1992 using a similar questionnaire and methodology (drop-off and mail back). However, these rates are considerably above the rates from the British Crime Surveys (BCS) (Mayhew, P. et. al. 1992) and the United States National Crime Victimization Surveys (NCVS) (Bastian 1993). Both the BCS and the NCVS use detailed questionnaires similar to those used in the 1991 CVS, administered by trained interviewers.

The robbery rates estimated from the BCS and the NCVS have remained relatively constant during the period 1982 to 1992. Table 2 shows robbery rates from Australian, British and United States crime victims surveys conducted in recent years.

TABLE 2 - ROBBERY VICTIMISATION RATES FROM AUSTRALIAN, BRITISH AND U.S. CRIME SURVEYS

Survey	Reference Year	Collection Method	Rate per 1,000	Country/Region
NCSS	1983	face to face	1.3	Queensland
CSS ⁽¹⁾	1989/90	drop/mail	16	New South Wales
	1990/91	drop mail	15	NSW
	1991/92	drop mail	11	NSW
CSS ⁽¹⁾	1990/91	drop/mail	14	South Australia (SA)
CSS ⁽¹⁾	1991	drop/mail	17	Western Australia (WA)
NCSS	1992/93	drop/mail	13	NSW, SA, WA
NCSS	1992/93	drop/mail	12	Queensland
CVS	1990/91	face to face	1.8 - 2.9	Queensland
BCS ⁽²⁾	1991	face to face	4	England and Wales. Robbery rate includes purse snatching.
NCVS	1991	face to face / telephone	4.6	United States. Robbery rate includes purse snatching (0.7 per 1,000)
	1992	face to face / telephone	4.6	United States. Robbery rate includes purse snatching (0.7 per 1,000)

Notes:

1. Figures as quoted by Indermaur (1994)
2. Mayhew, personal communication.

The above table shows that robbery rates from self-completion surveys are significantly greater than those from interviewer based surveys. However, it is not possible to conclude that the difference is due solely to the collection method used as the questionnaire wording and structure also varies substantially. Further, there was no internal validation built into the self-completion questionnaires to check that a robbery had taken place, i.e. that something was actually stolen and that the offender used or threatened to use force or violence.

Further insight into the likely accuracy of robbery rates from the 1991 CVS and the 1993 NCSS may be gained by comparison with robberies recorded by the Queensland Police Service (QPS). According to official police statistics (QPS 1993), 1,319 and 1,783 robberies were recorded during 1990/91 and 1992/93 respectively. These figures relate to incidents the police became aware of and for which an offence report identifying the incident as robbery was prepared by an investigating officer. For various reasons, not all incidents reported as robberies are recorded as robberies. In some cases the police may decide that technically a robbery has not taken place. In other cases they may consider it too trivial and not submit an offence report. Also, in a small number of cases, police fail to forward offence reports to police headquarters and consequently these crimes are not recorded in official police statistics. The QPS is unable to provide an estimate of the proportion of incidents **reported** as robberies which are not **recorded** as such. However, it is likely that (compared to an offence such as assault), a high proportion of incidents which are reported as robberies (and which are technically robberies) will be recorded as robberies.

The 1993 NCSS estimated that 54 per cent (22,386) of robberies were reported to the police. Comparing this with 1,783 robberies recorded by police in 1992/93 yields a recording rate of only eight per cent. It should be noted that the NCSS robbery incidents were estimated from the ABS unit record file where the frequency of occurrence was truncated to three, presumably for confidentiality reasons; the recording rate is likely to be smaller if the original frequencies were available.

In contrast, the 1991 CVS estimated that 73 per cent (4,531) of robberies were reported to the police, yielding a recording rate of 29 per cent for 1990/91. The corresponding figure from the BCS for 1991 was 48 per cent.

Based on the above discussion it is possible to draw the following conclusions:

- Because detailed screening questions were administered by trained interviewers, the incidence of robbery as measured by the CVS should more accurately measure robberies in the legal sense. Therefore, even allowing for sampling error, the true robbery victimisation rate in Queensland for 1990/91 is unlikely to exceed five per 1,000.
- The true victimisation rate for the incident measured by the 'robbery' question in the 1993 NCSS is unlikely to be below 10 per 1,000 even allowing for sampling error.
- The recorded robbery rate from police statistics shows an increase of 35 per cent for the period 1990/91 to 1992/93. It is likely, therefore, that the true robbery rate would have increased by an amount less than this because part of the increase would be due to increased reporting and better recording practices.
- Consequently, it is likely that the 1993 NCSS significantly overestimates the true robbery rate.
- If costs considerations continue to constrain future crime victims surveys to self-completion methodologies, it would be highly desirable to include screening questions to validate the incidents reported.
- The estimation of robbery victimisation rates in the CVS, BCS and NCVS would be simplified and made more accurate if a question asking whether something was stolen was to be included in the "main" questionnaire for incidents involving use or threats of violence.

ASSAULT RATES

Table 3 shows assault victimisation rates as estimated from Australian, British and United States crime victims surveys.

TABLE 3 – ASSAULT VICTIMISATION RATES FROM AUSTRALIAN, BRITISH AND U.S. CRIME SURVEYS

Survey	Reference Year	Collection Method	Rate per 1,000	Country/Region
NCSS	1983	face to face	29	Queensland
CSS ⁽¹⁾	1989/90	drop/mail	21	New South Wales (NSW)
	1990/91	drop/mail	27	NSW
	1991/92	drop/mail	22	NSW
CSS ⁽¹⁾	1990/91	drop/mail	26	South Australia (SA)
CSS ⁽¹⁾	1991	drop/mail	29	Western Australia (WA)
NCSS	1992/93	drop/mail	26	NSW
	1992/93	drop/mail	25	SA
	1992/93	drop/mail	22	WA
NCSS	1992/93	drop/mail	29	Queensland
CVS	1990/91	face to face	74	Queensland
BCS ⁽²⁾	1991	face to face	52	England and Wales
NCVS	1991	face to face / telephone	26	United States
	1992	face to face / telephone	26	United States

Notes:

1. Figures as quoted by Indermaur (1994).
2. Mayhew, personal communication.

This table indicates that the 1983 and 1992/93 assault rates for Queensland as measured by the NCSS are the same and are similar to those in other states of Australia and in the United States in 1990s. However, the CVS rate for Queensland is about two and a half times the NCSS rate. The BCS rate is mid way between the NCSS and CVS rates. The likely reasons for the CVS rate being larger than the NCSS rate are presented below.

- In the CVS the total assault rate is derived by screening for a range of incidents (including threat of violence or force) that fall within the broad category of assault. Consequently, it includes many incidents of "minor" assaults such as pushing and grabbing, and minor threats of violence. The use of face to face interviews in the CVS will enhance the likelihood of reporting minor assaults.
- By comparison, in the NCSS incidents of assault are measured by a single self completed question. Consequently minor incidents of assault are likely to be not reported.

It is notable, however, that in spite of the much smaller number of assaults reported to the NCSS, the percentage of respondents who reported the incident to the police (29%) was almost identical to the CVS figure (27%).

Official police statistics (QPS 1991, 1993) show that in 1990/91 and 1992/93, 11,552 and 14,517 incidents respectively were recorded as assaults in Queensland. These figures imply police recording rates of 44 and 15 per cent for the NCSS and the CVS respectively. The CVS recording rate is low but this is due to the large number of minor assaults "captured" through the detailed questionnaire used and the low propensity of police to record incidents such as domestic violence and minor acts of violence/threats committed by friends, fellow workers or neighbours as assaults. By comparison, the NCSS recording rate is much larger and supports the conclusion that minor incidents of assault are likely to be not reported in the NCSS.

CONCLUSIONS

The aim of this paper was to assess the impact of different collection methodologies on the accuracy of survey derived victimisation rates. Lack of reliable benchmark figures makes such a task difficult. However the above analysis does suggest that:

- Both self completion and interviewer based collection methods are likely to yield similar and accurate estimates for easily recalled and well defined offences such as motor vehicle theft and break and enter.
- Greater differences in estimates obtained using the two collection methods are likely to emerge for offences such as robbery and assault because the perception of such offences in the community may be considerably different to the legal definitions.
- Attempts to measure a "compound" offence such as robbery by a single question in a self completion questionnaire are likely to result in considerable response bias. Such biases may be reduced by the use of screening questions.
- A self completion questionnaire containing a single question on assault is less likely to capture minor incidents involving offenders known to the victim than a detailed questionnaire administered by interviewers.

On the basis of these findings it is concluded that should the self completion methodology be retained for future crime victims surveys, further examination of questionnaire wording and the use of questions to validate responses would be desirable to reduce response bias.

REFERENCES

- Australian Bureau of Statistics 1986, *Victims of Crime, Australia*, Cat. no. 4506.0, ABS, Canberra.
- 1994, *Crime and Safety, Australia, April 1993*, Cat. no. 4509.0, ABS, Canberra
- Bastian, L. D. 1993, *Criminal Victimization 1992, A National Crime Victimization Survey Report*, Bureau of Justice Statistics, U.S. Department of Justice.
- Government Statistician's Office 1992, *Crime Victims Survey, Queensland 1991*, Brisbane.
- Indermaur, D. 1994, *What do Victimization Surveys Measure? An Examination of Trends in Robbery and Assault Victimization in Western Australia and Australia*, Presented at the Symposium on 'Crime Victims Surveys', Griffith University, Brisbane, 28-29 November 1994.
- Mayhew, P. et. al. 1993, *1992 British Crime Survey*, Home Office Research Study 132, London.
- Queensland Police Service 1991, *Statistical Review 1990-1991*, Brisbane.
- 1993, *Statistical Review 1992-1993*, Brisbane.

APPENDIX A

COMPARISON OF THE 1993 NATIONAL CRIME AND SAFETY SURVEY AND THE 1991 QUEENSLAND CRIME VICTIMS SURVEY METHODOLOGY

Offence	NCSS ⁽¹⁾	CVS
<i>1. Data Collection</i>	Use self completed questionnaires, in April 1993 as a supplement to the Monthly Population Survey (MPS).	Used face to face interviewing by trained interviewers during April - June 1991.
<i>2. Reference Period</i>	12 months.	12 months.
<i>3. In Scope Population</i>	Usual residents of private dwellings aged 15 years and over who are in scope of the MPS.	Usual residents of private dwellings aged 15 years and over.
<i>4. Respondents</i>	Questions were asked of any responsible adult (ARA) member of the household.	Questions were asked of ARA member of the household aged 18 years or over.
<i>Household Offences</i>	Questions were asked of all usual residents aged 15 years and over except for sexual assault questions that were asked of females aged 18 years and over.	Questions were asked of one randomly selected usual resident aged 15 years or over.
<i>Personal Offences</i>		

APPENDIX B

COMPARISON OF THE 1993 NATIONAL CRIME AND SAFETY SURVEY AND THE
1991 QUEENSLAND CRIME VICTIMS SURVEY DEFINITIONS AND EQUIVALENCES

Offence	NCSS ^(a)	CVS
<i>Household Offences</i>		
<i>Break and Enter</i>	Respondent's home had been broken into, including the garage or shed, but break and enter relating to their car/garden were excluded.	Respondent's home had been broken into and something stolen or attempted to be stolen (BQ1A) plus respondent's home had been broken into and vandalised (BQ1B).
<i>Attempted Break and Enter</i>	An attempt was made to break into the respondent's home.	Anyone tried to break into the respondent's home with intent to steal or cause damage (BQ1C).
<i>Motor Vehicle Theft</i>	A registered motor vehicle was stolen from any member of the household.	A motor vehicle belonging to the respondent, or any other member of a household he/she was living in, was stolen (BQ1G).
<i>Personal Offences</i>		
<i>Sexual Assault</i>	Incident of sexual nature involving physical contact (rape, attempted rape, indecent assault and assault with intent of sexually assault). Sexual harassment not leading to assault was excluded. Only females aged 18 years and over were asked sexual assault questions (Form C).	Any personal offence excluding verbal abuse, where the victim was a female aged 18 and over and the offender used force or violence to sexually assault/rape/attempt to rape the victim (GQ48d = 1) or threatened to sexually assault/rape the victim (GQ52c = 1).
<i>Robbery</i>	An incident where someone had stolen something from respondents by threatening or attacking them.	Any personal offence excluding verbal abuse, where something belonging to the victim was stolen (GQ22a = 1) by using violence (GQ46a = 1) or threats of violence (GQ50a = 1).
<i>Assault</i>	An incident other than robbery where the respondent was threatened with force or attacked.	Any personal offence excluding verbal abuse, sexual assault and robbery, where some violence (GQ46a = 1) or threat of violence (GQ50a = 1) was used.

COUNTING CRIME: ARE VICTIM SURVEYS THE ANSWER?

Sandra Egger, David Brown, Gayle Travis – *University of New South Wales*

Russell Hogg – *Macquarie University*

Brian O'Toole – *University of Queensland*

Julie Stubbs – *University of Sydney*

INTRODUCTION

National crime victimisation surveys have been administered in the United States since the 1960's and in Britain since the early 1970's (Sparks, Genn & Dodd 1977). The first national victimisation survey in Australia was conducted in 1975 (Australian Bureau of Statistics (ABS) 1979). Further Australian national surveys were conducted in 1983 and 1993 (ABS 1986, ABS 1994a). In 1989 the first cross-national victimisation survey was administered involving Australia as well as other countries (van Dijk & Mayhew 1992).

The five commonly stated objectives of traditional victim surveys are that they attempt to: measure the incidence of crime over time using a wider source than 'crimes known to the police'; provide more detailed information about crime than that available from official criminal justice statistics; identify high risk victim sections of the population; understand better 'reporting to police' behaviour and provide information for the development of criminal justice programs (Wong 1992).

The aim of the present paper is to examine some of the claims made in support of victim surveys. Particular attention is devoted to the definition and classification problems involved in these surveys. Increasingly, large scale national surveys have been viewed as representing an alternative and superior source of information about crime as compared to police statistics. It is argued in the present paper that insufficient attention has been paid to the category 'crime' in most victim surveys to warrant these claims.

Crime is both legally and socially constructed. Legally, certain conduct is defined as criminal and the elements or characteristics of the conduct are described in the statute and case law. Socially, crime is constructed in at least two important ways. Firstly, certain conduct may be legally capable of definition as a crime but not generally regarded as criminal in the community. Domestic assault, for example, is legally an assault, but prior to the feminist campaigns of the 1970's and 80's it was not regarded as criminal. The police rarely intervened and domestic assault was widely viewed as a marital or family problem, not a crime. Secondly, certain conduct may constitute a social nuisance or harm but is not legally defined as a crime. Public concern may, on occasions, lead to the criminalising of such conduct, as recently occurred in many Australian jurisdictions with the offence of stalking.

Crime is not like a physical quality, existing independently in the community and waiting to be measured by criminologists. Different methodologies provide information about different experiences, some criminal and some not criminal. Police statistics provide information about experiences which are legally classified as crimes in a particular jurisdiction, regarded as crimes by victims, considered to be appropriate subjects of a police complaint, and regarded by the police to be the appropriate subject of a crime report. Victim surveys provide information about experiences which may or may not be legally classifiable as crimes, and they may or may not be correctly classified by respondents into the appropriate legal categories. The surveys do not provide information about experiences not socially recognised as crimes or which respondents are not prepared to disclose. Both police statistics and victim surveys are capable of revealing important information about the social construction of crime within agencies like the police and in the community at large, but the results are rarely qualified and interpreted in this way. With some

notable exceptions, the literature on large-scale national crime surveys assumes that victims survey and police statistics are both measuring crime, but victim surveys do it better: they are uncontaminated by the different classifications of crimes between jurisdictions and by agency recording practices and they tap crimes not reported to the police. The classification and disclosure problems in victim surveys are, in fact, at least as complex as those involved in police statistics and less well understood. The present paper illustrates some of these problems in the context of the Australian national victimisation surveys and the International Crime Surveys.

THE AUSTRALIAN VICTIM SURVEYS

The most basic questions about crime also are asked the most often: how much crime is there and is it increasing? Attempts to estimate the extent of crime and the trends over time draw largely on police statistics and crime victimisation surveys. The available national Australian sources are:

- **The Australian National Crime Statistics.** In May 1994 the first Australian national crime statistics were published by the ABS (1994b). Previously, the production and publication of crime statistics (based on reports recorded by the police) were the responsibility of the State and Territory police departments. Different legal and operational definitions of offences, counting rules and statistical procedures prevented both the aggregation and comparison of crime statistics collected in each State and Territory. Now national crime statistics are available for a number of serious crimes: homicide, sexual assault, kidnapping, robbery, unlawful entry and motor vehicle theft.
- **Police statistics aggregated at the Australian Institute of Criminology.** Prior to 1994 the only source of national police statistics were the statistics obtained from the annual police reports published in each State and Territory (Mukherjee & Dagger 1991; Walker 1994). These data are important as the only source of time trends in crime prior to 1993, but contain unidentified discrepancies in the offence categories and counting rules between jurisdictions.
- **The National Crime Victim Surveys.** Three national victimisation surveys have been conducted in Australia in 1975, 1983 and 1993 (ABS 1979; ABS 1986; ABS 1994a). These surveys asked respondents to identify crime incidents they had experienced in a nominated time period.

The following two sections examine and compare the data on robbery and sexual assault from these three sources.

ROBBERY

The robbery data from the three sources are presented in Table 1 for the period 1975 to 1993. Robbery rates as measured by the aggregated police statistics have increased by 217 per cent over the last two decades (Walker 1994). The robbery rate increased from 21.21 per hundred thousand in 1974-75 to 67.20 in 1991-92. The 1991-92 rate from this source is roughly comparable to the 1993 rate of 72.78 per hundred thousand reported in the national crime statistics (ABS 1994b). The National Crime Statistics Unit reported that the jurisdictions with the highest rates were South Australia (116.51 per hundred thousand) and New South Wales (99.89).

Robbery rates as measured by the three national crime victim surveys are much higher than those derived from police statistics and have increased by 566 per cent in the last two decades. The robbery rate in 1993 according to the national crime victim survey was 1,200 per hundred thousand. Similar proportions of victims claimed to have reported the robbery to the police in 1975 and in 1993 (54%; 52%). The interpretation of the results from the victim surveys is complicated by changes in the form of the robbery question, which was different in each of the three surveys.

The 1975 question was 'Within the last 12 months have you been robbed? That is did anyone use violence or threaten violence to take anything from you?'. The 1983 question was 'During the last 12 months did anyone try and take something from you by threatening or attacking you?'. The 1993 question was 'In the last 12 months did anyone steal anything from you by threatening or attacking you?'. The 1975 and 1993 questions thus excluded attempted robbery. The 1983 and 1993 questions both raised the element of theft before the elements of threat or attack which may have had an impact on the type of incidents reported. These differences have important implications for the estimation of time trends from the victim surveys.

TABLE 1 – THE NUMBERS AND RATES PER HUNDRED THOUSAND PERSONS OF ROBBERY OFFENCES (1975–1993), AUSTRALIA

	1975	1983	1991-92	1993
NCS*				
Rate				72.28
N				12765
Police Statistics**				
Rate	21.21	42.91	67.20	
N	2921	6606	11780	
NCVS***				
Rate	180	600		1200
N	15000	65300		160100
N reported	7700	27800		83400
% reported	54.0%	42.6%		52.1%

Notes:

1. National Crime Statistics: Definition of robbery – the unlawful taking of property under confrontational circumstances from the immediate possession, control, custody or care of a person without consent, accompanied by force or threat of force or violence and/or by taking placing the victim in fear. Attempts are excluded.
2. Aggregated police statistics: these figures were compiled at the Australian Institute of Criminology from the Annual Police Statistics Reports from each State and Territory and contain unsystematic variations in offence classifications. The figures have been compiled by financial year 1974–75, 1982–83, 1991–92 (the most recently available, Walker 1994).
3. National Crime Victim Survey: the definitions employed in the three national crime victim surveys differed (ABS 1994a). N reported refers to the number of victims who claimed to have reported the robbery to the police. % reported refers to the percentage of victims who claimed to have reported the robbery to the police.

The findings reported in Table 1 raise a number of problems. Firstly, the police statistics and the victim survey findings estimate very different robbery rates and very different rates of increase over the last two decades. These findings do not appear to be related to an increasing willingness of victims to report to the police: just over half the victims in the 1975 and 1993 victim surveys claimed to have reported the robbery to the police.

Secondly, according to the national crime statistics there were 12,765 robberies recorded by the police in 1993. According to the National Crime Victim Survey there were an estimated 160,100 victims of robbery in 1993, 52 per cent of whom claimed that they reported the robbery to the police. Thus the National Crime Victim Survey estimated that the police should have received 83,400 reports of robbery in 1993; approximately seven times the number actually reported (12,765).¹ Thirdly, the jurisdiction with the second and third lowest robbery rates per hundred thousand in 1993, according to the national crime statistics (NT: 27.93, ACT: 38.14), were found to have the highest rates according to the 1993 victim survey (NT: 1,700; ACT: 1,700).

The different estimates of the amount of the increase in the last two decades, the over-estimation of robbery incidents reported to the police in the victim survey, and the failure to find any consistent relationship between jurisdictions in the robbery rates estimated by the victim surveys and the police statistics suggests that quite different incidents are being recorded by the different sources. The form of the 1983 and 1993 victim survey questions may have encouraged respondents to report theft from the person (e.g. pick pocketing) as well as robbery, because the wording does not stress the importance of the elements of actual or threatened violence. The unidentified and unsystematic categories used by respondents in the victim surveys may bear little relationship to the quasi-legal categories used in police statistics. Whilst both police reports and victim survey data suggest that robbery has increased in the last 20 years, the extent and nature of that increase is not clear.

SEXUAL ASSAULT

The rates of sexual assault victimisation derived from the three sources are presented in Table 2. The police reports collected in the national crime statistics revealed that in 1993 12,390 sexual assaults were reported to the police (ABS 1994b). The Australian rate was 70.15 per hundred thousand, roughly comparable to the rate for England and Wales in 1989 (72 per hundred thousand; Levi 1994). The definition of sexual assault used in the national crime statistics collection is broad and includes both rape and indecent assault but excludes attempted offences.

The Australia wide police statistics (aggregated at the Australian Institute of Criminology) are for rape only and thus exclude indecent assault. Table 2 demonstrates an increase in the rape rate per hundred thousand from 5.25 in 1974-75 to 29.61 in 1991-92. The 1983 and 1993 crime victim surveys found an increase in sexual assault victimisation from 500 per hundred thousand to 600 per hundred thousand. The 1975 findings cannot be compared because of a much narrower offence definition. Only one quarter of the victims stated that they reported the sexual assault to the police in both 1983 and 1993.

Once again, the question asked in the three National Crime Victim Surveys differed. The 1975 question asked respondents if they had been a victim of rape or attempted rape. The 1983 question asked: 'In the last 12 months have you been the victim of (a) rape or attempted rape (b) any other type of sexual assault?'. Sexual assault was defined as including all assaults or threatened assaults of a sexual nature. The 1993 question asked, 'In the last 12 months have you been a victim of sexual assault? (Include all

¹ The discrepancy may be even greater since the police statistics allow for multiple reports by victims and the victims survey only analysed reporting of the last incident. Furthermore the police statistics include robberies committed against retail and commercial entities.

incidents of a sexual nature involving physical contact – rape, attempted rape, indecent assault, assault with intent to sexually assault. Exclude sexual harassment.)'. The 1975 question thus elicited information on a much narrower range of incidents (rape, attempted rape) than the 1983 and 1993 questions. The 1983 and 1993 questions also differed. Both clearly involved rape and indecent assault but the 1983 question did not narrow threatened sexual assaults to only those involving physical contact (as did the 1993 question).

These major differences in the questions complicate the estimation of time trends from the victim surveys.

Comparisons between the different sources of data (police statistics and victim surveys) are also complicated by classification differences. Although the definitions employed in the 1983 and 1993 victims survey and in the national crime statistics are broad and include both rape and indecent assault, the national crime statistics data exclude attempted rape. The aggregated police data were for rape only and the definition of rape varied from jurisdiction to jurisdiction (Walker 1994). A number of observations may be made about the discrepancies between the findings from the three sources of information.

Firstly, the victim survey found only a moderate increase in the sexual assault rate from 1983 to 1993 (20%: 500 per hundred thousand to 600). In contrast, the aggregated police statistics reported a 172 per cent increase in the rape rate from 1982-83 to 1990-91 (10.87 per hundred thousand to 29.61). However the proportion of victims who claimed to have reported the sexual assault to the police was similar in both victim surveys (25%).

Secondly, the number of sexual assaults reported to the police in 1993 as estimated by the victim survey was 9,700. The actual number of sexual assaults reported to the police (according to the national crime statistics data) was 12,390. The victim survey thus underestimated the number of sexual assaults reports to the police (the reverse of the position with robbery).² Such a finding suggests that the victim survey had a higher "dark figure" than the reports to the police.

The police statistics and victim survey findings thus present quite different views of robbery and sexual assault in Australia. It is not clear that the same incidents are being recorded by the different methodologies. Certain known deficiencies apply to police statistics – there are differences in offence classifications across Australian jurisdictions, different crimes reported to the police are "accepted" at different rates according to unarticulated criteria, and different crimes have different "dark figures". The deficiencies in crime victim survey estimates are at least as great, more complex and less well known. Apart from the obvious problems of sampling, response rate, recall and telescoping, demand characteristics, multiple victimisation and the method of obtaining the interview (face to face, telephone etc) there are problems about which little is known. The "dark figures" of crime attaching to victim surveys have not been examined in Australia. In the area of sexual assault there is some suggestion that the "dark figure" may be higher in the victim survey than in reports to the police. Furthermore, the terminology and classification problems are vast. Most surveys ask victims to categorise their experiences into certain given quasi-legal categories. The extent to which respondents can reliably and accurately perform this task is highly questionable. The definitions of common offences – such as robbery, assault, sexual assault and indecent assault – are technical and complex. Even where such terms are avoided the questions themselves do not always accurately paraphrase the legal categories, and they do not always indicate the proper emphasis to be placed on the legal elements provided in the definitions. Furthermore, the questions asked in the three Australian victim surveys have been quite different.

The answers to the questions 'how much and is it increasing?' vary according to the source of the data and the methodology of collection. The measurement of crime is more complex than the measurement of a physical quality like height or feet size in a given population. The different methodologies result in quite

² The under-estimation is present even when the victims survey estimates are corrected by the standard error of the estimate (9,700 + 1,600 = 11,300).

different estimates of the levels of violent crime which are related in a complex (and poorly understood) way to legal, social and cultural factors such as the definitions of – and the language used to talk about – crimes, the preparedness of people to disclose such experiences, and the recording practices of the police.

TABLE 2 – NUMBERS AND RATES PER 100,000 PERSONS OF SEXUAL ASSAULT OFFENCES (1975–1993), AUSTRALIA

	1975	1983	1991–92	1993
NCS¹				
Rate				70.15
N				12390
Police Statistics²				
Rate	5.25	10.87	29.61	
N	723	1674	4698	
NCVS³				
Rate	200	500		600
N	7700	26700		38900
N reported	2200	6600		9700
% reported	28.2%	24.7%		25.0%

Notes:

1. National Crime Statistics: the definition of sexual assault was sexual assault according to State or Territory law, sexual offences (consent proscribed), other sexual offences. It thus extended beyond rape, but excluded attempted rape (ABS 1994b).
2. Aggregated police statistics: these figures were compiled at the Australian Institute of Criminology from Annual Police Statistics Reports for each State and Territory. The offence classifications do not coincide. The only available figures are for rape which is legally defined in different ways in different jurisdictions. The data are reported in financial years and the years reported here are 1974–75, 1982–83, 1991–92 (the most recently available, Walker 1994).
3. National Crime Victim Survey: the definition employed in the national crime victim surveys varied (ABS 1994a). % reported refers to the percentage of victims who claimed to have reported the robbery to the police. N reported refers to the number of victims who claimed to have reported the sexual assault to the police.

THE INTERNATIONAL CRIME SURVEYS

The classification and definition problems involved in crime victim surveys are strikingly illustrated by the cross-cultural comparisons undertaken in the International Crime Surveys (ICS). In their report *Criminal Victimization in the Industrialized World: Key Findings in the 1989 and 1992 International Crime Surveys*, authors van Dijk and Mayhew outline the approach of the 1989 International Crime Survey (ICS) which was replicated, with minor changes, in a second, 1992, sweep:

“In the majority of countries taking part in the 1989 survey . . . respondents were interviewed by telephone. They were asked about eleven main forms of victimisation. Respondents who mentioned that they had experienced one or more of the offences covered were asked short questions about where it had occurred; its material consequences; whether the police were involved (and if not why not); satisfaction with the police response; and any victim assistance given. In addition, some basic socio-demographic data were collected, and some information on people's social life. Other questions were asked about: fear of crime; satisfaction with local policing; crime prevention behaviour; and the preferred sentence for a 21-year old recidivist burglar” (van Dijk & Mayhew 1992, pp. 1-2).

Australian media reportage of the ICS results rather predictably focused on Australia's top of the table ranking in 'sexual incidents', ignoring both the warnings in the published reports of the ICS findings to interpret these with 'great care' and the small numbers involved in the 'sexual incidents' sample (Walker 1994). Such subtleties did not stand in the way of journalistic readings of the survey as showing Australia as "the most sexually violent country on earth" and authorising headlines such as 'War on Women' and 'Epidemic of Violence', interestingly in the "quality" rather than tabloid press (*The Age*, 3 June 1993).

THE SEXUAL OFFENCES QUESTIONS

In the 1989 international survey, eight questions were asked which related to sexual offences. The two key questions asked of women respondents only were:

I would now like to ask you some questions about crimes of violence of which you personally may have been the victim.

Firstly, a rather personal question. People sometimes grab or touch others for sexual reasons in a really offensive way. This can happen either inside one's house or elsewhere, for instance in a pub, the street, at school or at one's workplace. Over the past five years has anyone done this to you? Please take your time to think about it.

Would you describe the [last] incident as a rape, an attempted rape, an indecent assault or as just behaviour which you found offensive?

The remaining six questions were concerned with when the incident occurred; the number of incidents in the last 12 months; and in relation to the last incident, the relationship with the offender; whether the incident had been reported to the police; and the reasons for not reporting.

In the 1992 questionnaire the verb 'assault' was added to the sexual incident question and further location examples were provided:

People sometime grab, touch or assault others for sexual reasons in a really offensive way. This can happen either inside one's house or elsewhere, for instance in a pub, the street, at school, on public transport, in cinema's [sic], on the beach, or at one's workplace. Over the past five years has anyone done this to you?

Respondents were not asked to describe the conduct, but merely to classify it according to the categories provided.

THE MEANING OF SEXUAL ASSAULT

It is not possible to determine what kinds of conduct were classified into the four categories (rape, attempted rape, indecent assault, offensive behaviour) by different women in the same country, let alone across the 14 participating countries. The terms employed are quasi-legal categories derived from the common law. The likelihood that the terms were consistently and correctly defined and applied by respondents across cultures and countries is very low.

The first difficulty relates to a potential mismatch between the legal meaning of the categories and the respondent's understanding of the categories in any particular country. In a given common law jurisdiction the terms have a precise legal meaning which does not necessarily translate into the popular usage of the term. For example, in most jurisdictions in Australia an unwelcome and uninvited kiss is legally an indecent assault. For some women respondents the kiss may be classified as such; for others it may be classified as offensive behaviour. Yet others may not regard it as an incident to be reported to the

interviewer as a 'grab or touch for sexual reasons in a really offensive way'. The different definitions employed by respondents in Australia are subjective, unsystematic, and unidentified, yet they are treated by the ICS as objective legal or quasi-legal categories.

The second difficulty relates to the differences in both legal and popular usage between countries. For example, a comparison between the legal definition of rape in England and Australia reveals important differences even between common law countries. In England the sexual act involved in the crime of rape is penis/vagina penetration. In most States and Territories in Australia the sexual acts capable of being classified as rape include anal intercourse, oral intercourse and vaginal and anal penetration with an object. This broad definition of rape in Australia means that indecent assault is a less serious and more narrowly defined offence than in England. In England, anal intercourse, oral intercourse and vaginal and anal penetration with an object are classified as indecent assaults. On the assumption that there is at least some correspondence between the legal usage and the popular usage (and this may not be warranted) respondents in England may have classified various forms of serious sexual conduct in quite different ways to those in Australia. The differences may be even more marked between other countries which do not share a common legal and cultural heritage as do Australia and England. The extent to which the legal and popular definitions of sexual offences in civil law jurisdictions overlap with the definitions in common law jurisdictions is not addressed in the ICS. The categories of indecent assault and offensive behaviour may not translate into meaningful popular and/or legal categories in Spain, Belgium, or Finland.

One of the primary justifications for conducting the ICS was to overcome the deficiencies in international comparisons of police statistics. The first ICS report noted that "comparisons of police statistics are severely undermined by differences in culture and law, and by technical factors to do with how offences are classified, defined and counted" (van Dijk, Mayhew & Killias 1990, p. 2). The victim survey represented an attempt to overcome these difficulties and yet no attention was paid in the methodology to the "differences in culture and law" as they applied to victims. The known differences between the quasi-legal categories employed by police in different countries were replaced in the ICS by the unknown differences in the lay categories employed by respondents.

THE CALCULATION OF SEXUAL ASSAULT RATES

Victimisation rates for sexual assault were calculated for each participating country and presented in a graph. Figure 1 reproduces the graph from the first ICS survey. It presents a dramatic picture of sexual offending in Australia as compared with other parts of the industrialised world and received extensive attention in the Australian media. The procedures by which these rates were calculated are worthy of detailed examination because of the way in which they ignore the important differences between countries in the definition and classification of crimes.

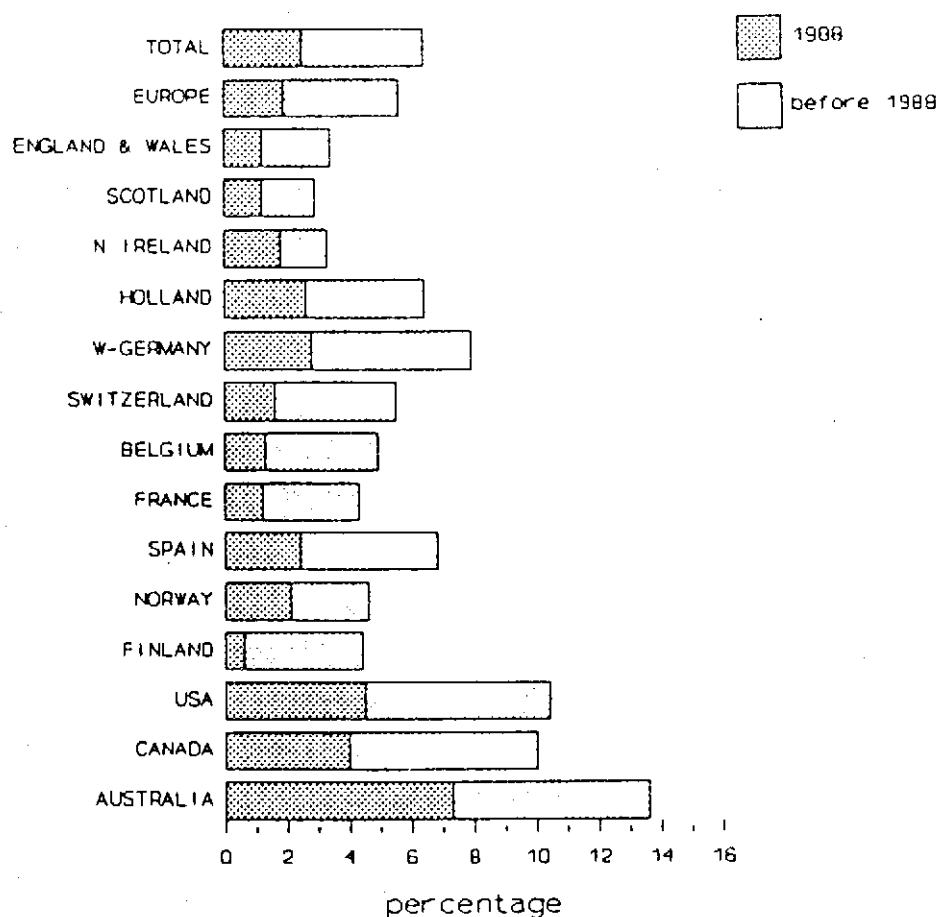


FIGURE 1 - VICTIMIZATION RATES AMONG WOMEN FOR SEXUAL INCIDENTS. PERCENTAGE VICTIMIZED IN THE PAST FIVE YEARS AND IN 1988

A detailed analysis of the responses in each category was not possible from the ICS report where only weighted percentage victimisation rates and weighted incidence victimisation rates were reported. The Australian report provided a little more information and limited raw data, but still insufficient for a detailed analysis. John Walker kindly made available raw data to the present authors. It was revealed that 75 of the 1,100 women respondents in Australia reported experiencing some kind of sexual incident in 1988. The classification of these incidents by respondents is reported in Table 3.

TABLE 3: SEXUAL OFFENCES IN AUSTRALIA IN 1988

	N	%
Rape	0	0
Attempted rape	3	4.0
Indecent assault	7	9.3
Offensive behaviour	64	85.3
Unable to classify	1	1.4
Total	75	100.0

The analysis employed in the ICS combined together the categories of rape, attempted rape and indecent assault. Adjustments were made to add in the incidents reported by victims who had been multiple victims in 1988 and an estimate was made of the proportion of these incidents that were sexual assaults (since this could not be ascertained from the questions asked). After these weighting and proportioning procedures were completed, the sexual assault victimisation rate for Australia was estimated to be 1.6 per cent, the third highest of the countries surveyed.

There are at least two unarticulated assumptions underlying these processes. Firstly it is assumed that women who experienced multiple sexual incidents (52% of victims) experienced the average pattern of incident types and secondly it is assumed that the offences of rape, attempted rape and indecent assault represent similar and equally serious sexual acts. From a methodological point of view these offences were equated, combined, and no further distinctions drawn.

The impact of these assumptions was that the reported incidents were inflated by approximately 50 per cent and these additional incidents were distributed into the now dichotomised categories of sexual assault/offensive behaviour according to the average pattern. Another five (approximately) incidents were thus allocated to the sexual assault category and no distinction was drawn as to whether these incidents were rapes or indecent assaults. In such a small sample as this, adding five incidents to the existing ten created a very high rate of sexual assault, notwithstanding the fact that no offences had been originally classified as rape and that 70 per cent of the offences in the sexual assault category (N=7) were originally classified as indecent assault by the victims.

It is extraordinary that in a survey which found no cases of rape in the 12 month time frame studied, Australia could be described as the country with the third highest rate of sexual assault. The assumptions underlying the proportioning and weighting procedures employed by the ICS methodology must be questioned. At the very least some consideration must be given to the validity of a methodology which equates serious sexual assault (rape) with indecent assault and which groups, proportions and weights accordingly. As noted previously, in Australia, "rape" now incorporates most serious forms of sexual assault including oral and anal intercourse and vaginal and anal penetration with an object. Indecent assault is legally a relatively minor offence involving bodily touching. It is misleading to equate an act such as anal or oral intercourse or vaginal penetration with an object such as a bottle with an unauthorised and unwelcome touching of the body. The methodology fails to identify and distinguish the serious forms of sexual violence in Australian society; it does not accurately reflect societal condemnation of the different types of conduct; it does not describe the differences in the legal response; and it fails to respect the differences in the impact on and the harm suffered by the victim.

CONCLUSION

In Australia, enthusiasm for data analysis of the ICS findings, in general, has not been accompanied by a similar level of interest or critical evaluation of the surveys' methodology. Can we begin to build theory or hope to explain crime cross-nationally before we have examined seriously the foundations of our information?

Methodological reservations, such as those we have expressed above, have not inhibited plans for the future development of the ICS. It is currently intended that the ICS be carried out on a regular basis and that its coverage be extended to countries on all continents under the coordination of the United Nations Inter-regional Crime and Justice Research Institute. Its future role has been summed up by one of the principal researchers involved in the 1989 and 1992 surveys in the following terms:

The results will not only help put crime prevention and control on the political agenda of developing countries, but also increase our understanding of the relationships between modernisation and crime (van Dijk 1992, p. 151).

The expectations and confidence this vision invests in surveys of the type carried out in 1989 and 1992 seems grossly exaggerated and misplaced. The ICS was directed at overcoming what were seen to be the two serious limitations of relying on national police statistics in international, comparative studies of crime: firstly, the differences in the propensity to report crime to police in different countries; and secondly, differences in the legal definition of crime and the technical means of classification and measurement of incidents from one country to the next. As shown in the examination of the sexual offences questions, victim surveys do not, however, overcome the definitional problems in police statistics. Rather, they raise further and more complex questions as to the way people in different cultures and countries classify and talk about crime.

Similarly, victim surveys do not overcome the problems of under-reporting. Most significantly, they have their own "dark figures" of unreported crime which are likely to vary according to a range of cultural and technical factors (Young 1988). There is little basis for assuming that the many factors which lead most victims to refrain from reporting crime to the police are completely removed from the setting in which victim surveys are carried out. The degree to which they are, however, is also likely to vary as between cultures. It would be surprising if general political and cultural attitudes to the public authorities failed to influence response rates in different countries or if the greater weight of religious and familial authority in the governance of personal conduct in some countries, for example, did not influence perceptions and responses to questions dealing with sexual and other forms of personal violence. Could this mean that high reporting rates with respect to such crimes in some countries might be taken as a healthy sign, an indication perhaps of less violence or at least less tolerance for predatory sexual and other behaviour? At a more prosaic methodological level, response rates to victim surveys (like police statistics) are likely to be influenced by a range of technical factors which are variable between countries, such as, for example, the level of telephone ownership.

These issues hint at a more fundamental consideration, for they are not merely technical obstacles to the more reliable measurement of crime. National and international variations in reporting behaviour and in the definitions and modes of classification and counting of crime frequently reflect cultural and social differences of real consequence for understanding the meaning, scale and significance of crime problems and related issues in different communities and countries. They can be written out of empirical research only at the expense of producing comparative studies of crime which are shallow and misleading in their results.

A decade ago Richard Sparks reflected on the usefulness of crime victimisation surveys by rhetorically asking the following questions:

Has it really been worthwhile to do fifteen years of extremely expensive research, merely to show that, Yes, Virginia, there really is a "dark figure" of unrecorded crime? Is it worth continuing to spend money on a research technique with an error structure of unknown but possibly enormous proportions, which may be producing findings that are not only mistaken but downright misleading? . . . Is the victimization survey technique ever likely to provide information about crime that will be useful to researchers, policy-makers, or administrators of the criminal justice system, and that could not be obtained in other (and less expensive) ways? (Sparks 1981, p. 45).

His answer to all these questions, based on assessment overseas, was yes.

In Australia we too, continue to speak of the benefits of victimisation surveys, but without concurrent appraisal of their potential uses. There is minimal assessment in this country of how different types of surveys could best explore victimisation questions or how different types of surveys could enhance the methodological reliability of the data obtained.

We have not yet explored in sufficient detail the potential benefits of local victimisation surveys, for example. Rather than simply treating these community-based surveys as yet another way of counting crime in a neighbourhood area or assessing risk of victimisation in a location using numbers that are superior to those based on police statistics, this type of survey may begin to broaden our understanding of the social construction of victimisation. Simply put, the local crime survey can help us to understand the many ways in which people interpret crime and respond to crime in a particular community.

As importantly, the size of local surveys allows for a more manageable methodological exploration of the survey instrument. For example, large surveys frequently rely on a "crime checklist" alone to assess whether the respondent has been victimised in a specified reference period. The assumptions underlying this methodology are that there is a common understanding among respondents of the terms that are provided in the checklist and that this understanding corresponds to the legal meaning of the terms. The smaller, local survey can explore how interviewees actually understand crime-related terminology and experiences of crime by comparative analysis of checklist and detailed descriptions of crime incidents, a task too cumbersome on a large scale.

The local survey also can begin to explore the experiences of the multiple victim who cannot conceptualise a "frequency number", and who envisions his or her experiences as a "crime series" rather than numerous discrete incidents.

While we continue to delay detailed appraisal of victimisation survey use for different objectives and to brush past methodological issues which affect the reliability of data obtained, we continue to gather information without ensuring either its suitability in addressing particular research problems or the refinement of its methodology.

REFERENCES

- Australian Bureau of Statistics 1979, 'General Social Survey': *Crime Victims May 1975*, ABS, Canberra.
- 1986, *Victims of Crime Australia 1983*, ABS, Canberra.
- 1994a, *Crime and Safety, Australia, April 1993*, ABS, Canberra.
- 1994b, *National Crime Statistics January-December 1993*, ABS, Canberra.
- Levi, M. 1994, 'Violent Crime' in Maguire, M., Morgan, R., & Reiner, R. (eds), *The Oxford Handbook of Criminology*, Clarendon Press, Oxford.
- Mukherjee, S. K. & Dagger, D. 1991, *The Size of the Crime Problem in Australia*, Australian Institute of Criminology, Canberra.
- Sparks, R. F. 1981, 'Surveys of Victimization: an Optimistic Assessment', in Tonry, M. & Morris, N. (eds), *Crime and Justice: An Annual Review of Research*, vol. 3, University of Chicago Press, Chicago.
- Sparks, R., Genn, H.G., & Dodd, D.J., 1977, *Surveying Victims: A Study of the Measurement of Criminal Victimization, Perceptions of Crime, and Attitudes to Criminal Justice*, John Wiley & Sons, Chichester.
- van Dijk, J. 1992, 'On the Uses of Local, National and International Crime Surveys' in Strang H. & Vernon J. (eds), *International Trends in Crime: East Meets West*, Australian Institute of Criminology, Canberra.
- van Dijk, J., Mayhew, P. & Killias, M., 1990, *Experiences of Crime Across the World: Key Findings of the 1989 International Crime Survey*, Kluwer Law and Taxation, De Venter.
- van Dijk, J. & Mayhew, P. 1992, *Criminal Victimization in the Industrialised World: Key Findings of the 1989 and 1992 International Crime Surveys*, Directorate for Crime Prevention, Ministry of Justice, The Netherlands.
- Walker, J. 1994, 'Trends in Crime and Criminal Justice', in Chappell, D. & Wilson, P., *The Australian Criminal Justice System: The Mid 1990's*, Butterworths, Sydney.
- Wong, B. 1992, 'Issues in the Design of Crime Victim Surveys', paper prepared for the Conference on 'Measurement and Research Design in Criminal Justice' at Griffith University, Queensland, 3-5 August 1992.
- Young, J. 1988, 'Risk of Crime and Fear of Crime: a Realist Critique of Survey-based Assumptions', in Maguire, M. & Pointing, J. (eds), *Victims of Crime: A New Deal?*, Open University Press, Milton Keynes.

MEASURING DOMESTIC VIOLENCE BY CRIME VICTIM SURVEYS

Julie Gardner
Office of Crime Statistics
South Australian Attorney-General's Department

INTRODUCTION

Domestic violence is a matter of public concern, yet this concern is not matched by a wealth of reliable information. This lack of reliable information can be attributed partly to the difficulties inherent in obtaining unambiguous data about domestic violence. A broad spectrum of behaviours and relationships is encompassed in the definition of domestic violence and this, coupled with data from varying sources, produces widely varying estimates. The ambiguity surrounding what is actually being measured can leave the uninitiated feeling as if numbers are randomly drawn out of a hat. Even the simple task of choosing the title of this paper highlights the intricacies of this field of research. What do we want to measure? The choices are seemingly endless: family violence, domestic violence, domestic abuse, wife assault, family conflict, or violence by sexual intimates. The choice of title is not just simply semantics, but will be determined by the theoretical framework of study. If it is the family that is of interest then parents, children and siblings need to be included in the study, and decisions made about how far to extend the kinship network; whether to include in-laws and grandparents, for example. While marriage – like unions have been the traditional focus of domestic violence research, sexually intimate relationships such as lovers have also been the subject of investigation. Once a decision is made about which relationships to study a decision is then needed about the type of behaviour to investigate. As well as physical violence, those researching domestic violence are often interested in a range of non physical abuses, such as psychological, economic, and social abuse. Many of these abuses are difficult for a survey to operationalise and count. Limiting a study to physical domestic violence does not remove all ambiguity as violent acts range in severity: the degree to which an act is perceived as violent by the victim can be dependent upon the situational context in which it occurs.

I have chosen the terminology “domestic violence” because it is a terminology widely used and accepted by the general community. The fact that children are usually excluded from crime surveys restricts the ability to examine family violence in any detail. The behaviour I have chosen to define as domestic violence is physical violence. Although this definition excludes a range of non physical abusive behaviours it is closer to legal definitions of crime and, as such, the behaviours are more likely to be included in crime surveys.

Some commentators (Hirschel et. al. 1992) feel that problems with terminology, and the variety of data sources, mean that accurate information on the prevalence and incidence of domestic violence can never be obtained. I do not think the situation is that extreme. The different data sources for measuring domestic violence each have limitations and benefits. Police data, for example, comprises the entire population of events recorded by police rather than relying on survey estimates. The recording of crime by police both temporarily and spatially enables the accurate placement of the recorded criminal events for additional “pattern” analysis. Improvements in collection and storage of police data mean that information about the victim’s age, sex, and relationship to the offender are now able to be analysed (Gardner 1994b). Incidents recorded by police have been through some validation process, while survey data is taken at face value. Validation has also occurred by the victim who, in reporting the event, has decided that the incident warrants official attention. Finally, police data captures rarer and more extreme forms of violence, more so than can be obtained through a survey. A good example of the use of police data in relation to domestic violence has been the analysis of homicide data, an area not amenable to survey

methods. Studies in Australia have shown that marital and family relationships play a vital role in understanding homicide (Wallace 1986; Bonney 1987; Strang 1991). These studies have found that although less women are murdered than men, the murderer is often the women's spouse. In addition, women who are homicide offenders often murder their husband or children. The national homicide monitoring program found that at least 30 per cent of homicides in 1989/90 had as the primary precipitating factor family or domestic altercations, or breakdown of relationships (Strang 1991).

Despite the advantages of police data, the most promising source of information about domestic violence is obtained through general population surveys. Surveys include offences that have not been brought to police notice, and are also able to provide estimates on the extent of the phenomena as it exists in the general population. Because surveys are focussed on the victim an array of demographic and socio-economic information about the victim can be obtained. Yet another benefit of survey data, and one that is not often utilised, is the ability of surveys to obtain descriptive details about the incident. This extra descriptive detail enables one to move beyond simple counting to describing sequences and consequences of events.

However, crime surveys are not the holy grail. Measuring domestic violence by crime victim surveys is subject to all the usual problems inherent with survey methodology, in addition to problems unique to domestic violence. The small numbers of victims traditionally obtained in surveys can result in large standard errors being associated with the estimates obtained. The main problem with regard to measuring domestic violence through crime surveys involves under-reporting. This under-reporting can occur for several reasons, including fear of reprisal from the offender, and not considering the behaviour to be relevant in a survey about crime.

Neither the intricacies of terminology, nor methodological hurdles, should be viewed as insurmountable problems in obtaining valid estimates of domestic violence in the community. This paper will review past attempts to measure domestic violence through crime surveys, explore options available in the design and administration of survey instruments, and finally examine the results of the approach undertaken in South Australia.

PREVIOUS RESEARCH

Measuring the extent of domestic violence by survey methodology has been attempted in the past. The most controversial of these surveys is the Straus and Gelles study of American families in conflict (Straus & Gelles 1992). In order to examine how husband and wives, siblings, parents and children deal with conflict, Straus and Gelles developed a Conflict Tactics Scale. This scale measures various violent behaviours ranging from pushing and shoving to more severe violence such as being kicked, punched or hit with an object. This instrument has been utilised in numerous other studies; in fact, Straus and Gelles cite over 200 papers and five books which have used the Conflict Tactics Scale as a primary method of obtaining information about violence in close relationships. The main controversy arose over Straus and Gelles' finding that wives were as 'violent' as their husband. The 1985 survey found that the rate of husband to wife violence was 11.6 per cent, and the rate of wife to husband violence 12.4 per cent (Straus & Gelles 1992). The rate of 'severe' violence was also found to be similar between the sexes. It has been cogently argued by others that these figures ignore the consequences of the violence, the relative strength of the parties involved, and the processes and motivation that lead up to the violence (Kurz 1984; Dobash et. al. 1992). The value of the Conflict Tactics Scale in surveys designed to estimate domestic violence is still being debated.

Statistics Canada recently conducted a comprehensive national survey on violence against women (Statistics Canada 1993). Over 12,000 Canadian women over the age of 18 were interviewed about physical and sexual violence they had experienced since the age of 16. The survey examined violent incidents that occurred in a variety of settings and identified a variety of offenders, such as strangers, work colleagues, friends, family and partners. The descriptions of violence covered by the survey matched legal definitions of violence. Marital violence was further measured using the Conflict Tactics Scale; this enabled investigators to identify various levels of violence, as well as providing the respondent with several opportunities to identify an incident. Results from the study estimated that three in ten women had been assaulted by a marital partner (which included common law relationships) sometime in their life, with 3 per cent of women having been assaulted by their partner in the past 12 months (Statistics Canada 1993).

Traditional crime surveys have also produced estimates on domestic violence. The United States National Crime Survey (NCS) calculates the annual average rate of family violence to women (between 1987 and 1991) to be 5.4 per 1,000 (Bureau of Justice 1993). Intimate relationships in the survey were defined as a spouse, ex spouse, boyfriend/girlfriend, brother/sister, parent, or child. Of women who had been victimised by their spouse or ex spouse, approximately one in five reported that this had occurred three or more times in the past six months. The 1984 British Crime Survey (BCS) estimated that 13 per cent of violent incidents involved family, lovers or ex lovers (Hough & Mayhew 1985). The 1988 BCS survey found the estimate to be 18 per cent (Mayhew, P. et. al. 1989) but the researchers felt that 'there is little doubt that BCS counts of sexual offences and domestic or non stranger violence are under estimates'.

Unfortunately, Australian national and state crime surveys unlike their British or United States counterparts are unable to provide any direct information about the extent of domestic violence. The best that can be obtained from Australian crime surveys is information on the number of assaults that occur in the victim's home (Australian Bureau of Statistics 1994; Matka 1991). The 1993 national survey found that 45 per cent of assaults against women occurred in or around the victim's home. The majority (90%) of these women reported that the offender was known to them, and 38 per cent had been victims on three or more occasions in the past 12 months (ABS 1994). This type of result is both incomplete and unsatisfactory. Violence in the home could involve not only marital or family relationships but also friends and acquaintances. In addition, domestic violence is not confined to the victim's place of residence, but can take place in a variety of settings. For example, a survey in the inner-city London council area of Islington found that while over three quarters of the domestic assaults occurred in or around the victim's home, assaults also took place at friends' or relatives' homes, in the street, or some 'other' place (Jones et. al. 1986). The major defining factor in establishing domestic violence is not the location of the assault but the relationship between the victim and the offender; this information is not adequately captured in Australian crime surveys.

Traditional crime surveys, such as those employed in Australia, Britain and the United States, have been used with varying degrees of success to obtain estimates on the extent of domestic violence in the community. Domestic violence is seen as just one of a range of crimes which could be captured by the crime survey. In contrast to this traditional approach, there have been surveys undertaken whose main purpose has been to determine the amount of family violence, or violence against women. Regardless of the target group, both approaches have problems to address concerning the best methodology to use in obtaining their estimates.

METHODOLOGICAL ISSUES

Problems traditionally faced with survey methodology, such as respondents' ability to recall incidents in the appropriate time frame, still exist when measuring domestic violence. The "private" nature of domestic violence compounds some of these problems, especially the problem of under-reporting which can occur due to embarrassment, or more seriously, fear of reprisal from the offender. The presence of

the perpetrator when the interview takes place would undoubtedly also inhibit reporting. Literature on the psychological effects of domestic violence mentions that female victims can feel a sense of self-blame over the events (Smith 1989). If the victim feels shared responsibility in the incident this is likely to inhibit the reporting of the event. It is conceivable that a woman has reason to call police about a violent incident – for immediate protection for example – or the police might be notified by others, yet six months later the incident may not be retold to an interviewer (Block & Block 1984).

Although it is recognised that under-reporting of domestic violence is a problem in crime surveys, no one is sure as to the magnitude of the problem. It is also unknown whether under-reporting is random throughout the survey population, if not, doubt would be cast on the representativeness of the obtained sample.

The United States NCS has recognised problems with under-reporting of domestic violence and has redesigned its questionnaire and methodology accordingly (Bureau of Justice 1989). Effort has been spent, among other things on refining the screener questions. Screener questions are those questions that determine if any victimisation has taken place before asking extra questions about the nature of the crime. The NCS experimented with various forms of screening procedures, and found that for some the number of crimes reported to the survey increased by half. Reporting was found to increase across all types of offences, and did not just capture more minor events. The following statements are now included in the NCS:

People often don't think of incidents committed by someone they know. Other than any incidents already mentioned, did you have something stolen from you OR were you attacked or threatened by a) someone at work or school, b) a neighbour or friend c) a relative or family member, d) any other person you've met or known?

The respondents are further guided with:

please mention it even if you were not certain it was a crime.

From 1993 onwards the NCS expects estimates of the number of victims to increase in response to these new specific cues and screening questions (Bureau of Justice 1993).

In addition to the various reasons which inhibit the respondent's desire to report the event, the context in which the questions are asked is important. Surveys are generally placed firmly in the context of "crime", and respondents might not view domestic incidents to be relevant to the survey (Wetzels 1993; Smith 1994; Straus & Gelles 1992). Straus and Gelles suggest that the reason their figures on domestic violence were much greater than that obtained by the NCS was that their questions were asked in the context of how families deal with conflict, thus disassociating themselves from "police" or "crime" issues. The Canadian national survey introduced the survey to respondents as being about women's safety, even though the survey utilised legal definitions of criminal events. However, the National Crime Survey, British Crime Survey and Australian Bureau of Statistics surveys are all carried out within the framework of crime.

Crime surveys often rely on only the one question to determine victimisation, yet this need not be the case. Multiple chances to obtain information on the extent of domestic violence will assist in reducing under reporting behaviour. The Canadian study for example gave respondents several opportunities to indicate if some violence had occurred, as do all surveys which utilise the Conflict Tactics Scale.

Another methodological issue in measuring domestic violence through crime surveys is whether to look at lifetime prevalence or annual rates of violence. An annual figure enables the analysis of trends over time and comparisons between areas. However a lifetime prevalence figure provides another picture of the risk a woman encounters. For example, the Canadian survey found that the yearly assault rate to be 3 per cent: this risk increased to 30 per cent in a woman's lifetime (Statistics Canada 1993). If the

preferred calculation is an annual measure there are still some methodological considerations to resolve, in particular how to calculate the incidence of violence that occurs during that year. Series crime, that is an incident that occurs on more than one occasion during the reporting period, is a problem for crime surveys, and domestic violence is particularly susceptible to this problem. Crime surveys traditionally obtain details on only the last incident, thus undercounting the amount of crime in the community. Weighting the numbers upwards to take into account all incidents is a possibility but rarely occurs, due mainly to problems involved in obtaining precise measures of the number of times an incident occurred. The traditional approach has been to record if the incident occurred 'three or more times' during the year. The redesign of the NCS mentioned earlier is also aiming to obtain more information about series crime in future surveys.

Analysis of qualitative data from surveys highlight the fact that phenomena more inclusive than crime are captured by surveys (Morgan 1994; Gardner 1994b; Hough 1990). There is a conceptual decision that the designers of surveys need to make about how strictly they wish to remain tied to legal definitions of crime when examining domestic violence. As there will inevitably be comparisons made between police and survey data there is some argument for keeping the two similar, as is the fact that surveys can be used to provide measures of police effectiveness. However, alternative descriptions of violence that include harm, or events that invoke fear, without them necessarily being criminal can also be of relevance to those interested in the field of domestic violence.

As seen above, there are numerous problems encountered when attempting to measure domestic violence through the use of surveys. While not all of these methodological difficulties have been overcome, the Office of Crime Statistics, through a series of general population surveys, has obtained better estimates of domestic violence in South Australia than has previously been available through Australian crime surveys.

DOMESTIC VIOLENCE IN SOUTH AUSTRALIA

To date the Office of Crime Statistics has commissioned three surveys (1992, 1993, 1994) as part of a Health Omnibus. Although the questions asked by the Office are the traditional ones used in Australian crime surveys, the questions take place within the context of a survey dealing with a variety of health and welfare issues. This placement of questions could possibly assist in obtaining more information about domestic violence than a survey based solely on crime or policing issues. In addition, the surveys contain more information about the relationship between victim and offender than has previously been collected by Australian national surveys.

The surveys involve over 3,000 personal interviews of South Australians aged 15 years and over, at households selected randomly throughout the state. Up to six separate visits are paid to selected households, to interview the person whose birthday is next in the household. The response rate for the surveys is around 72 per cent. The data are weighted by age, sex and location according to the 1991 ABS census of population and housing. Data are double punched, edited and the very few missing responses are followed up by telephone if possible. A random sample of 5 per cent of each interviewer's work is selected and respondents are recontacted as a check on the reliability of the study.

Victims of robbery and assault identified by the 1993 and 1994 surveys were asked if they would answer additional questions about the incident at a later date. This supplementary survey covered details such as circumstances surrounding the event, the degree of seriousness of the victimisation, and the consequences to the victim. The supplementary interview was conducted over the telephone about one month after the initial interview, and provides valuable qualitative data on the nature of events captured by the survey.

Similar to other crime surveys respondents can indicate the number of times an assault has taken place, but details regarding the location of the offence, and the relationship between victim and offender, are taken for the last incident only. Therefore, any domestic violence which is identified relates only to the last incident, under-estimating the incidence of the offence.

The following analysis is drawn from the 1992 and 1993 surveys. For the purposes of this paper domestic violence is defined as assaults against women that have been perpetrated by a partner or an ex-partner. There were two male victims assaulted by their partner or ex-partner identified by the 1992 and 1993 surveys; these have not been included in the analysis.

RESULTS

The tables below show that few males or females were assaulted in either year, with females being assaulted at approximately half the rate of males. Women were assaulted in their own homes more often than males, although this was more pronounced in 1992 than in the 1993 survey. The majority of males did not know their assailant, whereas the reverse was true for female victims of assault. Partners or ex partners were the offender in a quarter (26.4%) of the assaults against females in 1992, and in over one in six of the 1993 cases.

**TABLE 1 – PERCENTAGE OF POPULATION VICTIMS OF ASSAULT
WITHIN THE PAST 12 MONTHS
SOUTH AUSTRALIA: 1992 – 1993**

	Female	Male
1992	3.3	6.7
1993	2.9	6.4

Source: South Australian Health Omnibus Surveys.

**TABLE 2 – LOCATION OF LAST INCIDENT OF ASSAULT
FEMALE AND MALE ASSAULT VICTIMS
SOUTH AUSTRALIA: 1992 -- 1993**

	1992		1993	
	Female (n=53)	Male (n=101)	Female (n=44)	Male (n=93)
Own Home	43.2	5.8	28.3	13.1
Other Home	16.3	6.7	16.9	2.7
Work or Study	15.5	15.1	7.3	17.8
Other Building	-	19.9	12.6	26.5
Private Vehicle	3.0	2.2	1.8	4.6
Public Place	14.0	37.4	21.6	22.8
Other	8.2	12.8	11.3	12.5
Total	100.0	100.0	100.0	100.0

Source: South Australian Health Omnibus Surveys.

**TABLE 3 – VICTIM OFFENDER RELATIONSHIP
FEMALE AND MALE ASSAULT VICTIMS
SOUTH AUSTRALIA: 1992 – 1993**

	1992		1993	
	Female (n=53)	Male (n=101)	Female (n=44)	Male (n=93)
Did Not Know Offender	29.0	62.1	43.9	57.3
Know Offender				
Partner/Ex Partner	26.4	0.6	18.7	1.8
Relative	9.3	2.3	3.3	5.5
Friend	8.7	5.4	1.1	7.7
Acquaintance	8.5	20.8	15.0	20.2
Other	18.1	9.4	15.5	8.9
Not Stated	-	-	2.5	-
Total	100.0	100.0	100.0	100.0

Source: South Australian Health Omnibus Surveys.

As Table 4 illustrates, the assault rate for separated and divorced women is the highest of all categories, being over two times the rate for women as a whole. Table 5 shows that about one in 10 of the assaulted married/defacto women identified their partner or ex partner as being the offender. However, the situation for women who had separated or divorced was significantly different, with between 40 per cent and 50 per cent of the assaults against this group being perpetrated by a partner or ex-partner.

TABLE 4 - PERCENTAGE OF FEMALE POPULATION ASSAULTED, BY VICTIM'S MARITAL STATUS SOUTH AUSTRALIA: 1992 - 1993

	1992	1993
Married/Defacto	1.7%	1.8%
Separated/Divorced	8.3%	7.1%
Widowed	0.4%	0.9%
Single	8.2%	5.3%
Total	3.3%	2.9%

Source: South Australian Health Omnibus Surveys.

TABLE 5 - PERCENTAGE OF FEMALE VICTIMS ASSAULTED BY A PARTNER OR EX PARTNER, BY VICTIM'S MARITAL STATUS SOUTH AUSTRALIA: 1992 - 1993

	1992	1993
Married/Defacto	10.3%	11.5%
Separated/Divorced	51.5%	41.0%

Source: South Australian Omnibus Surveys.

These figures enable an estimate to be made on the level of domestic violence per 1,000 specific population. Table 6 shows that approximately two per 1,000 South Australian women in a married or defacto relationship had been threatened with force or attacked by their partner/ex-partner at some time in the past year. The rate for separated and divorced women was much greater at between 29 and 43 per 1,000. A Z-Test was conducted on the estimates between the two years and no significant difference was found. The two surveys were therefore combined, resulting in a data set of 6,097 cases. The combined years' estimates on domestic violence are presented in Table 7, together with their 95 per cent confidence limits. The annual rate of domestic violence for South Australian women is therefore estimated to be between 4.4 and 9.8 per 1,000 population.

**TABLE 6 – RATE OF ANNUAL DOMESTIC VIOLENCE PER 1,000 SPECIFIC POPULATION
SOUTH AUSTRALIA: 1992 – 1993**

	1992	1993
All Women	8.7	5.4
Women in Married/Defacto Relationship	1.8	2.1
Separated/Divorced Women	42.7	29.1

Source: South Australian Omnibus Surveys.

**TABLE 7 – RATE OF ANNUAL DOMESTIC VIOLENCE PER 1,000 SPECIFIC POPULATION,
AND 95.0 PER CENT CI
SOUTH AUSTRALIA: 1992 – 1993**

	Rate	Confidence Interval
All Women	7.1	(+/- 2.7)
Women in Married/Defacto Relationship	1.9	(+/- 1.8)
Separated/Divorced Women	35.2	(+/- 17.8)

Source: South Australian Health Omnibus Surveys.

The difference in relative risk between women in a relationship and those who have separated or divorced is dramatic, and suggest that further information is required to understand possible reasons for the difference. It is not known for example, whether the violence caused the separation, or whether the stress of the separation process caused the violence. Homicide data in Australia and Canada shows that separation is a time of great danger for many women (Easteal 1993; Wilson, Daly & Wright 1993). The Canadian national survey also found that one-fifth of the women who experienced violence by an ex-partner said it occurred following or during separation (Statistics Canada 1993). The 1993 Health Omnibus supplementary survey asked women who reported assaults by an ex partner how long had it been since they had separated. Of the nine women in this group identified from the supplementary survey, six had been separated for less than 18 months, while the remaining three were assaulted by a partner from whom they had been separated for more than 18 months.

The 1993 Health Omnibus questionnaire was refined in order to distinguish between women who were married and those in a defacto relationship. This was in response to findings by Stets & Straus (1992) who found that cohabiting couples were more violent than married couples, and that the severity of this violence was greater. The Canadian study also found that common law relationships had higher rates of violence, but the difference was not significant. The further division of cases in our survey between on married or defacto status results in small number of cases and a higher standard error, but a difference was noted between the two groups. Married women had an estimated annual rate of domestic assault at 1.4 per 1,000, which was less than the rate of 12.4 per 1,000 women in defacto relationships.

As mentioned previously, qualitative information provides another dimension to crime survey data. There were ten women in the 1993 *supplementary* survey who had been identified as a victim of domestic violence. From information provided by these respondents we are able to determine that the lounge room was the most common location where the offence began, although nearly as many assaults began in the bedroom (see Table 8), and that for eight of the 10 women this last incident was not the first or only time that they had been assaulted by that particular offender. Reasons for the assault were listed as disputes over custody of children and/or household property, maintenance payments, the woman wishing to start a new relationship (after two years of separation), or were just 'on going' arguments. The actual violence used was quite severe and included one case of rape by the women's ex-partner and his friend (see Table 9). All the women suffered some emotional problems, especially fear and worry for their children's safety. They also reported difficulty sleeping, nightmares, anger and depression. For half the women there was some degree of physical injury such as broken bones, bruises, and black eyes. The police were notified in six out of the ten cases. The women who did not tell the police had varying reasons for not doing so: that the police would not believe them, that they had the situation under control, they did not want the "hassle", or they were afraid of reprisal from the offender.

**TABLE 8 - SPECIFIC LOCATION OF ASSAULT
SUPPLEMENTARY SURVEY 1993**

	Number
Lounge Room/Watching TV	4
Bedroom	3
Kitchen	2
Can't Remember	1
Total	10

Source: South Australian Health Omnibus Surveys.

**TABLE 9 - DEGREE OF VIOLENCE
SUPPLEMENTARY SURVEY 1993**

	Number*
Verbal Assault, Insults	4
Threats to Kill	5
Property Damage, Throwing Objects, Slash Cushions	4
Push, Grab, Shove	1
Kicked, Bit, Hit, Struck, Punched, Hair Pulled, Bashed	7
Choked or Restrained	2
Raped, Attempted Rape	2

* more than one response per victim is possible.

Source: South Australian Health Omnibus Surveys.

FUTURE OF CRIME SURVEYS

Despite the problems identified in measuring domestic violence by crime surveys, useful information can be obtained given appropriate methodology. To obtain the most information about domestic violence an instrument dedicated to the topic, similar to that used by the Canadian survey, is probably the best but most expensive option. The flow of questions in the Canadian survey was specifically designed to encourage disclosures of abuse, and the use of the Conflict Tactics Scale enabled various levels of violent actions to be identified.

For the Office of Crime Statistics the vehicle of the Health Omnibus Survey could be more fully utilised in the future by situating the questions on assault within other safety or health issues, and perhaps including more questions on specific behaviours rather than relying on the one question to determine victimisation.

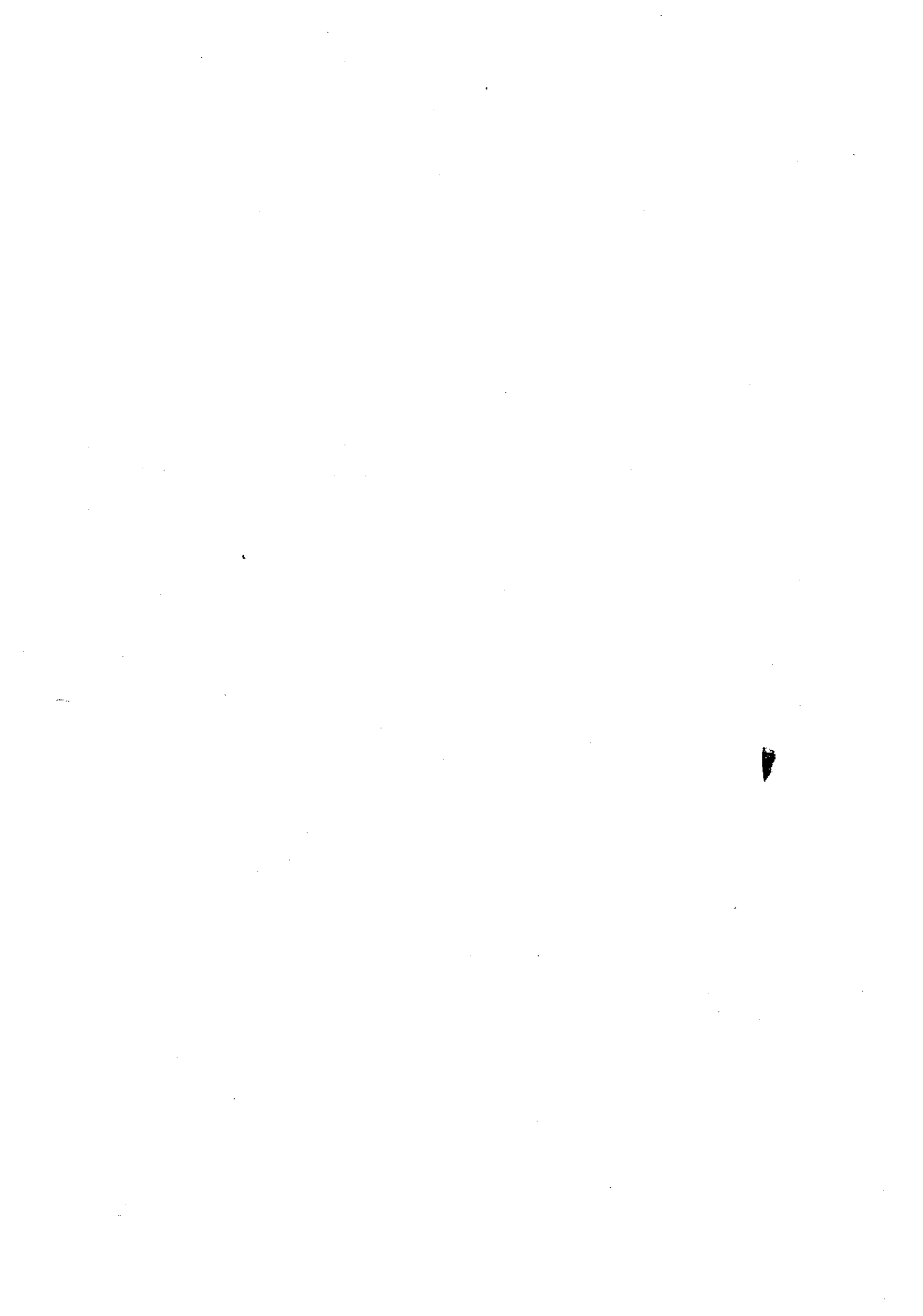
For Australian crime surveys improvements can be made simply by including information about the relationship between victim and offender. It would also be interesting to monitor the results of the National Crime Survey's redesign efforts in the use of specialised screening questions and increased information on crimes which occurred several times during the reporting period.

To end on a cautionary note, obviously domestic violence is different from other crimes due to its private and emotional nature, and effort needs to be made to improve current under-reporting. However the aim should be to obtain reliable and valid figures, not necessarily the biggest figures. A large number is not necessarily more accurate than a smaller one. For example one study (Radford 1987) found almost *all* women had suffered some male violence in the previous 12 months. This finding is not only of little use to anyone, but detracts attention and damages the credibility of the serious cases of domestic violence that require attention and action.

REFERENCES

- Australian Bureau of Statistics 1994, *Crime and Safety Australia, April 1993*, Cat. no. 4509.0, ABS, Canberra.
- Block, C. R. & Block, R. L. 1984, 'Crime definition, crime measurement, and victim surveys' in *Journal of Social Issues*, vol. 40, no. 1, pp. 137-160.
- Bonney, R. 1987, *Homicide II*, New South Wales Bureau of Crime Statistics and Research, Sydney.
- Bureau of Justice 1989, *Redesign of the National Crime Survey*, U.S. Department of Justice, NCJ-111457, Washington.
- 1993, *Highlights from 20 years of surveying crime victims: The National Crime Victimization Survey, 1973-1992*, U.S. Department of Justice, NCJ-144525, Washington.
- Dobash, R. P., Dobash, R. E., Wilson, M., & Daly, M. 1992, 'The myth of sexual symmetry in marital violence', *Social Problems*, vol. 39, no. 1, pp. 71-91.
- Easteal, P. 1993, 'Homicide between adult sexual intimates: a research agenda', *Australia and New Zealand Journal of Criminology*, vol. 26.
- Gardner, J. 1994(a), *Violence against Women, Justats No. 3*, Office of Crime Statistics, Adelaide.
- 1994(b), 'Use of official statistics and crime survey data in determining violence against women', Paper prepared for the Eighth International Symposium on 'Victimology', 21-26 August, Adelaide.
- Hirschel, J., Hutchinson, I., Dean, C. & Mills, A. 1992, 'Review essay on the law enforcement response to spouse abuse: past, present and future' *Justice Quarterly*, vol. 9, no. 2, pp. 247-283.
- Hough, M. & Mayhew, P. 1985, *Taking account of crime: Key findings from the 1984 British Crime Survey*, Home Office Research Study No. 85, HMSO, London.
- Jones, T., MacLean, B., & Young, J. 1986, *The Islington Crime Survey: Crime, victimisation and policing in inner-city London*, Gower, Aldershot.
- Kurz, D. 1989, 'Social science perspectives on wife abuse: current debates and future directions', *Gender & Society*, vol. 3, no. 4, pp. 489-505.
- Matka, E. 1991, 'Domestic violence in NSW', *Crime and Justice Bulletin* no. 12, NSW Bureau of Crime Statistics and Research, Sydney.
- Mayhew, P., Elliott, D., & Dowds, L. 1989, *The 1988 British Crime Survey*, Home Office Research Study No. 111, HMSO, London.
- Morgan, F. 1994, 'The benefits of descriptive information in crime surveys', Paper prepared for the Eight International Symposium on 'Victimology', August 21-26, 1994, Adelaide.
- Radford, J. 1987, 'Policing male violence-policing women' cited in Smith, M. 1994, 'Enhancing the quality of survey data on violence against women: A feminist approach', *Gender & Society*, vol. 8, no. 1, 109 - 127.

- Smith, L. 1989, *Domestic violence*, Home Office Research Study No. 107, HMSO, London.
- Smith, M. 1994, 'Enhancing the quality of survey data on violence against women: A feminist approach', *Gender & Society*, Vol 8, No. 1, 109 - 127.
- Statistics Canada 1993, *The violence against women survey*, Cat. No. 11-001E, Ottawa, Ontario.
- Stets, J. E., & Straus, M. A. 1992, 'The marriage licence as a hitting license: A comparison of assaults in dating, cohabiting and married couples' M. A. Straus & R. J. Gelles *Physical violence in American families*, Transaction Publishers, New Brunswick.
- Strang, H. 1991, *Homicides in Australia 1989-90*, Monograph No. 4, Australian Institute of Criminology, Canberra.
- Straus, M. A., & Gelles, R. J., 1992, *Physical violence in American Families*, Transaction Publishers, New Brunswick.
- Straus, M.A., & Gelles, R.J. 1992, 'How violent are American Families? Estimates from the National Family Violence Resurvey and other Studies', *Physical violence in American Families*, Transaction Publishers, New Brunswick.
- Wallace, A. 1986, *Homicide: the social reality*, New South Wales Bureau of Crime Statistics and Research, Sydney.
- Wetzels, P. 1993, 'Victimisation experiences in close relationships: another blank in victim surveys', in W. Bilsky et al. eds *Fear of crime and criminal victimisation*, Enke, Stuttgart.
- Wilson, M., Daly, M., & Wright, C. 1993, 'Uxoricide in Canada: Demographic risk patterns', *Canadian Journal of Criminology*, July, pp. 263 - 291.



CORRELATES OF VICTIMISATION FOR CRIMES AGAINST THE PERSON: AN ANALYSIS OF THE 1991 QUEENSLAND CRIME VICTIM SURVEY

Anna Stewart & Ross Homel
*School of Justice Administration
Griffith University*

INTRODUCTION

The major aim of this paper is to examine who is at risk of becoming the victim of an offence against the person and, more specifically, the victim of a violent crime. There is increasing evidence that criminal victimisation is not an indiscriminate visitation but, rather, certain people in certain situations are far more likely to be a victim (Goldstein 1994). Data from the 1991 Queensland Crime Victim Survey (QCVS) were analysed to investigate the nature of assault victimisation risks, and to explore in some detail the correlates of reported assaults and other crimes against the person.

MEASURING THE DIMENSIONS OF VIOLENCE

Violent crime is important because it creates great fear in the community, and because on occasion it involves serious physical injury and psychological trauma. The fact that violence usually involves direct confrontation with another human being who is intent on inflicting harm makes it qualitatively different from most other forms of injury-producing behaviours. Nevertheless, it is important to keep crimes against the person in perspective. From a statistical point of view, injuries arising from other causes are far more common. Moreover, the groups who are often most fearful, such as the elderly, are in fact the least at risk.

Motor vehicle traffic accidents have been for many years the major cause of injuries in Australia, especially in younger age groups. However, in the decade to 1992, suicide overtook traffic accidents as the major cause of death across all age groups. Deaths resulting from intentional injury by others (of which 98% are homicides) are few in comparison with traffic accidents, suicides or other accidents (chiefly falls). In 1992 there were 327 such deaths, or 4.4 per cent of the total of 7,489, with men comprising 62.4 per cent of the victims (National Injury Surveillance Unit 1994). In contrast to other injuries, the peak age for victimisation was around 35 for men and 30 for women. However, homicide statistics, being the tip of a complex iceberg, give an incomplete picture of the nature of criminal violence, most instances of which do not lead to death. Data on non-fatal injuries suggest that young people (particularly young men under the age of 25) are most at risk.

Vimpani (1991) reports data from 86,820 cases recorded in Accident and Emergency Centres in 22 hospitals which show that in 1988 the number of non-fatal injuries due to intentional violence among those aged 15 to 24 exceeded the total for all older age groups. Males comprised 73 of all the young victims. However, although more representative than the statistics on homicide, the hospital data probably also provide a biased picture of injuries arising from intentional violence. This is because surveys of Accident and Emergency Centres in major hospitals indicate that cases of self-inflicted injury and assault are over-represented in the cases being missed by self-reporting procedures. Young, intoxicated males figure prominently amongst these missing cases.

The crime victim survey has become one of the main tools utilised by criminologists to gain a clearer picture of the incidence of major forms of crime, particularly over time. These surveys have indicated that criminal victimisation, especially for violent offences, is rare and is strongly related to being young, male, and socially marginalised (Fattah 1991). The published findings of the 1991 QCVS are consistent with this picture. Respondents under the age of 30 reported the highest incidence of victimisation for any personal offence (other than verbal abuse), young males were more likely to be the victim of an assault or attack than young females, and 25 per cent of attacks and assaults (other than those involving the deliberate use of a weapon) took place in Brisbane's inner suburbs (Government Statisticians Office 1992).

However, crime victim surveys have definite limitations with respect to the measurement of violence. There is clear evidence that a great deal of violence, especially violence against women and children within family relationships, is hidden from both police and survey interviewers. Consequently, using standard survey methods, it has been almost impossible to identify the actual levels of domestic violence in our society. Perhaps the most reliable statistics are provided by the British crime survey, which suggests that 56 per cent of all assaults on women are domestic, compared to only 8 per cent of assaults on men (Davidoff & Dowds 1989).

Unfortunately, official statistics on such matters are also extremely unreliable, the legislation and police responses to domestic violence have been plagued with inconsistencies, and many offences are not reported to the police. Nevertheless, official data on murders are reliable, and provide a useful corrective to the survey picture of victims as being overwhelmingly male. Criminal Justice Commission data on murders in Queensland for the years 1980 to 1991 show that 42 per cent of victims were women, and that 23.4 per cent of murders were spousal killings. In two-thirds of these spousal murders males killed females (Criminal Justice Commission 1994).

Understanding the nature of domestic violence is important. Crime prevention strategies which are appropriate outside the home are unlikely to have the same effect inside the home, and the psychological and physical impact of violence in the home is likely to be substantively different to the impact of violence outside the home. For these reasons, we attempt in this paper to extract as much information as possible on domestic violence from the Queensland Crime Victim Survey. Nevertheless, it will be apparent from our analyses that, because the data are so limited, few conclusions can be drawn.

Another dimension of victimisation which has been highlighted in recent research is the phenomenon of *repeat victimisation*. British crime survey figures indicate that between 4 and 5 per cent of respondents are the victims of 43 per cent of the crimes and approximately 50 per cent of respondents who identify as being a victim are the victim of multiple crimes. Farrell and Pease (1993) have identified four factors which are related to repeat victimisation: (a) living in a bad area; (b) living a chaotic or vulnerable lifestyle; (c) being the victim of relationship crimes; and (d) being the victim of retail crime such as shop theft. Understanding the nature of repeat victimisation will allow for the more efficient allocation of crime prevention effort and resources, and for this reason we have attempted in the analysis to investigate the factors which distinguish repeat victims from "one off" victims. Again, however, data limitations prevent clear conclusions.

Another aspect of crime victimisation that has received attention recently in the research literature concerns *geographical or ecological effects*. Crime victim surveys have been criticised because of their lack of geographic specificity and the tendency to treat respondents as autonomous individuals who are unconnected with their environment (Skogan, 1992). In recent years it has been suggested that contextual variables such as area stability and cohesion, local unemployment rates, and residential mobility, explain victimisation better than individual measures of lifestyle (Mayhew & Hough, 1991). In the 1991 QCVS, questions were asked concerning the respondents' perception of and attitudes to their immediate environment. We make use of these questions to explore some of the ecological aspects of violence in Queensland.

A final aspect of violent behaviour which has been identified in the literature as being of crucial importance is *alcohol use* (Homel, in press). Violence in and around licensed premises has been a particular focus of concern in Australia in recent years (Homel & Clark 1994; Stockwell 1994). When the analysis of the QCVS data was planned, it was hoped to include the location of an assault (in or near licensed premises), or the intoxication of the offender as judged by the victim, as variables in the analysis. Unfortunately the method employed in the survey to categorise the location of a crime against the person did not allow for the separation of licensed premises from other kinds of public places, and the question on the judged intoxication of the offender was asked of verbal abuse victims only. Consequently it proved impossible in the present analysis to explore the roles of alcohol or of public drinking as correlates of violence.

STRATEGY OF ANALYSIS

In order to make the best use of the information available in the Queensland Crime Victim Survey, and to investigate as far as possible the key dimensions identified in the literature, we adopted an analytic strategy somewhat akin to peeling an onion. Each stage of analysis involved discarding a part of the sample and then "decomposing" the remainder of the sample.

First, we focused on all victims of personal crimes, including victims of verbal abuse. The key question here was what factors distinguished any kind of victim from people who did not report being the victim of any personal crime in the previous twelve months.

The second stage of analysis – the second layer of the onion – involved discarding non-victims and comparing people who were victims of verbal abuse only with victims of "genuine" crimes against the person, including both assault and property offences. The third stage or layer took us closer to our major objective, since it involved discarding verbal abuse victims in order to compare victims of one or more property offences only (i.e., "pure" property victims) with victims of assault, whether or not they also reported a property offence.

At the fourth stage, we began to differentiate types of assault, by discarding the pure property offenders and comparing victims of one or more domestic assaults (whether or not any other offence was reported, and whether or not a single or multiple victimisation was reported) with people who reported being assaulted only in non-domestic situations. In other words, the key question at the fourth stage was how victims of domestic and "public" assaults differ.

The fifth and sixth stages of unpeeling the onion involved a focus on multiple assault victimisation. Too few people reported being the victim of domestic violence to allow analysis of multiple victimisation for domestic assaults, so domestic violence victims were discarded in these last stages. In stage five, victims of a single non-domestic assault (and nothing else) were compared with people who were victims of multiple non-domestic assaults, or "mixed" victims of both assault and property crime. At stage six, victims of multiple non-domestic assaults, but no property crimes, were compared with victims of at least one non-domestic assault and at least one property crime. This last comparison allowed us to compare "pure" multiple assault victims with people who reported being victims of both property offences and assault.

The overall strategy of analysis is summarised in diagrammatic form in Figure 1.

In order to focus more precisely on the correlates of physical assault, we also carried out supplementary analyses excluding people who simply reported being threatened with assault. We used a simplified dependent variable which distinguished non-victims of physical assault from victims; and, among the victim group, victims of physical domestic violence from victims of physical non-domestic violence. Selected results from these analyses are reported in this paper.

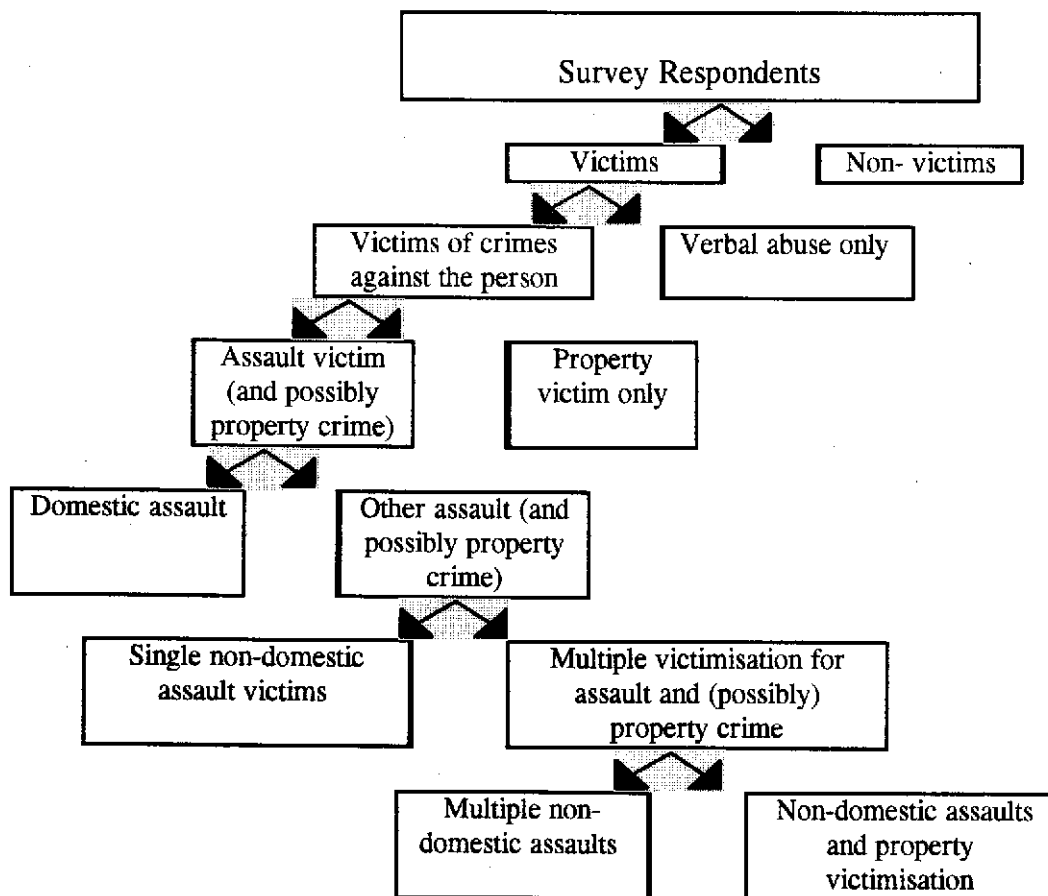


FIGURE 1 – METHOD OF CONSTRUCTION OF THE MAJOR MEASURE OF CRIME VICTIMISATION

METHOD

QUEENSLAND CRIME VICTIM SURVEY

In 1991 the Criminal Justice Commission and the Queensland Government Statistician's Office conducted the Queensland Crime Victim Survey (QCVS) to examine Queenslanders' experiences with crime. Data were collected from a sample of 6,315 households throughout Queensland using face-to-face interviews and four interview schedules with household members. Interview schedules included (a) Household Form, (b) Household Crime Questionnaire, (c) Personal Crime Questionnaire, and (d) Victim Questionnaire.

Data collected using the Personal Crime Questionnaire were used for the analyses presented in this report. Respondents were asked to report on their experiences with victimisation in the previous 12 months. In each household, one member over the age of 14 was randomly selected to participate in the interview. If possible these interviews were conducted in private. However, because of practical difficulties associated with the interview situation many interviews were unable to be conducted in private.

Of households sampled in the QCVS, 16.1 per cent were unable to be interviewed. However, only 0.7 per cent of households approached refused to participate in the survey. In 11.2 per cent of households the interviewers made three calls and were unable to contact any members of the household. In a further 4.8 per cent of households the interviewers made contact but were unable to carry out the interview for a

number of reasons, including a lack of interpreters in rural areas, and illness. Unfortunately, it is very likely that victims are over represented in uncontacted households. Many of these will be highly mobile households; households frequently associated with high levels of victimisation (Skogan 1992).

METHOD OF ANALYSIS

NATURE OF VICTIMISATION

To investigate the nature of victimisation, two dependent variables were created from respondents' reports of victimisation, following the analysis strategy outlined above. The Appendix contains the questions asked respondents concerning their personal victimisation experiences. The two variables are outlined in Table 1.

TABLE 1 - METHOD OF CONSTRUCTION OF THE DEPENDENT VARIABLES

Major Dependent Variable: The Nature of Victimization	N	%
a. Not a victim of verbal abuse or any crime	4768	75.5
b. Verbal abuse victim only	671	10.6
c. Domestic assault, single or multiple, whether or not any other offence was reported	58	0.9
d. One or more property crimes only	433	6.9
e. One only non-domestic assault and no property victimisation	201	3.2
f. More than one non-domestic assault and no property victimisation	117	1.9
g. At least one non-domestic assault and at least one property crime	67	1.1
	6315	100.0
Second Dependent Variable: Victimization for physical assault	N	%
a. Not a victim of physical assault	6083	96.3
b. Domestic physical assault, single or multiple, whether or not any other offence was reported	35	0.6
c. One or more non-domestic physical assaults, whether or not property victimisation was reported	197	3.1
	6315	100.0

The focus of the first dependent variable was on assault victimisation. For this variable the definition of assault included threats of assault. This variable consisted of the seven categories of victimisation set out in Table 1. These comprehensive categories allowed the investigation of a range of victimisation experiences. The focus of the second dependent variable was on more serious assault victimisation. For this variable threats of assault were excluded, so that only actual physical assaults were counted. The small number of victims of physical assault prevented the elaborate distinctions that were possible when all kinds of personal victimisation were analysed. Despite the small number, however, it was considered vital to maintain the distinction between domestic and non-domestic physical assaults.

Responses were included in the category of domestic assault when the victim of an assault identified the assault as either a current or former spouse or de facto, or a current or former boyfriend or girlfriend. This definition extended the definition used in the report of the Queensland Domestic Violence Task Force (Matchett 1988) which did not include current or former boyfriend or girlfriend. Any respondent who reported that they had been a victim of domestic violence, no matter what other crimes they also reported being the victim of, was assigned to the domestic violence category.

Despite giving primacy to reports of domestic assault, very few cases were reported: 58 when threats were included, and 35 when only physical assault was counted. Perhaps not surprisingly, verbal abuse was the most common category, at 10.6 per cent of the sample. The next most frequent type of offence was property crimes, at 8 per cent (6.9% + 1.1%), with assault victimisation (including threats) being reported by 7.1 per cent of the sample.

Note that the percentages in Table 1 are unweighted. Technically, if one wishes to make valid statements about the whole population of Queensland, sample statistics such as percentages should be weighted to take account of the effect of household size when randomly sampling one person from each household, or to take account of other aspects of the sampling structure. None of the statistics in this paper are weighted, for two main reasons. First, the emphasis of the paper is on exploring predictors of crime victimisation, and to include household size as a covariate in the cross tabulations would substantially increase the complexity of the analyses while creating a problem of consistency. Why privilege household size as a control variable, thus introducing the complexities of three-way cross tabular analysis, when many other variables, such as age or gender, deserve primacy on both theoretical and empirical grounds as covariates?

Secondly, weighting the data produces only slight differences in the percentages and log odds reported. For example, if the data had been weighted the percentage of 15-19 year old non-victims would have dropped from 51.5 per cent (unweighted) to 50.6 per cent (weighted). Nearly all other comparisons of weighted and unweighted percentages yield equally slight differences.

As the analyses were conducted primarily to explore the relationships among the variables, rather than to generate population estimates, it was felt that the slight differences between the weighted and unweighted figures would have little impact on the overall interpretation. Consequently, all graphs are based on unweighted percentages, and depict (appropriately) odds analyses of the sample. Although strictly speaking they should not be interpreted as population estimates but as sample contrasts or statistics, when the data are presented in graphical form the distinction is mostly of little practical importance.

INDEPENDENT VARIABLES

The groups of independent variables included in these analyses were (a) personal descriptors (b) respondents' attitudes to and perceptions of their suburb/area and (c) interviewers' observations of the suburb/area. The personal descriptors included in the analysis were age, gender, marital status, labour status, education, Aboriginal or Torres Strait Islander, language spoken at home, housing status, country of birth and locality.

The respondents' attitudes to and perceptions of their suburb or area were indicated in their responses to a range of survey questions, including questions concerning the length of time the respondent had lived in the suburb/area, how satisfied they were with their suburb/area, and their perception of the level of crime in the suburb or area. Their perception of their suburb or area was based on their response on a four point Likert scale, from *very common* to *not at all common* on the frequency of the following public incivilities: (a) graffiti on the walls or buildings, (b) drunks or vagrants on the streets, (c) rubbish or litter lying about, (e) homes or gardens in bad condition, and (f) noisy neighbours or loud parties.

The interviewers were asked to provide an independent evaluation of the area or suburb by listing the frequency of a range of non-residential buildings visible from the property. These included hotels, schools, factories, churches and hospitals.

STATISTICAL ANALYSIS

The relationships between the two dependent variables and the independent variables were examined using a series of chi-square analyses of two-way tables. Post-hoc analyses were conducted to explore significant bivariate relationships. These analyses were carried out through orthogonal decomposition of chi-square statistics for the two-way tables. The orthogonal contrasts for the major dependent variable are presented in Table 2.

TABLE 2 - DECOMPOSITIONS FOR THE MAJOR DEPENDENT VARIABLE

	Contrasts	n1	n2	Total
C1	Victim v non-victim	4768	1547	6315
C2	Verbal abuse v crime against the person	671	876	1547
C3	Property victim only v assault victim	433	443	876
C4	Domestic assault v other assault	58	385	443
C5	Single non-domestic assault v multiple non-domestic assaults,	201	184	385
C6	Multiple non-domestic assaults v at least one non-domestic	117	67	184

The results of these analyses are presented graphically, plotting the log of the odds ratio for the probability of victimisation. Using this plotting process, a log odds ratio of zero indicated equal risk, but the points on the vertical axis have been relabelled to indicate untransformed odds ratios (so that the "equal risk" line corresponds to an odds ratio of 1.0).

RESULTS

PERSONAL DESCRIPTORS

Of the personal descriptors included in the analyses, age, gender, marital status, education, labour status, housing status and urban or rural location were significantly related to the respondents' experiences with crime (Table 3).

TABLE 3 – RELATIONSHIP BETWEEN PERSONAL DESCRIPTORS AND THE NATURE OF VICTIMISATION (ASSAULT INCLUDING THREAT)

Personal Descriptors	df	G ²
Age	60	834.45**
Gender	6	119.19**
Marital status	36	570.28**
Aboriginal or Torres Strait Islander	12	8.26
Language spoken at home	48	44.40
Education	48	253.14**
Labour status	54	706.22**
Housing status	30	248.97**
Country of Birth	48	43.09
Urban/Rural	6	28.77*

Notes:

* $p < .05$

** $p < .01$

As there is not space to present the decompositions for all statistically significant bivariate relationships, age, gender, and labour status will be examined graphically to illustrate key relationships.

AGE

Three of the six orthogonal contrasts were significantly associated with age. The first significant contrast ($G^2(10) = 680.7, p < .001$) compared the risks of victimisation for any kind of offence, including verbal abuse, with not being a victim at all for each age group. Plotted in Figure 2 are the percentages of victims in each age group. The younger age groups were more likely to be the victim of a crime (including verbal abuse). Almost 50 per cent of respondents under the age of 25 had been the victim of a crime. Fewer than 5 per cent of respondents over the age of 65 had been the victim of a crime.

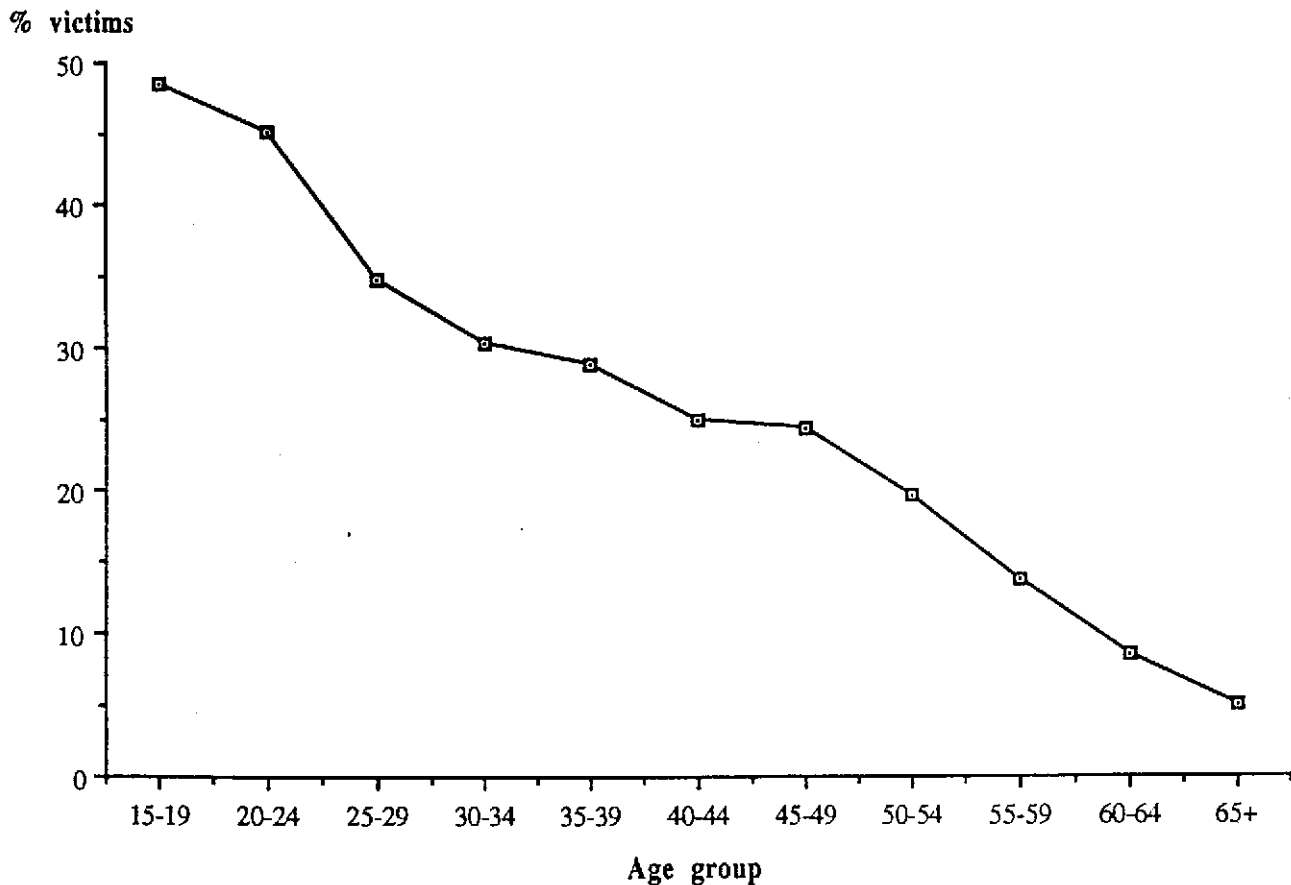


FIGURE 2 - RISK OF BEING A VICTIM OF AN OFFENCE AGAINST THE PERSON (INCLUDING VERBAL ABUSE), BY AGE

The second significant contrast ($G^2(10) = 53.10, p < .001$) compared, amongst victims of an offence against the person, the risk across age groups of being the victim of verbal abuse only with the risk of being the victim of a property offence or assault. This contrast is presented graphically in Figure 3. For each age group, the log odds ratio of victimisation for verbal abuse to victimisation for all other personal crime is plotted. This enables the comparison at each age group of the risk of victimisation of verbal abuse and the risk of victimisation for all other crimes. The 'equal risk' line corresponds to an odds ratio of 1.0 and a log odds ratio of zero. Of respondents who reported being a victim of an offence, the younger age groups were at a higher risk of victimisation for "real" crimes than for verbal abuse. Between the ages of 35 and 49, respondents were about equally likely to be the victim of either verbal abuse or a "real" crime. However, if an older person reported being the victim of an offence, the offence was more likely to be verbal abuse than the more serious assault or property crimes. Respondents in the 15-19 year old age category who reported being the victim of an offence against the person reported being a victim of a serious crime three times more often than being the victim of verbal abuse.

Relative risk - victimisation for verbal abuse vs crime victimisation

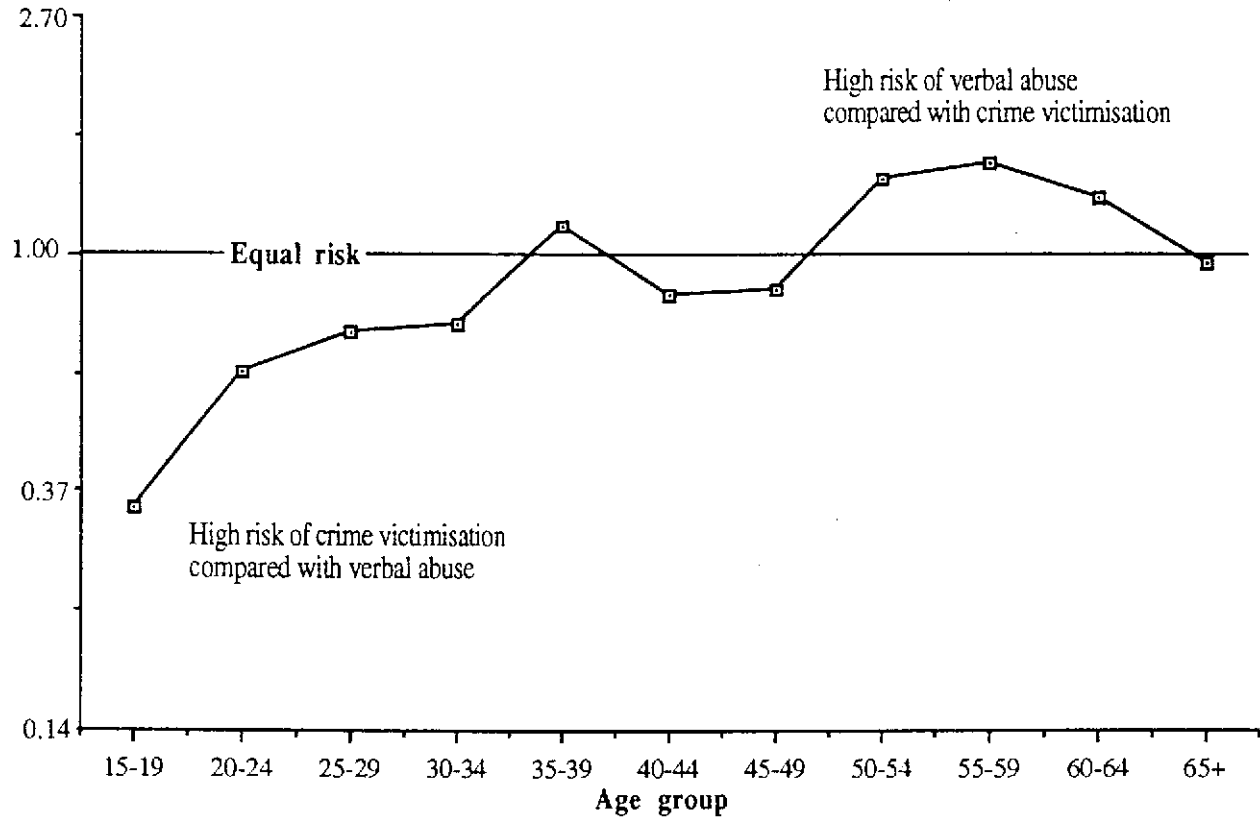


FIGURE 3 – VICTIMS OF OFFENCES AGAINST THE PERSON: THE RISKS OF VICTIMISATION FOR VERBAL ABUSE ONLY, COMPARED WITH VICTIMISATION FOR ASSAULT OR PROPERTY, BY AGE OF VICTIM

The third significant contrast ($G^2(10) = 39.42, p < .001$) is amongst the victims of "real" crime (excluding verbal abuse). At each age group the risk of property victimisation is compared with the risk of assault victimisation (Figure 4). Young people, particularly those aged 20-24, were at greater risk of an assault (including threats) than a property crime. Conversely, victims over the age of 45 years were substantially more likely to be victims of a property crime than a violent crime.

Relative risk - property victimisation
vs assault victimisation

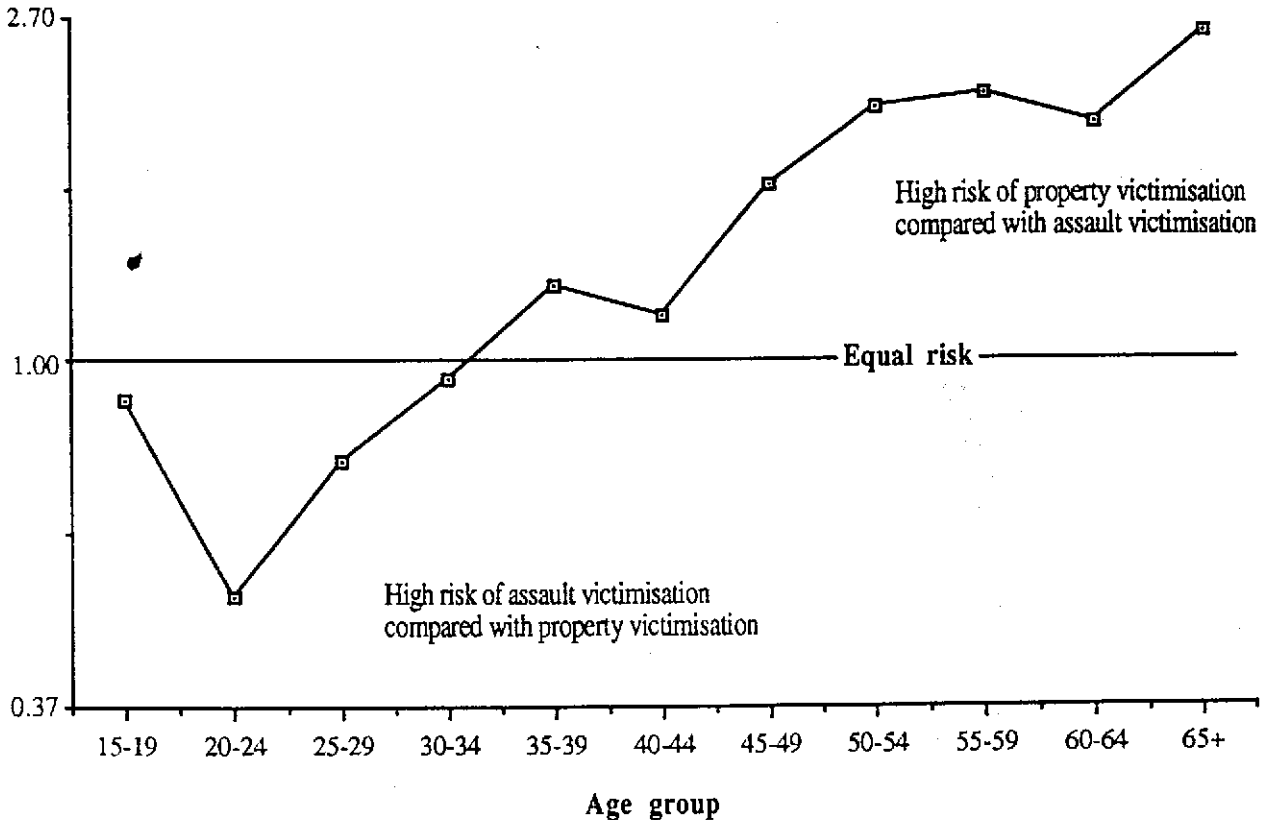


FIGURE 4 - VICTIMS OF OFFENCES AGAINST THE PERSON: THE RISKS OF VICTIMISATION FOR PROPERTY OFFENCES ONLY, COMPARED WITH VICTIMISATION FOR ASSAULT, BY AGE OF VICTIM

In summary, young people are much more often victimised than older people; they are more often the victims of "real" crimes rather than verbal abuse; and when they are the victims of "real" crime they are more likely than older people to be victims of assault rather than property crime.

GENDER

Only two of the six orthogonal contrasts were significantly associated with gender. The first significant contrast ($G^2(1) = 39.28, p < .001$) examined the risks of being a victim with the risks of not being a victim for each sex. Plotted in Figure 5 are the percentage of respondents in each category who reported being victimised in the previous 12 months. Males were more likely to be the victim of a crime than females, with 28.3 per cent of males reporting victimisation compared with 21.4 per cent of females.

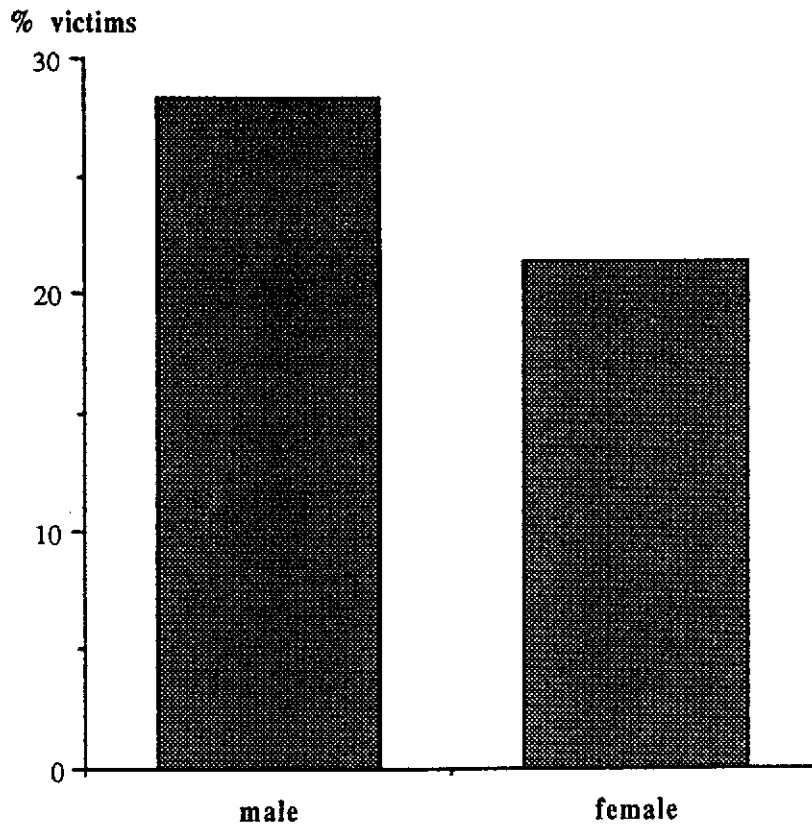


FIGURE 5 – RISK OF BEING A VICTIM OF AN OFFENCE AGAINST THE PERSON (INCLUDING VERBAL ABUSE), BY GENDER

The non-significant contrasts for verbal assault versus other assault, property victimisation versus assault victimisation, single non-domestic assault versus multiple non-domestic assaults, and multiple non-domestic assaults versus non-domestic assault and property indicate that both male and female victims were equally at risk of these personal offences. The other significant contrast compared victims of domestic assault with victims of non-domestic assault ($G^2(1) = 72.21, p < .001$). Figure 6 indicates that both men and women were at greater risk of non-domestic assault than domestic assault. However, women were at far greater risk of domestic assault than men.

This gender pattern was repeated for the second dependent variable involving serious physical assaults (excluding threats). Males (4.9%) were almost twice as likely as females (2.6%) to report being the victim of a serious assault. For both sexes the majority of reported serious assaults were not domestic (the perpetrator was not a partner or ex-partner). However, 38.8 per cent of females who claimed that they had been the victim of a serious assault reported that the assault had been perpetrated by a partner or ex-partner, compared with only 2.1 per cent of males. Although it is certain that the incidence of domestic violence is grossly under-reported, it is apparent from these data that females were at greater risk than males of being assaulted by a partner.

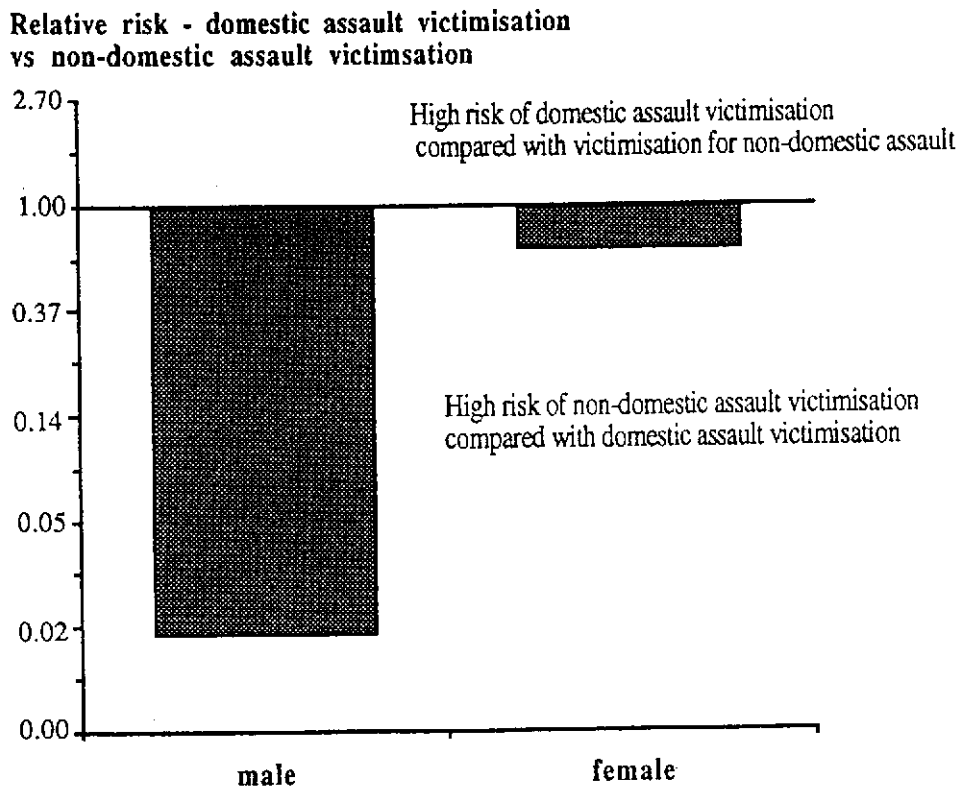


FIGURE 6 – VICTIMS OF ASSAULT (INCLUDING THREAT): THE RISKS OF VICTIMISATION FOR DOMESTIC ASSAULTS COMPARED WITH VICTIMISATION FOR NON-DOMESTIC ASSAULTS, BY GENDER OF THE VICTIM

AGE BY GENDER INTERACTION

To explore a suspected interaction between age and gender, an additional analysis was performed examining reported victimisations for assault (excluding threats and verbal abuse). Two-way analysis of variance was carried out, using an arc-sine transformation on the percentage of victims as the dependent variable. A significant interaction between age and gender was found ($\chi^2(10) = 35.38, p < .001$). The percentage of reported victimisation for males and females across each of the age groups are set out in Figure 7.

Younger respondents were at greater risk of being the victim of a physical assault than older respondents. However, the difference between the two sexes observed in the earlier analysis was only apparent in the under 35 year olds. Both males and females over the age of 35 were about equally at a low risk of a physical assault. Young males were more at risk of a physical assault than young females and they were at risk until an older age. Of all females, females in the 15-24 age group were at the highest risk. By the time a female reached 25, this risk had levelled out: not until their mid-30's do males reach this plateau.

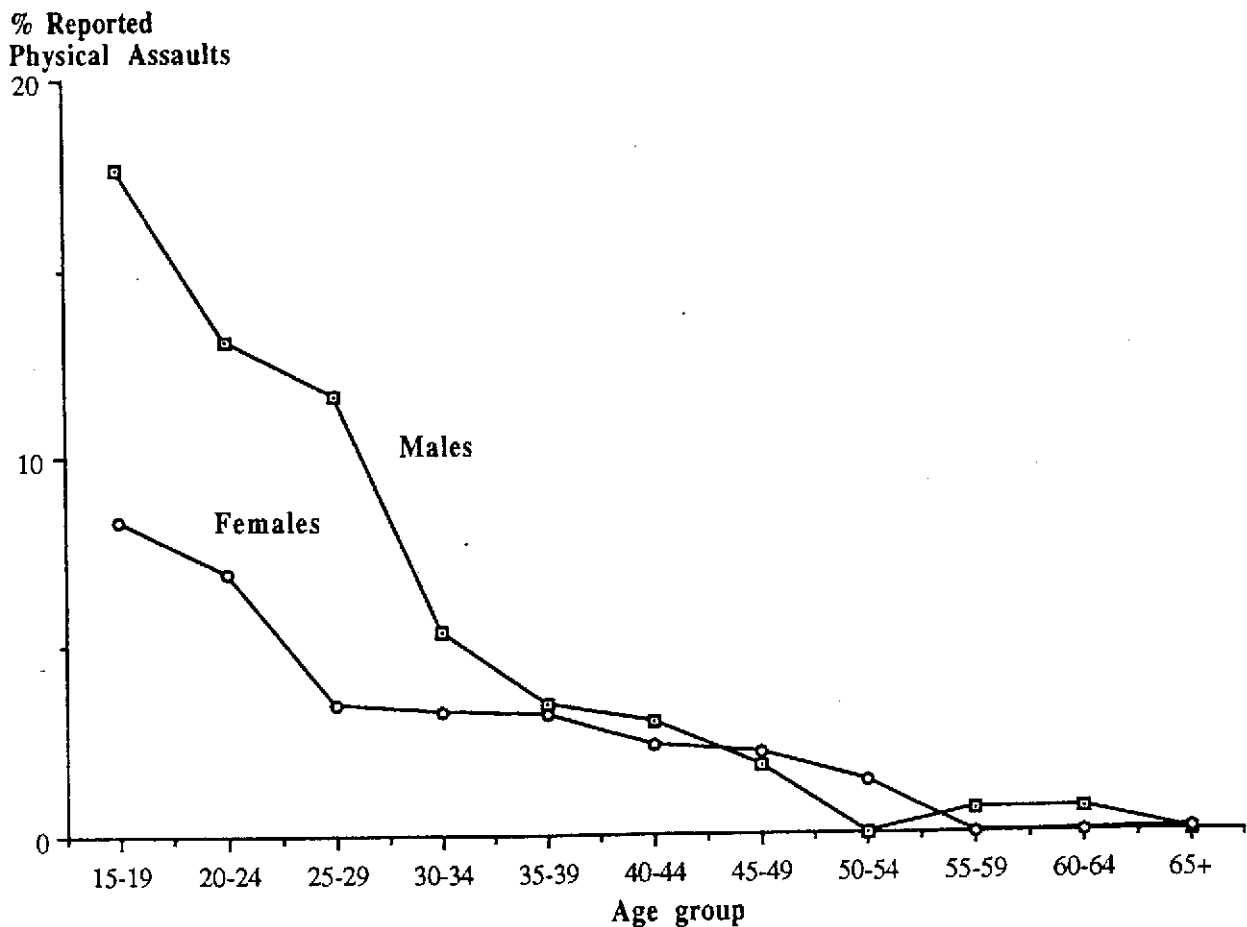


FIGURE 7 – RISK OF BEING THE VICTIM OF A PHYSICAL ASSAULT BY AGE AND GENDER

To summarise the effects of age and sex on victimisation risks: young people and males are victimised more overall; young people are more at risk of actual crimes against the person rather than verbal abuse alone; when victimised for personal crimes, they are more likely to be the victims of assault rather than property crime; when assaulted, young people are more likely than older people to be physically assaulted rather than threatened; young men (especially teenagers) are more at risk of physical assault than young women; but women are at more risk than men of being assaulted by their partners, even though overall they report more often being the victim of an assault by someone other than a partner. It is likely, however, that this last effect is an artefact of low reporting rates for domestic violence.

LABOUR FORCE STATUS

Five of the six contrasts were significantly related to labour force status. The labour force status of the respondent was significantly related to their risk of being the victim of a crime ($G^2(9) = 550.85, p < .001$). Almost 50 per cent of respondents in full-time study or on a sole parent's pension reported being the victim of a crime (Figure 8). Only 5 per cent of respondents on an age pension or retired were the victims of any type of crime. This finding probably partly reflects the effects of age, with students being in the younger age groups and respondents receiving an age pension being in the older age groups.

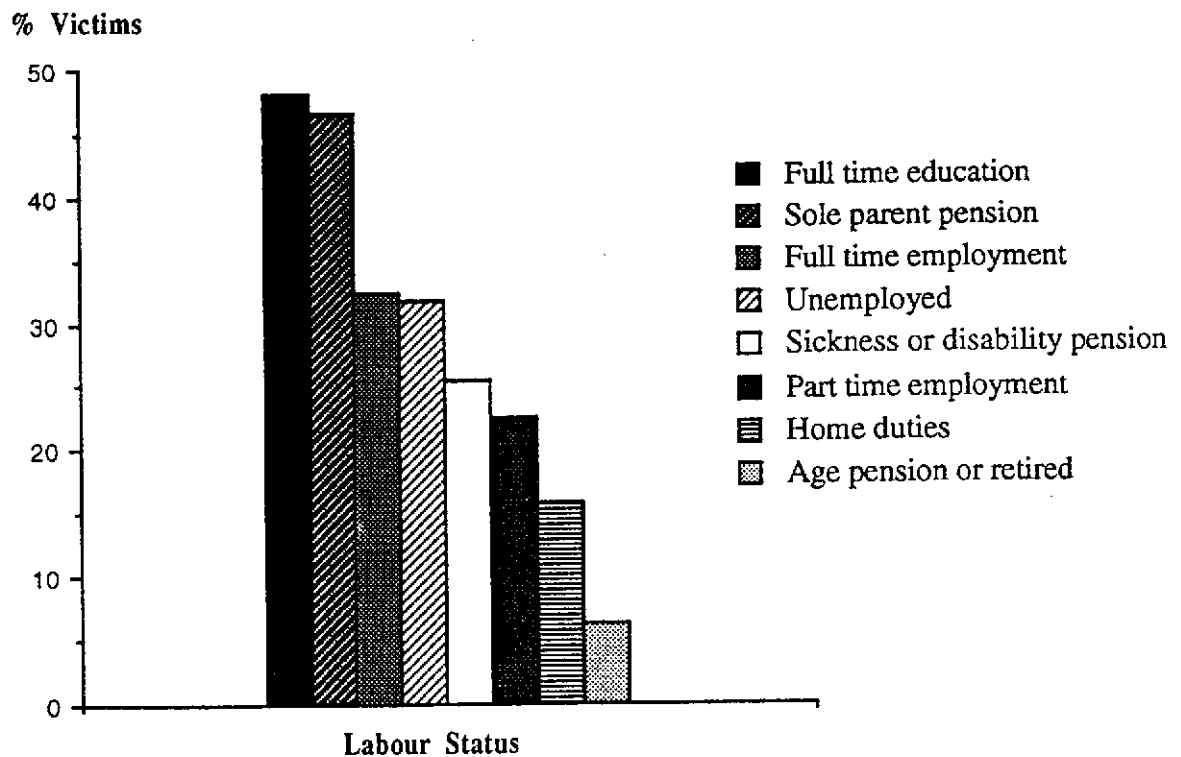


FIGURE 8 - RISK OF BEING A VICTIM OF AN OFFENCE AGAINST THE PERSON (INCLUDING VERBAL ABUSE), BY LABOUR STATUS

Victims on the age pension, or who were retired, and victims who reported their occupation to be home duties, were at higher risk of verbal abuse compared with 'real' victimisation ($G^2(9) = 38.88, p < .001$). Conversely, victims who were full-time students or on a sole parent pension were at greater risk of victimisation for "real" crime compared with verbal abuse (Figure 9), reflecting to some extent once again the effects of age.

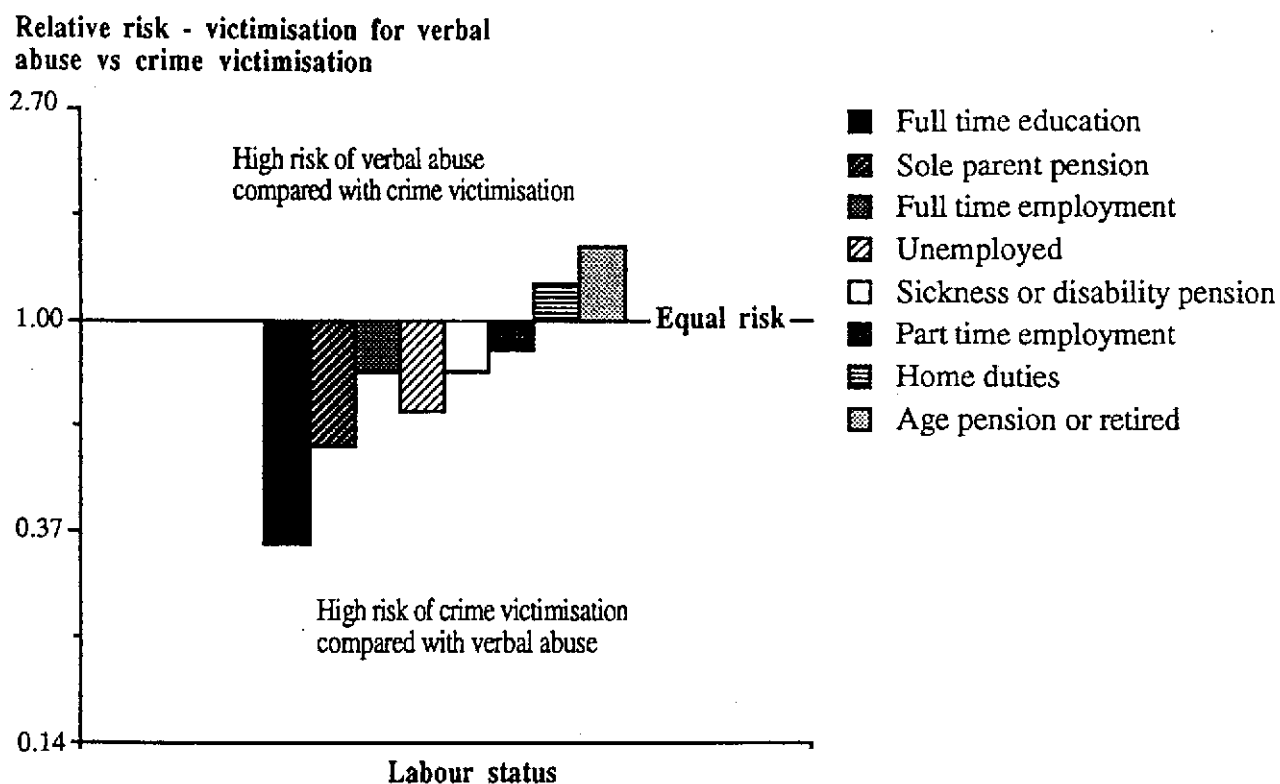


FIGURE 9 – VICTIMS OF OFFENCES AGAINST THE PERSON: THE RISKS OF VICTIMISATION FOR VERBAL ABUSE ONLY, COMPARED WITH VICTIMISATION FOR ASSAULT OR PROPERTY, BY LABOUR STATUS OF THE VICTIM

When the labour force status of victims of property offences was compared with the status of victims of assault a significant difference was found ($G^2(9) = 27.45, p < .001$). Victims receiving an age pension or who were retired were more likely to report being the victim of a property offence than an assault. Victims on a sole parent pension, the unemployed or those on a sickness or disability pension were at higher risk of an assault than a property offence. Victims who reported their labour force status as full-time education, full or part-time employment were equally at risk of property and assault victimisation (Figure 10).

Relative risk: property victimisation vs. assault victimisation

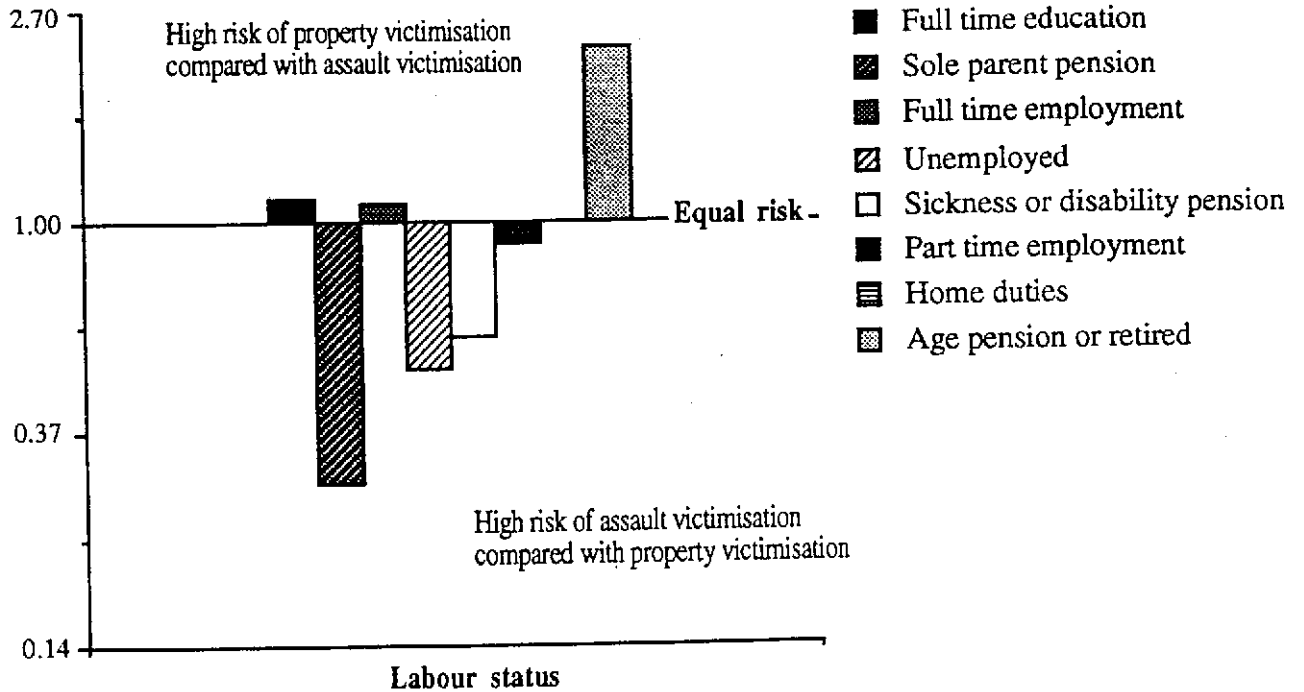


FIGURE 10 – VICTIMS OF OFFENCES AGAINST THE PERSON: THE RISKS OF VICTIMISATION FOR PROPERTY OFFENCES ONLY, COMPARED WITH VICTIMISATION FOR ASSAULT, BY LABOUR STATUS OF THE VICTIM

Labour force status was an important factor when comparing victims of domestic assault with victims of a non-domestic assault (Figure 11). Victims of assault who were recipients of a sole parent pension were more likely to report the assailant to be a spouse or defacto ($G^2(9) = 55.85, p < .001$). Victims of assaults in all the other categories of labour force status were more likely to be the victim of a non-domestic assault than a domestic assault.

Relative risk - domestic assault victimisation vs. non-domestic assault victimisation

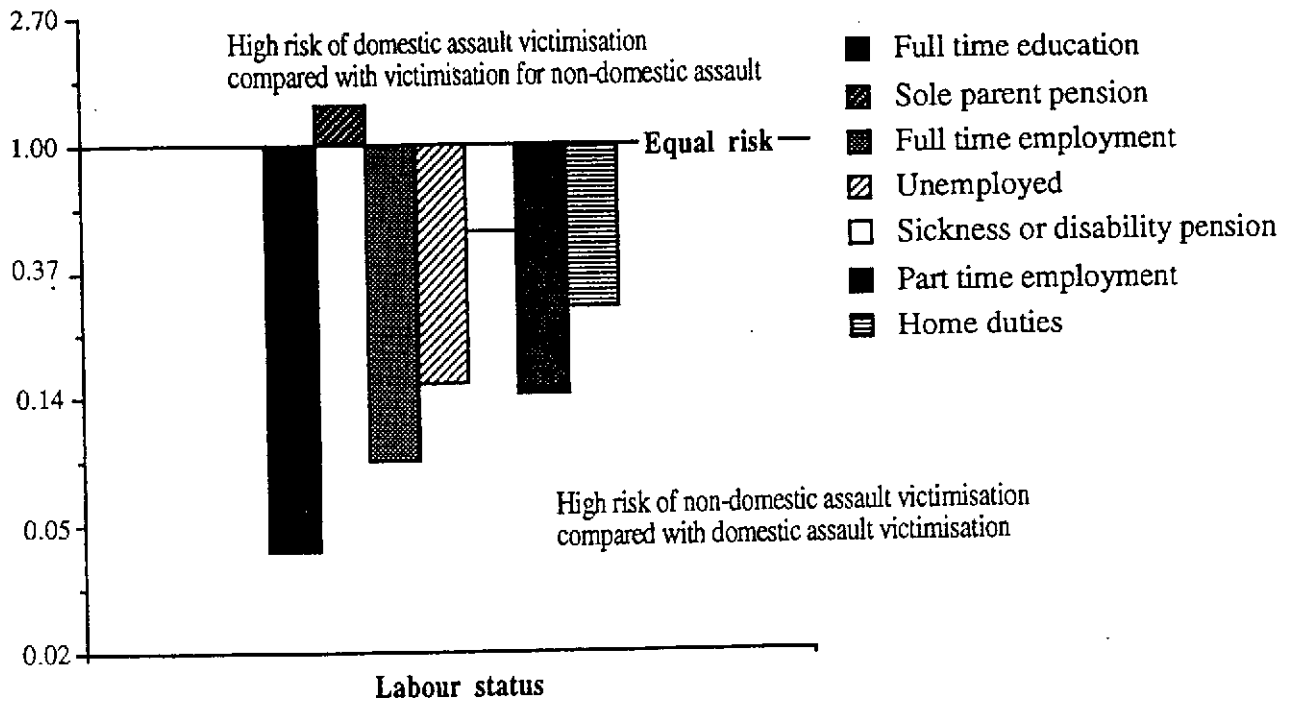
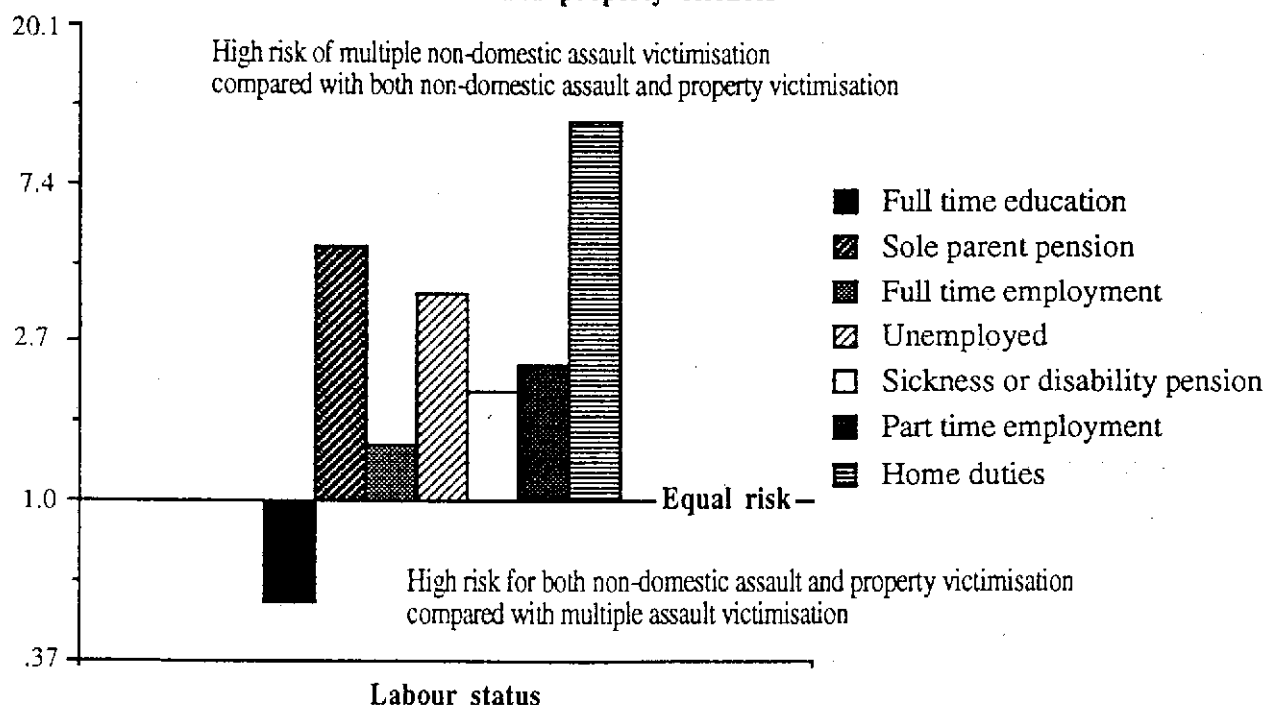


FIGURE 11 - VICTIMS OF ASSAULTS (INCLUDING THREATS): THE RISKS OF VICTIMISATION FOR DOMESTIC ASSAULTS COMPARED WITH VICTIMISATION FOR NON-DOMESTIC ASSAULTS, BY LABOUR STATUS OF THE VICTIM

When the labour force status of victims of a single non-domestic assault was contrasted with victims of multiple non-domestic assaults no significant differences were found. However, when victims of multiple non-domestic assaults were compared with victims of at least one non-domestic assault and one property offence significant differences with respect to labour status were found ($G^2(7) = 22.79, p < .01$). Of the respondents who were victims of multiple offences against the person, students were at higher risk of both non-domestic assault and property victimisation (Figure 12). Victims of multiple offences in all other labour force status groups were more at risk of multiple non-domestic assaults. The group most at risk for multiple non-domestic assault was those which reported their occupation to be home duties. However, the number of respondents involved was very small. Twelve of the victims of multiple offences against the person reported their occupational status to be home duties, and eleven of these reported being the victim of multiple non-domestic assaults. The next highest at risk group was sole parents. In this analysis the assaults are not domestic (the assailant was not identified as a spouse, ex-spouse, de facto or ex-de facto), but because those identifying their occupations as 'home duties' or as 'sole parents' are likely to be women it is possible to speculate that these assaults were in fact perpetrated by someone well known to the victim.

Relative risk - multiple non-domestic assault victimisation vs. both non-domestic assault victimisation and property offences



NB. There were 5 victims in the category 'age pension or retired' who were all victims of multiple non-domestic assault

FIGURE 12 - VICTIMS OF MULTIPLE OFFENCES AGAINST THE PERSON: THE RISKS OF VICTIMISATION FOR MULTIPLE NON-DOMESTIC ASSAULTS COMPARED WITH VICTIMISATION FOR BOTH NON-DOMESTIC ASSAULTS AND PROPERTY OFFENCES, BY LABOUR STATUS OF THE VICTIM

SUMMARY FOR PERSONAL DESCRIPTORS

Examination of the respondents' personal descriptors provide substantial evidence which dispels the notion of random victimisation. Certain groups of respondents were at higher risk of victimisation. Furthermore, when the nature of that victimisation was examined, relationships were found between the personal descriptors and specific crimes. It is possible to speculate on the interactions among these personal descriptors which would identify groups of high risk individuals. Unfortunately, because of the relatively small numbers of victims in some of the categories, it was not possible to statistically explore these interactions.

Respondents who were in full-time education, and those who were unemployed, were at very high risk of being a victim and the victim of a "real" crime. However, the type of crime they were at risk of was different for the two groups. Victims who were students were equally at risk of property, assault victimisation or both property and assault victimisation, whereas unemployed victims were at greater risk of an assault compared with a property victimisation. It can be speculated that both these groups of victims consist predominantly of young males who live (by normal standards) somewhat "chaotic" lifestyles. However the difference in risk of victimisation for property and assault victimisation probably reflects the difference between the two groups in socio-economic status. Students are more likely to be of higher socio-economic status and consequently have more property to steal. Unemployed people are of lower socio-economic status and have less property to steal.

Males were found to be at greater risk of victimisation than females. However, female victims of assault were at a higher risk of a domestic assault than were male victims of assault. Furthermore, respondents who reported their labour force status as recipients of a sole parent pension were at higher risk of assault than all over labour force status categories. It can be assumed that the majority of respondents on the sole parent pension are female. It is therefore not surprising that this group of respondents reported being most at risk of domestic assault.

Older people, regardless of gender, were at a very low risk of being the victim of a personal offence. Those who were a victim were very unlikely to be the victim of an assault. If they were the victim of a "real" crime, this crime was most likely to be a property offence.

RESPONDENTS' ATTITUDES TO AND PERCEPTIONS OF THEIR SUBURB/AREA

Table 4 presents the results of the bivariate analyses examining the relationship between the respondents' ratings on their attitudes to and perceptions of their suburb or area and their crime victimisation experiences. All the relationships between the major dependent variable and the respondents' attitudes to and perceptions of their suburb or area were statistically significant.

TABLE 4 – RELATIONSHIP BETWEEN THE NATURE OF VICTIMISATION (MAJOR DEPENDENT VARIABLE) AND THE RESPONDENTS' SATISFACTION WITH AND PERCEPTION OF THEIR AREA/SUBURB

Satisfaction with the suburb/area	df	G ²
Years in this suburb/area	30	232.2**
How likely to move in next two years	30	317.16**
Satisfied with this suburb/area	30	223.35**
Do people in this suburb/area help each other or go own way?	24	91.27**
Perception of crime in the area	36	217.26**
Perception of the suburb/area		
Graffiti on walls and buildings	30	168.51**
Drunks and vagrants on the streets	30	311.51**
Rubbish and litter lying about	30	207.25**
Homes and gardens in bad condition	30	167.87**
Noisy neighbours or loud parties	30	220.33**
Vandalism and deliberate damage to property	30	282.47**

Notes:

* $p < .05$

** $p < .01$

Once again there is not enough space to present graphically all the significant decompositions. However, similar patterns of victimisation were found across all the variables assessing the respondents' attitudes to and perceptions of their area or suburb. For the majority of the variables only two of the contrasts were significant. Not surprisingly the first contrast, comparing non-victims with the victims of any offence against the person (including verbal abuse) was significant across all variables. The second significant contrast compared the victims of property offences with assault victims.

The graphical analysis of the decompositions associated with the variable asking respondents to rate the frequency of drunks and vagrants on the street will be presented since it conveniently captures most of the relevant information. Figure 13 presents the results of the first significant contrast ($G^2(5) = 254.14$, $p < .001$). If the respondent reported drunks and vagrants on the streets as being very common they were more likely to be the victim of a crime against the person.

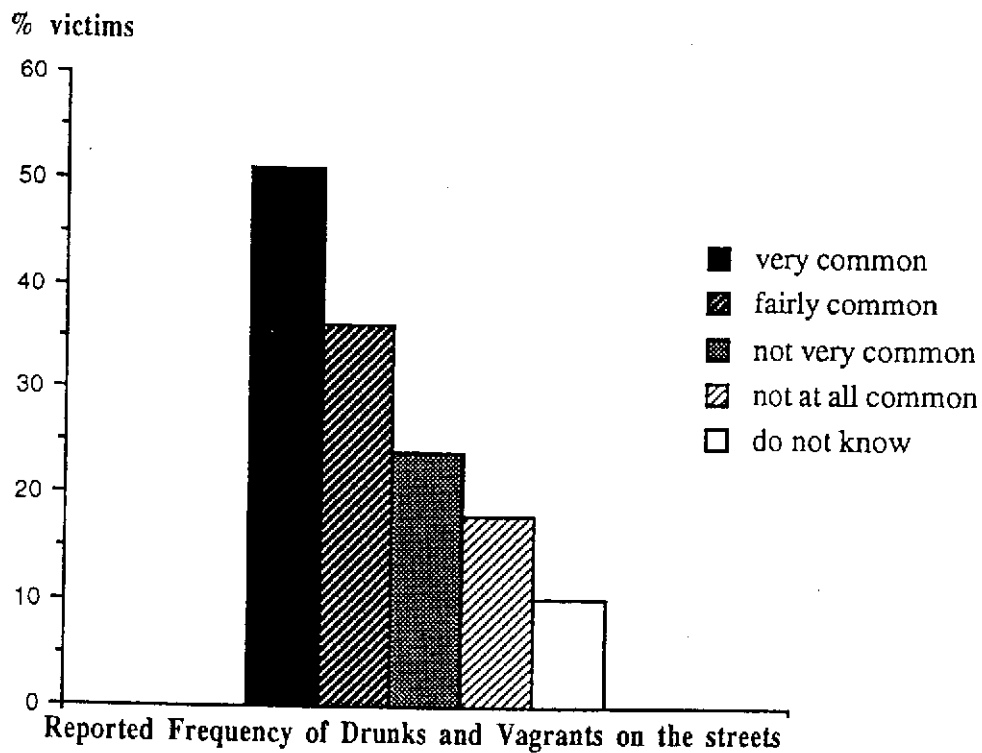


FIGURE 13 – RISK OF BEING THE VICTIM OF AN OFFENCE AGAINST THE PERSON (INCLUDING VERBAL ABUSE), BY REPORTED FREQUENCY OF DRUNKS AND VAGRANTS ON THE STREETS

Victims who reported drunks and vagrants in the street being a very or fairly common event were at higher risk of an assault compared to a property victimisation (Figure 14). Victims who lived in areas in which drunks and vagrants in the street were not very common were at greater risk of a property crime compared to an assault victimisation.

All the variables asking about the respondents' attitudes to and perceptions of their area or suburb showed similar patterns. It is assumed that these variables are capturing the level of social disorganisation in an area or suburb. The higher the levels of social disorganisation the more likely residents are to be the victim of a crime, and victims in "disorganised" areas are more likely to be victims of assault rather than a property crime.

Relative risk - property victimisation vs assault victimisation

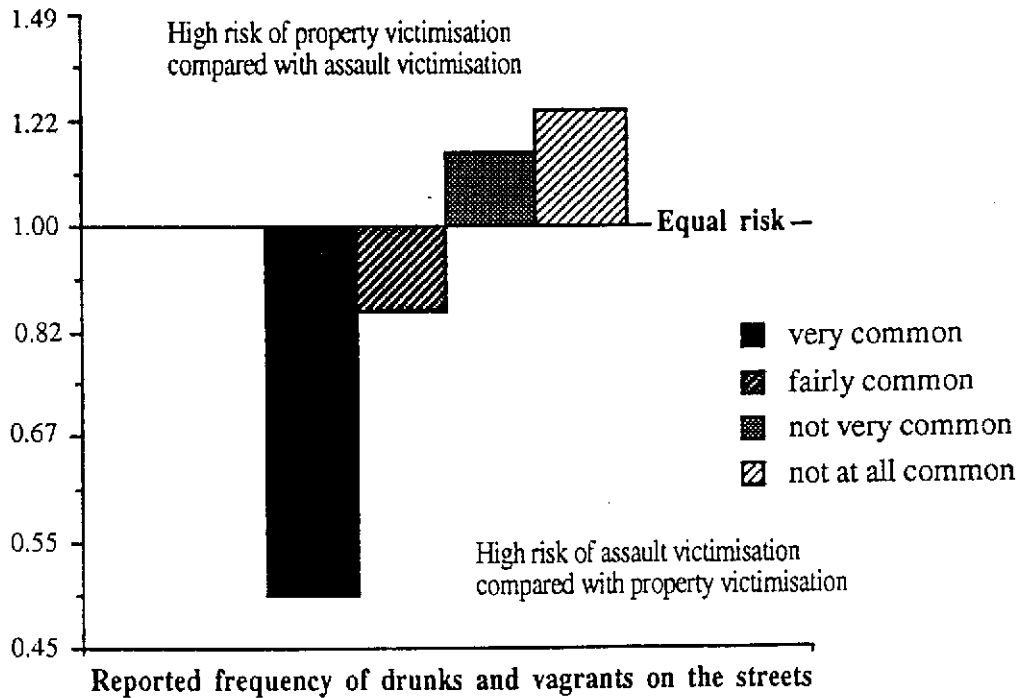


FIGURE 14 - VICTIMS OF OFFENCES AGAINST THE PERSON: THE RISKS OF VICTIMISATION FOR PROPERTY OFFENCES ONLY, COMPARED WITH VICTIMISATION FOR ASSAULT, BY REPORTED FREQUENCY OF DRUNKS AND VAGRANTS ON THE STREETS

INTERVIEWERS OBSERVATIONS OF THE SUBURB/AREA

The interviewers were asked to provide independent observations of the area or suburb by reporting on the types of buildings visible from the respondent's residence. As indicated in Table 5, only three of the building types were significantly related to the respondents' victimisation experiences.

TABLE 5 – RELATIONSHIP BETWEEN THE NATURE OF VICTIMISATION (MAJOR DEPENDENT VARIABLE) AND THE INTERVIEWERS' REPORT ON THE SUBURB/AREA

	df	G ²
Type of building visible from household	24	32.85
No non-residential	6	2.96
Bank, shop, restaurant, petrol station	6	11.52
Hotel	6	12.64*
Factory, warehouse, industrial	6	5.87
Office	6	21.99**
School, college, university	6	5.25
Church	6	4.23
Hospital, clinic, nursing home	6	9.36
Sports ground, public park	6	5.48
Farm buildings	6	24.61**
Other non residential	6	5.58

Notes:

* $p < .05$

** $p < .01$

When the subsequent analyses were performed examining the significant relationships between the major dependent variable and the interviewers reported sighting of office buildings and farm buildings, only the first contrast, the likelihood of the respondent being a non-victim compared to the victim of any crime, was found to be significant (office buildings; $G^2(1) = 7.13, p < .01$; farm buildings; $G^2(1) = 17.94, p < .001$). Respondents who had office buildings visible from their dwelling were more likely to be the victim of a crime than respondents who did not have office buildings visible from their dwelling. The opposite situation was observed when farm buildings were visible from the property, with these respondents being less likely to have been a crime victim than respondents who could not see a farm building from their house.

Analyses examining the relationship between the interviewer's observation of a hotel from the respondent's property and the orthogonal contrasts again found only one contrast to be significant. Surprisingly, respondents who lived in sight of a hotel were no more likely to be the victim of a crime than all other

respondents. However, of respondents who were the victim of a crime, those living in sight of a hotel were more likely to be the victim of a "real" crime (84.6%) than those not living in sight of a hotel (56.1%) ($G^2(1) = 9.52, p < .01$).

DISCUSSION

Overall, the results of the analysis of the 1991 QCVS support the existing literature on victimisation, which shows that crime victimisation is rare and that risks are distributed unequally. The results indicated that young, single males were at greatest risk, particularly for assault. This pattern of risk was also found among respondents who lived in areas with a high incidence of social incivilities.

Substantial evidence was found to support relationships between the level of social disorganisation in a suburb or area and the nature of victimisation. Victims of any offence were more likely than non-victims to live in an area in which respondents reported a range of social incivilities, including graffiti on the walls, rubbish and litter lying around, vandalism, noisy neighbours, homes and gardens in bad conditions and drunks and vagrants on the streets. Furthermore, respondents who reported high mobility and low satisfaction were more likely to be the victim of any offence than victims who reported low mobility and high satisfaction. Of victims, assault victims were more likely to live in a socially disorganised suburb or area compared with victims of a property offence.

The relationship between social disorganisation and the nature of victimisation supports Skogan's (1992) assertion that it is extremely important to include both ecological factors as well as individual or personal factors when examining the probability of victimisation. It is not possible to disentangle completely individual variables and ecological variables, as areas high in social disorganisation are also areas in which young, single, unemployed people congregate. Nevertheless, these ecological circumstances are the most highly correlated with criminal victimisation and especially assault victimisation. Evidently, the risk of personal victimisation is not evenly distributed even amongst young people. Certain individuals are at higher risk, as are individuals living in specific social situations.

The interviewers' perceptions of the area or suburb provided some support for the increasing risk of victimisation within specific geographical locations, but this support was not as strong as expected. Apparently, it is the behaviour of individuals within certain locations that is highly associated with the increased risk of victimisation, rather than the actual presence of certain buildings in the area or suburb. However, the presence of a hotel was associated with an increased risk of personal victimisation. When this is examined in conjunction with the increased presence of drunks and vagrants it is apparent that alcohol plays an important role in the nature of victimisation. Unfortunately, as indicated earlier, it was not possible to explore further the role of alcohol in the respondents' victimisation experience, as the QCVS only collected data about alcohol in relation to verbal abuse. In the light of both the literature and the results of the analyses, this was clearly a major defect in the design of the survey.

Contrary to previous research, little evidence was found that victims of multiple crimes were any different from victims of a single crime. This may have been due to the way the nature of victimisation categories were formed, but it was probably more related to the reluctance of respondents to report domestic violence. Repeat victimisations occur more frequently in relationship crimes (Farrell & Pease 1993). Domestic violence is arguably the most under-reported and under-recorded crime. However, in these data the problem was compounded as the individual interviews may not have always been conducted in private. Consequently, in situations of domestic violence the victim and perpetrator may have been present during the interview. Furthermore, many respondents may not have considered crime within the household as "real" crime - "real" crime occurring only between strangers. Women appeared readier to report assaults by non-intimates than by intimates.

Although too few cases of family violence were reported for detailed analysis, those at greatest risk of such violence appeared to be women who were separated, divorced, or living in defacto relationships. Unfortunately, it was not possible to determine if the assaults on separated or divorced women occurred prior to the separation. Domestic violence is, of course, a major factor in separation and divorce. However, domestic violence does not stop at the point of separation. US Department of Justice figures suggest that up to 75 per cent of domestic assaults reported to the police occur after separation (Hart, Stuehling, Reese, & Stubbing 1990). The question then arises whether domestic violence escalates after separation. If this were so, it would have substantial implications for the protection of women and the prevention of violence. However, an alternative explanation may be that women are more prepared to identify and report violence after the separation.

This analysis of the 1991 Queensland Crime Victim Survey has raised more questions than it has answered. To explore these issues, victims need to be asked about their lifestyles, social relations, protective and policing arrangements, and the circumstances leading up to and surrounding the incident. Both the macro and micro environment of victims need be explored using qualitative as well as quantitative data collection techniques. These surveys would use selective sampling techniques to maximise the use of resources and to ensure high risk populations are adequately surveyed. Progress in criminological research on victimisation clearly depends, in part, on the use of different kinds of surveys, designed with more explicit theoretical frameworks, which address these and many other specific research questions, such as the role of victim precipitation, the long term psychological impact of victimisation, and the impact of victimisation on fear of crime.

ACKNOWLEDGMENTS

We would like to thank Jeff Clark for his assistance in carrying out the analyses. We are also indebted to David Brereton for his helpful comments on an earlier draft of this paper, and to officers of the Government Statistician's Office for comments on our methods of analysis.

REFERENCES

- Criminal Justice Commission 1994, *Murder in Queensland*, Criminal Justice Commission, Brisbane.
- Davidoff, L. & Dowds, L. 1989, 'Recent Trends in Crimes of Violence Against the Person in England and Wales', *Home Office Research and Planning Unit Research Bulletin, No. 27*, HMSO, London.
- Farrell, G. & Pease, K. 1993, 'Once Bitten, Twice Bitten: Repeat Victimisation and its Implication for Crime Prevention', *Crime Prevention Unit Paper 46*, Home Office, London.
- Fattah, E. A. 1991, *Towards a Critical Victimology*, St. Martin's Press, New York.
- Goldstein, A. P. 1994, *The Ecology of Aggression*, Plenum Press, New York.
- Government Statistician's Office 1992, *Crime Victims Survey: Queensland 1991*, Government Statistician's Office, Brisbane.
- Hart, B., Stuehling, J., Reese, M. & Stubbing, E. 1990, *Confronting Domestic Violence: Effective Police Responses*, Reading, Pennsylvania Coalition Against Domestic Violence, Pennsylvania.
- Hamel, R. (in press), 'Preventing Alcohol-Related Injuries', in Sutton, A. & O'Malley, P. (eds.), *Crime Prevention in Australia: Current Issues and Contemporary Developments*, Federation Press, Sydney.
- Hamel, R. & Clark, J. 1994, 'The Prediction and Prevention of Violence in Pubs and Clubs', *Crime Prevention Studies*, vol. 3, pp. 1-46.
- Matchett, R. 1988, *Beyond these Walls: Report of the Queensland Domestic Violence Task Force*, Department of Family Services, Brisbane.
- Mayhew, P. & Hough, M. 1991, 'The British Crime Survey: The First Ten Years', in Kaiser, Kury and Albrecht (eds), *Victims and Criminal Justice*, Max-Planck Institute, Freiberg, Im. B, pp. 304-331,
- National Injury Surveillance Unit 1994, 'Injury Mortality, Australia 1992', *Australian Injury Prevention Bulletin, no. 6*, Australian Institute of Health and Welfare, National Injury Surveillance Unit, Adelaide.
- Skogan, W. 1992, 'Innovations in the Analysis of Crime Surveys', Paper presented at the Conference on 'Measurement and Research Design in Criminal Justice', Griffith University, Queensland, August 1992.
- Stockwell, T. (ed) 1994, 'An Examination of the Appropriateness and Efficacy of Liquor Licensing Laws Across Australia. Report 5 on Alcohol Misuse and Violence', Australian Government Publishing Service, Canberra.
- Vimpani, G. 1991, 'National Injury Surveillance and Prevention Project Final Report', Australian Government Public Service, Canberra.

APPENDIX

VICTIMISATION QUESTIONS FROM THE PERSONAL CRIME QUESTIONNAIRE

Q. 10 The following questions relate to offences which occurred in Queensland during the last 12 months. We are interested in incidents which relate to you personally, not other members of the household.

Offence K: In Queensland, at any time during the last 12 months, has anyone deliberately used a weapon on you?

Offence M: (Apart from what you've already told me, in Queensland, at any time during the last 12 months) have you been attacked, punched or kicked; or assaulted, sexually or otherwise, either by a stranger or someone you knew?

Offence N: (Apart from what you've already told me, in Queensland, at any time during the last 12 months) has anyone threatened to use force or violence on you in a manner that actually frightened you, or threatened property of yours?

Offence P: (Apart from what you've already told me, in Queensland, at any time during the last 12 months) have you had an item stolen from your person, e.g. a wallet, purse or watch?

Offence Q: (Apart from what you've already told me, in Queensland, at any time during the last 12 months) has anyone tried to steal an item from your person?

Offence R: (Apart from what you've already told me, in Queensland, at any time during the last 12 months) have you had any property stolen from an office, school, shop or anywhere else you left it?

Offence S: (Apart from what you've already told me, in Queensland, at any time during the last 12 months) has anything of yours been deliberately damaged or tampered with by vandals or thieves?

Offence T: (Apart from what you've already told me, in Queensland, at any time during the last 12 months) have you been subjected to verbal abuse from anyone you came in contact with, including work colleagues?

STATE DIFFERENCES IN BURGLARY VICTIMISATION IN AUSTRALIA: AN EXPLORATORY ANALYSIS¹

Timothy Phillips
*Research and Co-ordination Division
Queensland Criminal Justice Commission*

INTRODUCTION

Conducting research on State differences in burglary victimisation in Australia is important for a number of reasons. First, State differences in victimisation have yet to be embraced as a substantive research issue in Australia. This is anomalous, given the growing body of work on the economic, political and cultural differences between the States in Australia (Anderson & Western 1970; Bean 1988, 1993; Berry 1969; Denmark & Sharman 1994; Holmes & Sharman 1977; Rydon 1981; Sharman 1990), and the recognition attributed to "region" within North American criminology (Ellison 1991; Huff-Corzine, Corzine & Moore 1986; Messner 1983; Strauss 1987).² Second, we need to question the "authenticity" of observed State differences in burglary victimisation. In other words, are these State differences "real", or do they mask variance at the regional or ecological level? (Byrne & Sampson 1986; Murphy 1991).³ Third, to what extent do a range of predictor variables account for State variation in burglary victimisation? Fourth, research on burglary victimisation enables us to evaluate the usefulness of the 1993 National Crime and Safety Survey (NCSS) for investigating a substantive research question.⁴ Fifth, the issue of State differences in victimisation features regularly in public discourse, and is of ongoing interest to politicians, policy makers and the police.

What do the crime statistics reveal about burglary victimisation in Australia? First, taking Australia as a whole, burglary victimisation is on the increase. Walker's (1994) analysis of police statistics and crime victims surveys over the period 1974/75 through 1990/91 demonstrated burglary to be one of two crimes clearly on the increase in Australia, the other being motor vehicle theft. NCSS data indicate an 11 per cent increase in the household burglary/attempted burglary rate over the 1983-1993 period.⁵ Second, the

¹ Thanks go to Christine Bond, David Brereton, Ross Homel and John Walker for their suggestions; Avril Alley for technical assistance; the Queensland Government Statistician's Office for generating tables from the 1993 NCSS Unit Record File and Katrina Erueti for presentational assistance.

² Region and State have been generally treated as 'synonymous' in Australian research in the humanities and social science (Bulbeck 1989, p. 70).

³ Regional theories are usually specified at the supra-State level. Examples include differences between the 'North' and the 'South' in the USA (Ellison 1991); and the 'centre' and 'periphery' in Canada (Gidengil 1990). Ecological theories operate at the sub-State level, concentrating on differences between such units as census districts, cities, towns, neighbourhoods and communities (Bennett & Flavin 1994; Devery 1991; Osborn, Trickett & Elder 1992).

⁴ The usefulness of secondary analysis for studying such 'rare populations' as burglary victims is an ongoing issue for researchers (Reed 1975/76).

⁵ While this paper is primarily interested in *completed* break and enters, change in the victimisation rate for break and enter/attempted break and enter over the 1983-1993 period is reported, as these categories were not disaggregated in the 1983 Crime Victims Survey, Australia.

increase in burglary victimisation has not been uniform across the Australian States.⁶ NCSS data suggest three States experienced notable increases in burglary victimisation rates over the 1983–1993 period, while two States recorded slight decreases. The increase of greatest magnitude was evident in Western Australia (93%). Queensland (29%) and South Australia (27%) also experienced notable increases, whereas New South Wales (15%) and Victoria (4%) recorded small decreases.⁷ Third, there has been a shift from homogeneity to heterogeneity in the distribution of burglary victimisation rates across the Australian States. In 1983, the mainland States broadly fitted into two categories: New South Wales and South Australia had marginally higher burglary victimisation rates than Queensland, Western Australia and Victoria. Victimization rates across the States only ranged from a high of 6.7 per cent per household for New South Wales, to a low of 5.6 per cent for Victoria. By 1993, the picture had changed markedly, and the Australian States were characterised by a greater level of heterogeneity in burglary victimisation rates. The States clustered into three categories: Western Australia recorded by far the highest burglary victimisation rate; Victoria and New South Wales, which had the lowest burglary victimisation rates, each recorded burglary victimisations at about half the rate of Western Australia; and South Australia and Queensland were positioned between these two extremes. Burglary victimisation rates ranged from a high of 11 per cent for Western Australia to a low of 5.4 per cent for Victoria, a range of 5.6 percentage points. Compared to 1983, these figures suggest marked variation between the States in burglary victimisation rates in 1993.

These descriptive aspects of burglary victimisation in Australia raise a range of longitudinal and cross-sectional research questions. This paper limits itself to a cross-sectional analysis, concentrating upon exploring the notable interstate differences in burglary victimisation rates as revealed by the NCSS, and broadly confirmed by the 1993 National Uniform Crime Statistics (NUCS).⁸ More particularly, the paper explores the extent to which these differences can be explained by using data on household characteristics collected by the survey. The paper does not use a single theoretical framework. Given the exploratory nature of the research, I instead draw upon previous research in victimisation which suggests the kind of household factors we might expect to be associated with burglary victimisation. In consulting previous research, I was guided by the availability of indicators of predictors of burglary victimisation in the 1993 NCSS data.⁹ The focus is on two types of variables, guardianship and housing unit. These variables were selected because they were available and also seemed theoretically/empirically plausible.

Guardianship is the capacity of persons or objects in a household to circumvent victimisation (Cohen & Cantor 1981; Miethe & McDowall 1993; Miethe & Meier 1990). There are two types of guardianship: the presence of persons in the household is 'primary' guardianship, while the installation of objects to prevent victimisation is 'proxy' guardianship (Garofalo & Clark 1992). Indicators of primary guardianship are whether the household is occupied during the day, whether the household has an aged resident, and whether the household is comprised of a married couple. Indicators of proxy guardianship are whether the household has physical or electronic security devices installed. Less socially integrated neighbourhoods, where residents are less likely to know others in the immediate area, are likely to have higher levels of victimisation. These areas are frequently over-represented in terms of transient or newly arrived residents, and under-represented in the level of home ownership (Lynch & Cantor 1992; Smith

⁶ Refer to Table 8 in the Appendix. This recorded increase should be interpreted cautiously, due to differences between the two surveys in data collection techniques and the question wording.

⁷ Burglary victimisation rates are not reported for Tasmania due to an unacceptably high level of sampling error in both the 1983 Crime Victims Survey (CVS) and the 1993 National Crime and Safety Survey.

⁸ Broadly similar patterns of State differences in break and enter rates were recorded in the 1993 National Crime and Safety Survey and the 1993 National Uniform Crime Statistics. Refer to Table 9 in the Appendix.

⁹ This is a common problem in secondary data analysis (Dale, Arber & Procter 1988; Kiecolt & Nathan 1985; Procter 1993).

& Jajoura 1989). Two indicators of these dimensions of an area are; whether the household is a new address, and whether the household is rented.

DATA

The NCSS was conducted in mid-April 1993 by the Australian Bureau of Statistics (ABS), as a supplement to the Monthly Population Survey. Information was collected on a range of household property offences, personal offences, risk factors, reporting behaviour and Neighbourhood Watch membership. The survey was self-administered, with one household member aged at least 15 years of age providing information relating to the entire household. Data collection was restricted to the usual residents of private dwellings. Data were collected from 21,528 households across the five mainland States: 1,004 of which were victims of burglary. The survey response rate was 85.8 per cent (Wong 1994). For the purposes of this analysis, weighted data were analysed.¹⁰ The weighted distribution of burgled households across the five mainland States is presented in Table 1.¹¹

TABLE 1 – BURGLARY VICTIMISATION BY STATE: WEIGHTED DATA

State	Households in Sample	Victims of Burglary	Victimisation Rate (%)
Western Australia	3,233	242	7.5
Queensland	4,392	228	5.2
South Australia	3,160	158	5.0
New South Wales	5,608	207	3.7
Victoria	5,135	169	3.3
Australia	21,528	1,004	4.7

Source: NCSS 1993, Unit Record File.

THE BURGLARY INCIDENT

Before reporting the results of the analysis, the actual household burglary incident will be described in more detail. A series of tables were generated, examining characteristics of the burglary incident across the five mainland States in terms of: the frequency of repeat burglaries; the type of property stolen; and the frequency with which incidents were reported to the police.¹² Table 2 presents data on repeat burglary victimisation for Australia and the five States. Nationally, about one in five burgled households were burgled more than once in the 12 months preceding the survey. However, close to three out of every 10 households in Queensland were subjected to repeat burglary victimisation.

¹⁰ For weighting procedures, see ABS 1993e.

¹¹ The distribution for the unweighted data is available in Table 10 in the Appendix.

¹² These items were derived directly from the 1993 National Crime and Safety Survey, Unit Record File.

TABLE 2 – REPEAT VICTIMISATION: BURGLED HOUSEHOLD BY STATE

State	Burgled Households Experiencing One Incident in the Last 12 Months (%)	Burgled Households Experiencing Two or More Incidents in the Last 12 Months (%)	Total
Western Australia	79.8	20.2	100.0
Queensland	71.3	28.7	100.0
South Australia	83.3	16.7	100.0
New South Wales	80.9	19.1	100.0
Victoria	80	20	100.0
Australia	78.7	21.3	100.0

Source: NCSS 1993 (Weighted %).

Table 3 presents data on the types of items stolen in the last burglary incident¹⁵. Nationally, money (16%) was the most frequently stolen item from the household, followed by televisions/video recorders (13%). Jewellery (11%) and tools/gardening equipment (11%) were also frequently stolen. When the items stolen are disaggregated along State lines, little variation is evident. However, Queensland households were the most likely to have had money stolen. Also, of all the States, households in New South Wales and Victoria were the most likely to have had televisions/video recorders stolen.

TABLE 3 – ITEMS STOLEN IN THE LAST INCIDENT: BURGLED HOUSEHOLD BY STATE

ITEMS ¹	WA	QLD	SA	NSW	VIC	TOTAL
TV/Video Recorder	12	10	12	16	15	13
Stereo/Components/etc	10	7	13	8	12	9
Other Electrical Goods	11	7	7	12	8	9
Jewellery	12	13	12	11	9	11
Tools/Garden Equip	8	7	9	12	14	11
Money	17	20	16	12	15	16
Other ³	31	35	33	31	26	31
Total	100	100	100	100	100	100

Source: NCSS 1993 (Rounded Weighted %).

Notes:

1. Data are presented for households where at least one item was reported as taken. Up to four items were able to be listed as stolen for each household.
2. n = total number of items reported stolen for five mainland States.
3. "Other" represents a miscellaneous category, capturing a wide range of stolen items with small frequencies.

¹⁵ Approximately three out of every four of the burgled households reported that something was stolen in the last incident of break and enter. There was little difference between the States.

Table 4 presents data on whether the police were told about the last burglary incident. Nationally, approximately one out of every five household burglaries were not reported to the police. The likelihood of the last incident of burglary being reported to police varied little across the five mainland States. However, residents of burgled households in New South Wales and Queensland were less likely to have reported the last incident, compared to household residents in other States.¹⁴

TABLE 4 -POLICE TOLD ABOUT THE LAST INCIDENT: BURGLED HOUSEHOLD BY STATE

State	Told Police (%)	Did Not Tell Police (%)	Total
Western Australia	85.1	14.9	100.0
Queensland	74.9	25.1	100.0
South Australia	81.2	18.8	100.0
New South Wales	73.4	26.6	100.0
Victoria	82.9	17.1	100.0
Australia	78.5	21.5	100.0

Source: NCSS 1993 (Weighted %).

THE CHARACTERISTICS OF BURGLED HOUSEHOLDS

In this section of the paper, I consider the effects of guardianship and some housing unit characteristics upon the probability of a household being a victim of burglary. The dependent variable was whether the household had been a victim of a *completed* burglary in the last 12 months. Burglary victimisation was measured by a binary variable; coded 1 for household burgled, and 0 for household not burgled. Six independent variables were included in the analysis (see Table 5).¹⁵ Three variables were measures of primary guardianship (no person at home during the daytime; no household member aged 60 years or over; household comprised of a married couple with or without children). One variable measured proxy guardianship (household had electronic or physical security devices). Two variables tapped other characteristics of the housing unit (all household members recently moved into the current address; household in rented accommodation).¹⁶ Given the dichotomous character of the dependent variable, logistic regression analysis was the most appropriate technique for estimating the effects of the household characteristics on the probability of being burgled.

¹⁴ Part of the explanation for the lower likelihood of residents of Queensland households to report the last burglary incident to police is that more Queensland households involved the theft of money, an item less likely to be reported to insurance companies. Also, Queenslanders' greater reluctance to report may partly explain why 1993 NUCS data showed South Australian household burglary rates to exceed those of Queensland households, while 1993 NCSS data showed Queensland households to experience higher burglary rates than South Australian households.

¹⁵ See Table 11 in the Appendix for details of the items in the NCSS 1993 used to construct the six variables of interest. A correlation matrix and simple statistics for the variables included in the analysis are available from the author upon request.

¹⁶ A range of items from the NCSS 1993 survey were eliminated from inclusion in the final logistic regression models by evaluating their impact on burglary victimisation in bi-variate analysis (e.g. Neighbourhood Watch). Other variables were unavailable across the five States (e.g. metropolitan/ex-metropolitan).

TABLE 5 – CODING OF VARIABLES IN THE LOGISTIC REGRESSION MODEL OF BURGLARY VICTIMISATION

Variable	Values	Description
No-one home in day	1	No person stayed at home during the daytime
	0	At least one person stayed at home during the daytime
No aged resident	1	No household member was aged 60 years or over
	0	At least one household member was aged 60 years or over
New address	1	All household members moved to current address > one year ago
	0	Not all household members moved to current address > one year ago
Married couple	1	Household comprised of a married couple with or without children
	0	All other households
Security devices	1	Household had electronic or physical security devices
	0	Household did not have physical or electronic security devices
Rented accommodation	1	Household in rented accommodation
	0	Household in non-rented accommodation

Table 6 presents the regression coefficients for five constrained logistic regression models, gauging the impact of the independent variables on the probability of being burgled, for each of the mainland States.¹⁷ Four of the six variables generated results in the expected direction. In each of the five States, households with no member aged 60 years or over experienced a greater probability of being burgled, compared to households with at least one member aged 60 years or over. In each State except South Australia, households comprised of a married couple (with or without children) were less likely to have been burgled, compared to all other households. In Queensland and New South Wales, households where no person stayed at home during the daytime were more likely to have been burgled than households where at least one person stayed at home during the daytime. Rented accommodation proved to be at greater risk of being burgled in Queensland compared to non-rented accommodation. However, for the other four States, there was no significant difference in burglary risk between these two types of households.

¹⁷ Each model was constrained to include the same set of regressors, enabling comparisons to be made between the States.

TABLE 6 – LOGISTIC REGRESSION CO-EFFICIENTS FOR THE IMPACT OF HOUSEHOLD CHARACTERISTICS ON THE PROBABILITY OF BURGLARY VICTIMISATION FOR FIVE AUSTRALIAN STATES

Variable	WA	Qld	SA	NSW	Vic
No-one Home in Day	0.3	0.42*	0.25	0.34*	0.24
No Aged Residents	0.42*	0.56*	0.71*	0.66*	0.70*
New Address	-0.68*	-0.41*	0.08	0.12	-0.4
Married Couple ¹	-0.52*	-0.47*	-0.36	-0.80*	-0.55*
Security Devices	0.79*	0.68*	0.18	0.63*	0.37
Rented Accommodation	0.32	0.35*	0.13	0.06	0.25

Note: With or without children.

* $p < .05$

The effects of a household having security devices on the probability of burglary victimisation were more difficult to interpret. The impact of a household having electronic or physical security devices on the probability of being burgled was positive in Western Australia, Queensland and New South Wales. In other words, on the face of it, the results suggest that households in these States were more likely to have been burgled if they had electronic or physical security devices, as against not having devices. This result is counter-intuitive, and possibly reflects the poorly structured item in the NCSS 1993 survey designed to measure whether security devices were installed in the household. The question is worded in such a way that it fails to distinguish whether the security devices were installed either prior to, or consequent to, the burglary occurring. Given this limitation in the question structure, a more plausible interpretation of this finding may be that the occupants of burgled households were likely to install security devices as a response to being victimised.

To this point, the multivariate analysis has concentrated on describing how the characteristics of burgled households differ across the five mainland States. I now consider the question of the explanatory utility of the household level variables in accounting for differences in the probability of burglary victimisation, as experienced by households in the five mainland States. In other words, do the six attributes of households under consideration partially account for State differences in the probability of being burgled? Or, do these household characteristics have a negligible effect?

Table 7 presents regression co-efficients from two logistic regression models. The first model estimates the effect of State of household on the probability of burglary victimisation. The second model extends the first by repeating the analysis, holding constant the effects of the six household attributes.¹⁸ Referring to the first model, it is apparent that households in Western Australia, Queensland and South Australia are significantly more likely to have been burgled, compared to households in New South Wales. The first model also indicated that households in Victoria did not differ significantly from those in New South Wales, in terms of the probability of being burgled. The second model introduced the six household characteristics into the equation. For these new variables to be held to partially account for State differences in burglary victimisation rates, the magnitude of the significant regression co-efficients recorded in the first model would need to show signs of having been moderately weakened. However,

¹⁸ The household attributes held constant were the same independent variables used in the analysis described in Table 6.

the results indicate that the magnitude and direction of the effects of State of household on the probability of burglary victimisation remain substantively unchanged. In other words, net of the effects of the six household characteristics, State differences in burglary victimisation rates remain constant. Essentially, the results indicate that the six household attributes included in this study are unable to account for differences **between** the States in the probability of burglary victimisation, although they do explain some of the variation **within** States.

TABLE 7 – LOGISTIC REGRESSION CO-EFFICIENTS FOR THE IMPACT OF STATE OF HOUSEHOLD ON THE PROBABILITY OF BURGLARY VICTIMISATION

State ¹	Model 1 ²	Model 2 ³
Western Australia	0.78*	0.89*
Queensland	0.40*	0.44*
South Australia	0.30*	0.31*
Victoria	- 0.10	- 0.10

Notes:

1. New South Wales was the State omitted for comparison
 2. Without control variables
 3. With six control variables
- * p < .05

A CONSIDERATION OF SOME AGGREGATE LEVEL FACTORS

Given the limited utility of the six household level variables in explaining State differences in burglary victimisation, the only remaining strategy of potential use in accounting for the observed variation is an aggregate level analysis. The remaining empirical part of the paper will briefly investigate whether those mainland States with a higher burglary victimisation rate have aggregate level characteristics which distinguish them from States with a lower burglary victimisation rate. To this end, the final section of the paper examines the association between a constellation of economic and demographic factors, and the burglary victimisation rates of the mainland States. The range of economic and demographic characteristics examined were selected because of the theoretical/empirical plausibility of their association with victimisation. Economic characteristics considered for their impact on victimisation are unemployment (Weatherburn 1992; Wilson & Lincoln 1992) and building approvals (which is an indicator of the level of economic activity). Demographic characteristics investigated for their relationship with victimisation are urbanisation, population growth (Ingram 1993; Walker 1994), the number of flats or apartments in a structure (Lynch & Cantor 1992; Walker 1991) and the proportion of the population comprised of Aborigines (Devery 1991).

The data used are official statistics on the economic and demographic attributes of the mainland Australian States in the 1990's, as compiled by the ABS. Indicators of the economic and demographic characteristics are: the unemployment rate; the building approval rate; the percentage of the population urbanised (population cluster of 1,000 or more); the population growth rate (over the 1983-93 period); the percentage of households which are flats/apartment; and the percentage of the population comprised of

Aboriginal and Torres Strait Islanders.¹⁹ The association between the burglary victimisation rates of the five mainland States and these aggregate level factors are explored by plotting a series of bivariate relationships. However, two confounding factors complicate the interpretation of the data. First, as only five cases are available to be plotted, it is difficult to interpret the nature, direction and strength of the relationships. Second, even where there appears to be a strong association between the plotted variables, the association may be spurious; that is, other factors excluded from consideration may be responsible for explaining the observed association. Given these difficulties, the results reported here are tentative at best. However, the analysis does provide some pointers for further aggregate level research on burglary victimisation. Graphs showing the association between the six economic/demographic factors and burglary victimisation for the five Australian mainland States are presented in Figures 1 to 6 (see p. 150).

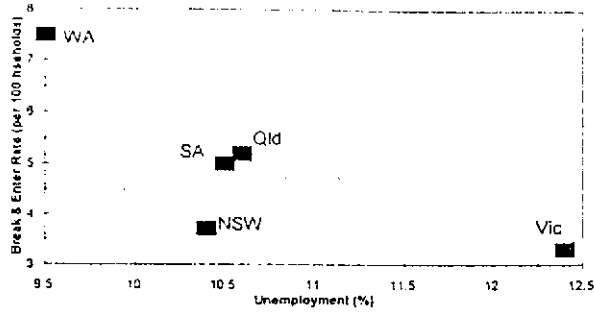
The distribution of cases in the graph of burglary victimisation by unemployment suggest a negative relationship (see Figure 1). Victoria was characterised by the highest unemployment rate, and the lowest burglary victimisation rate. Western Australia demonstrated the lowest unemployment rate and the highest burglary victimisation rate. The associations between unemployment and burglary victimisation in Queensland and South Australia provided additional support for the negative relationship. The graph of burglary victimisation by building approvals suggests a positive association (see Figure 2). Queensland and Western Australia had the highest rates of building approvals of the five States, while also recording the highest levels of burglary victimisation. The lower rates of building approvals in Victoria and New South Wales were associated with lower burglary victimisation rates.

The graph of burglary victimisation by urbanisation suggested a negative relationship (see Figure 3). Queensland was by far the least urbanised State, but recorded the second highest burglary victimisation rate. New South Wales and Victoria were the most urbanised States, and recorded the lowest burglary victimisation rates. Western Australia and South Australia, while less urbanised than New South Wales and Victoria, recorded higher burglary victimisation rates. Figure 4 suggests a positive association between burglary victimisation and population growth. Queensland and Western Australia were characterised by population growth rates far exceeding those of the other three mainland States, whilst also recording the highest burglary victimisation rates. Victoria and New South Wales experienced population growth at about half the rate of Queensland and Western Australia, while also recording notably lower rates of burglary victimisation. However, the case of South Australia provided less support for a positive association between population growth and burglary victimisation.

The graph of burglary victimisation by the proportion of flat/apartment structures suggested a negative relationship (see Figure 5). Of the mainland States, Western Australia indicated the lowest proportion of flat/apartment structures, while recording the highest burglary victimisation rate. New South Wales had a proportion of flat/apartment structures over twice that recorded in Western Australia. However, New South Wales only experienced burglary victimisation at about half the rate recorded in Western Australia. Figure 6 presents evidence for a positive association between burglary victimisation and the size of the Aboriginal and Torres Strait Islander (ATSI) population. Western Australia and Queensland, the States with the largest ATSI populations, also recorded the highest burglary victimisation rates. Victoria, the State with the smallest ATSI population, experienced the lowest burglary victimisation rate. The positioning of New South Wales and South Australia in the graph provides further evidence of a possible association between size of the ATSI population and burglary victimisation.

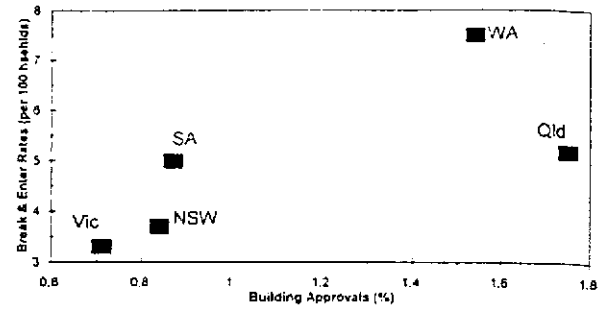
¹⁹ These measures were compiled from official statistics collected in Australia during the 1990s. For more details, please refer to the ABS publications in the bibliography.

FIGURE 1: BREAK & ENTER RATE BY UNEMPLOYMENT RATE



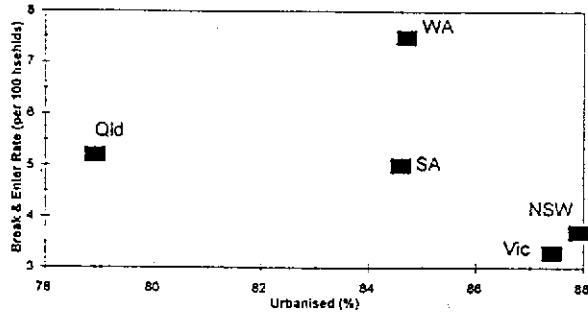
Sources: ABS 1993, Labour Force Estimates (May 1993) and ABS 1994, 'Crime and Safety Australia 1993'.

FIGURE 2: BREAK & ENTER RATE BY BUILDING APPROVAL RATE



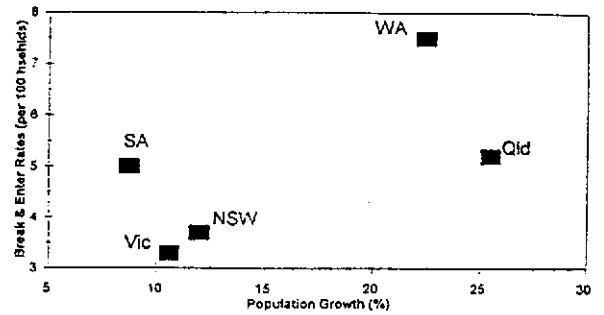
Sources: ABS 1993, 'Building Approvals, Australia', and ABS 1994, 'Crime and Safety Australia 1993'.

FIGURE 3: BREAK & ENTER RATE BY URBANISATION RATE



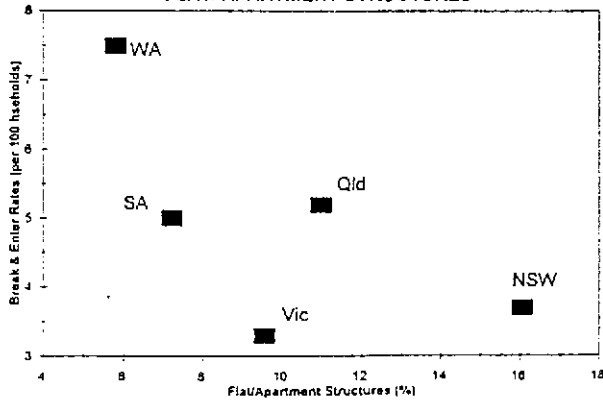
Sources: ABS 1994, Year Book Australia, 1994 and ABS 1994, 'Crime and Safety Australia 1993'.

FIGURE 4: BREAK & ENTER RATE BY POPULATION GROWTH RATE



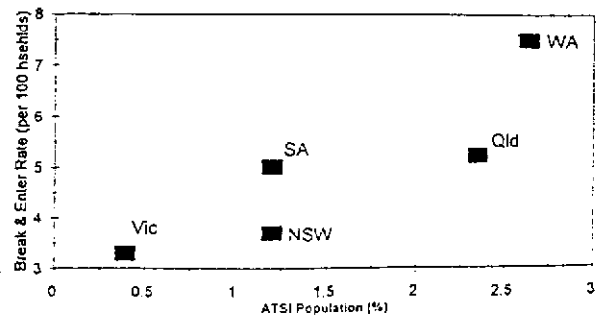
Sources: ABS 1993, Rates of Resident Population Growth and ABS 1994, 'Crime and Safety Australia 1993'.

FIGURE 5: BREAK & ENTER RATE BY FLAT/APARTMENT STRUCTURES



Sources: ABS 1991, Census of Population and Housing 1991 and ABS 1994, 'Crime and Safety Australia 1993'.

FIGURE 6: BREAK AND ENTER RATE BY PROPORTION OF POPULATION WHO ARE ATSI'S



Sources: ABS, 1991 Census of Population and Housing 3 'Crime and Safety Australia 1993', ABS.

DISCUSSION

The main task of this paper has been to explore the utility of a range of household and aggregate level factors in accounting for variation in burglary victimisation rates across the five Australian mainland States. The analysis produced four sets of findings. **First**, regarding the characteristics of the burglary incident, burgled households in Queensland were more likely to have experienced multiple incidents in the last 12 months, and to have had money stolen in the last incident, compared to households in other States. Also, residents of burgled households in Queensland and in New South Wales were less likely to have told police about the last incident. Burgled households in both New South Wales and Victoria were more likely to have had the television or video cassette recorder stolen. **Second**, guardianship was not found to be uniformly associated with the probability of a household being burgled across the five States. Households with no member aged 60 or over were more likely to have been burgled in all the States. In each State except South Australia, households comprised of married couples were less likely to be burgled. In New South Wales and Queensland, households with no person home during the day were more likely to be burgled. Rented households in Queensland were at a greater risk of burglary victimisation. **Third**, the six household level variables were of little use in accounting for differences between the States in the magnitude of the burglary victimisation rate. **Fourth**, the aggregate level factors offered some tentative possibilities for further investigating State differences in burglary victimisation rates. States with higher burglary victimisation rates were found to have fewer people out of work, a higher proportion of building approvals, a less urbanised population, a greater rate of population growth, a smaller proportion of flat/apartment structures, and a larger ATSI population.

Besides these substantive findings, the paper has highlighted the limitations of the NCSS as a source of data for investigating substantive research questions on victimisation. In short, the survey identified relatively few burglary victims, and contained little relevant information on them. Although the survey was based on a large, representative national sample, the population of victimised households accessed was small. This presented problems regarding the issue of acceptable sampling error, and the level of confidence able to be expressed towards the results of statistical analyses, based on such samples (see de Vaus 1990, p. 72; Travis, Egger, O'Toole, Brown, Hogg & Stubbs 1995). For example, the small frequency of burglaries recorded within some of the States raises questions about the meaningfulness of analysis exploring variation within these state: how effectively could the 73 burgled households (27 with weighted data) in Tasmania be broken down for sub-group analysis?

The NCSS has proved useful for documenting the frequency of reported victimisation in a particular context (State or national) and for recording changes within that context over time. However, little concern has been demonstrated with *explaining* victimisation in the design of the instrument. The survey contains few theoretically plausible variables for shedding light on why some households are more likely to be burgled than others. The explanatory utility of the survey would have been bolstered by the inclusion of a broader range of independent variables. For example, social ecological research has demonstrated the relationship between the social characteristics of neighbourhoods, communities or cities, and victimisation (Byrne & Sampson 1986; Smith & Jajoura 1989). Ecological analysis has featured centrally in victimisation surveys in the USA and the UK (Mayhew, Aye Maung and Mislees-Black 1993; Zawitz, Klaus, Bachman, Bastian, DeBerry, Rand & Taylor 1993).²⁰ The importance of specifying explanatory variables at macro and micro levels of analysis is evident in the growing emphasis on 'multilevel modelling' and 'contextual analysis' in victimology research (DiPrete & Forristal 1994; Miethe & McDowall 1993).

If crime victim surveys are to be used by governments to monitor and develop strategies for reducing levels of victimisation, it is critical that these surveys are subjected to an ongoing process of systematic evaluation and review. Large national crime victims surveys which collate reams of statistics on the

²⁰ ABS statistics are not available below the State level of analysis for Australian crime victims surveys (e.g. census districts).

frequency of victimisation, but tell us little about its causes or correlates, raise important questions about the practicality of investing long-term, substantial public expenditure in surveys of this format. Local crime surveys have been developed as a feasible option to national surveys in the UK (Walklate 1989; Zedner 1994). In Australia, the study of burglary across the States might be better approached by sampling break and enter victims, as identified by police records. These data could be used to construct explanatory variables at different levels of analysis (e.g. household, community/ neighbourhood, State), provide direct access to a population of victims, and provide details of offenders.²¹ Perhaps more importantly, such alternative approaches to studying victims offer economically feasible strategies for bypassing the expense involved in sampling large populations of mainly non-victims.

²¹ The importance of information on offenders for understanding burglary has been well documented (Cromwell, Olson & Avary 1991; Taylor & Nee 1988; Wright, Decker, Redfern & Smith 1992; Wright, Logie & Decker 1995).

REFERENCES

- Anderson, D.S. & Western, J.S. 1970, 'State Differences in Authoritarian Attitudes' *Australian Journal of Psychology* vol. 22, pp. 261-64.
- Australian Bureau of Statistics 1983, *Crime Victims Survey, Australia, 1983*, Preliminary, Cat. no. 4505.0, ABS, Canberra.
- 1991, *Census of Population and Housing*, ABS, Canberra.
- 1993a, *Australia Demographic Statistics*, Cat. no. 3101.0, ABS, Canberra.
- 1993b, *Building Approvals, Australia*, Cat. no. 8731.0, ABS, Canberra.
- 1993c, *Crime and Safety, Australia*, Cat. no. 4509.0, ABS, Canberra.
- 1993d, *Labour Force Estimates*, Cat. no. 6271.0, ABS, Canberra.
- 1993e, *National Crime and Safety Survey*, Unit Record Data.
- 1994a, *National Crime Statistics*, Cat. no. 4510.0, ABS, Canberra.
- 1994b, *Year Book Australia*, Cat. no. 1301.0, ABS, Canberra.
- Bean, C. 1988, 'Politics and the Public: Mass Attitudes towards the Australian Political System' in Kelly, J. & Bean, C. (eds), *Australian Attitudes*, Allen and Unwin, Sydney, pp. 45-57.
- 1993, 'Conservative Cynicism: Political Culture in Australia', *International Journal of Public Opinion Research*, vol. 5, pp. 58-77.
- Bennett, R.R. & Flavin, J.M. 1994, 'Determinants of Fear of Crime: The Effects of Cultural Setting', *Justice Quarterly*, vol. 11, pp. 357-81.
- Berry, J.W. 1969 'The Stereotypes of Australian States', *Australian Journal of Psychology*, vol. 21, pp. 227-33.
- Bulbeck, C. 1989, 'Regionalis' in Walter, J. (ed), *Australian Studies: A Survey*, Oxford University Press, Australia, pp. 70-83.
- Byrne, J.M. & Sampson, R.J. 1986, 'Key Issues in the Social Ecology of Crime' in Byrne, J.M. & Sampson, R.J. (eds), *The Social Ecology of Crime*, Springer Verlag, New York, pp. 1-22.
- Cohen, L.E. & Cantor, D. 1981, 'Residential Burglary in the United States: Life-Style and Demographic Factors Associated with the Probability of Victimization', *Journal of Research in Crime and Delinquency*, vol. 18, pp. 113-27.
- Cromwell, P.F., Olson, J.N. & Avary, D.W., 1991, *Breaking and Entering: An Ethnographic Analysis of Burglary*, Sage, Newbury Park, California.
- Dale, A., Arber, S. & Procter, M., 1988, *Doing Secondary Analysis*, Unwin Hyman, London.
- de Vaus, D. 1990, *Surveys in Social Research*, 2nd edn, Allen and Unwin, Australia.

- Denemark, D. & Sharman, C. 1994, 'Political Efficacy, Involvement and Trust: Testing for Regional Political Culture in Australia', *Australian Journal of Political Science*, vol. 29, pp. 81-102.
- Devery, C. 1991, *Disadvantage and Crime in New South Wales*, New South Wales Bureau of Crime Statistics and Research, Sydney.
- DiPrete, T.A. & Forristal, J.D. 1994, 'Multilevel Models: Methods and Substance', *The Annual Review of Sociology*, vol. 20, pp. 331-57.
- Ellison, C.G. 1991, 'An Eye for an Eye? A Note on the Southern Subculture of Violence Thesis', *Social Forces*, vol. 69, pp. 1223-39.
- Garofalo, J. & Clark, D. 1992, 'Guardianship and Residential Burglary', *Justice Quarterly*, vol. 9, pp. 443-63.
- Gidengil, E. 1990, 'Centres and Peripheries: the Political Culture of Dependency', *Canadian Review of Sociology and Anthropology*, vol. 27, pp. 23-48.
- Holmes, J. & Sharman, C. 1977, *The Australian Federal System*, George Allen and Unwin, Sydney.
- Huff-Corzine, L., Corzine, J. & Moore, D.C., 1986, 'Southern Exposure: Deciphering the South's Influence on Homicide Rates', *Social Forces*, vol. 64, pp. 906-29.
- Ingram, A. 1993, 'Type of Place, Urbanism, and Delinquency: Further Testing the Determinist Theory', *Journal of Research in Crime and Delinquency*, vol. 30, pp. 400-11. *
- Kiecolt, K. Jill & Nathan, L.E. 1985, *Secondary Analysis of Survey Data*, University Papers 53, Quantitative Applications in the Social Sciences, Sage, Beverley Hills.
- Lynch, J.P. & Cantor, D. 1992, 'Ecological and Behavioural Influences on Property Victimization at Home: Implications for Opportunity Theory', *Journal of Research in Crime and Delinquency*, vol. 29, pp. 335-62.
- Mayhew, P., Aye Maung, N. & Mirlees-Black, C., 1993, *The 1992 British Crime Survey*, A Home Office Research and Planning Unit Report, HMSO, London.
- Miethe, T.D. & McDowall, D. 1993, 'Contextual Effects in Models of Criminal Victimization', *Social Forces*, vol. 71, pp. 741-59.
- Miethe, T.D. & Meier, R.F. 1990, 'Opportunity, Choice, and Criminal Victimization: A Test of a Theoretical Model', *Journal of Research in Crime and Delinquency*, vol. 27, pp. 243-66.
- Messner, S.F. 1983, 'Regional Differences in the Economic Correlates of the Urban Homicide Rate', *Criminology*, vol. 21, pp. 477-88.
- Murphy, A.B. 1991, 'Regions as Social Constructs: the Gap between Theory and Practice', *Progress in Human Geography*, vol. 15, pp. 22-35.
- Procter, M. 1993, 'Analysing Other Researchers' Data' in Gilbert, N. (ed), *Researching Social Life*, Sage, London, pp. 255-69.

- Reed, J.S. 1976, 'Needles in Haystacks: Studying "Rare" Populations by Secondary Analysis of National Sample Surveys', *Public Opinion Quarterly*, vol. 39, pp. 514-22.
- Rydon, J. 1981, 'Studies of Australian State Government', *Politics*, vol. 16, pp. 325-30.
- Sharman, C. 1990, 'The Party Systems of the Australian States: Patterns of Partisan Competition, 1945-1986', *Publius*, vol. 20, no. 4, pp. 85-104.
- Smith, D.A. & Jarjoura, G.R. 1989, 'Household Characteristics, Neighbourhood Composition and Victimization Risk', *Social Forces*, vol. 68, pp. 621-40.
- Strauss, M.A., 1987, 'State and Regional Differences in U.S. Infant Homicide Rates in Relation to Sociocultural Characteristics of the State', *Behavioural Sciences and the Law*, vol. 5, pp. 61-75.
- Taylor, M. & Nee, C. 1988, 'The Role of Cues in Simulated Residential Burglary', *British Journal of Criminology*, vol. 28, pp. 396-401.
- Travis, G., Egger, S., O'Toole, B., Brown, D., Hogg, R. & Stubbs, J., 1995, 'The International Crime Surveys: Some Methodological Concerns', *Current Issues in Criminal Justice*, vol. 6, pp. 346-61.
- Walker, J. 1991, *Crime in Australia*, Australian Institute of Criminology, Canberra.
- 1994, *Crime in the Third Millennium in Australia*, unpublished manuscript.
- Walklate, S. 1989, *Victimology*, Unwin Hyman, London.
- Weatherburn, D. 1992, 'Economic Adversity and Crime', *Trends and Issues in Crime and Criminal Justice*, no. 40, Australian Institute of Criminology, Canberra.
- Wilson, P. & Lincoln, R. 1992, 'Young People, Economic Crisis, Social Control and Crime', *Current Issues in Criminal Justice*, vol. 4, no. 2, pp. 110-6.
- Wong, B. 1994, 'Non-Response Adjustments in the 1993 National Crime and Safety Survey' Paper presented at the Symposium on Crime Victims Surveys, November, Griffith University.
- Wright, R., Decker, S.A., Redfern, A.K. and Smith, D.L., 1992, 'A Snowball's Chance in Hell: Doing Fieldwork with Active Residential Burglars', *Journal of Research in Crime and Delinquency*, vol. 29, pp. 148-61.
- Wright, R., Logie, R.H. & Decker, S.A., 1995, 'Criminal Expertise and Offender Decision Making: An Experimental Study of the Target Selection Process in Residential Burglary', *Journal of Research in Crime and Delinquency*, vol. 32, pp. 39-53.
- Zawitz, M.W., Klaus, P.A., Bachman, R., Bastian, L.D., DeBerry, M.M., Rand, M.R. & Taylor, B.M., 1993, *Highlights from 20 Years of Surveying Crime Victims: The National Crime Victimization Survey, 1973-1992*, Bureau of Justice Statistics.
- Zedner, L. 1994, 'Victims' in Maguire, M., Morgan, R. & Reiner, R. (eds), *The Oxford Handbook of Criminology*, Clarendon Press, Oxford, pp. 1207-46.

APPENDIX A •

TABLE 8 – BURGLARY/ATTEMPTED BURGLARY VICTIMISATION RATES BY STATE
1983 AND 1993

State	CVS 1983 (% of households)	NCSS 1993 (% of households)	Change (%)
Western Australia	5.7	11.0	93.0 (+)
Queensland	5.8	7.5	29.0 (+)
South Australia	6.4	8.1	27.0 (+)
New South Wales	6.7	5.7	15.0 (-)
Victoria	5.6	5.4	4.0 (-)
Australia	6.1	6.8	11.0 (+)

Sources: Crime Victims Survey 1983; National Crime and Safety Survey 1993

TABLE 9 – BURGLARY VICTIMISATION RATES BY STATE, 1993

State	NCSS 1993 (% of households)	NUCS 1993 (per 100,000 of pop.)
Western Australia	7.5	1,828.2
Queensland	5.2	1,115.7
South Australia	5.0	1,432.3
New South Wales	3.7	1,061.9
Victoria	3.3	877.0
Australia	4.4	11,19.2

Sources: National Crime and Safety Survey 1993; National Uniform Crime Statistics 1993

TABLE 10 – BURGLARY VICTIMISATION BY STATE: UNWEIGHTED DATA

State	Households in Sample	Victims of Burglary	Victimisation Rate (%)
Western Australia	3,278	240	7.3
Queensland	4,461	228	5.1
South Australia	3,193	149	4.7
New South Wales	5,703	199	3.5
Victoria	5,215	165	3.2
Australia	21,850	981	4.5

Source: NCSS 1993: Unit Record File

APPENDIX B

TABLE 11 – DETAILS OF THE ITEMS FROM THE NCSS 1993 USED TO CONSTRUCT THE INDEPENDENT VARIABLES IN THE LOGISTIC REGRESSION ANALYSIS

Variable	Details of Construction
1.* No person was usually in the household during the daytime	This variable was constructed from items in the data item groups; "EDUCATION" and "LABOUR FORCE". If all persons in the household are full-time participants in the labour force or full-time participants in education, code (1). If at least one person in the household is not a full-time participant in the labour force or a full-time participant in education, code (0).
2.* No person in the household was aged 60 years or over	This variable was constructed from the item "age" in the data item group; "PERSON DESCRIPTION". If all persons in the household are equal to/less than fifty nine years of age, code (1). If at least one person in the household is equal to/greater than sixty years of age, code (0).
3. Household occupied by one adult (with or without children)	This variable was constructed from the item "household type" in the data item group; "HOUSEHOLD DETAILS". If the household was occupied by a married couple (with or without children), code (1). Code all other households (0).
4. Household a rental property	This variable was constructed from the item "whether dwelling owned or rented" in the data item group; "DWELLING DETAILS". If the household was a rental property, code (1). If the household was owned, code (0).
5.* Household a new address	This variable was constructed from the item "length of stay at this address" in the data item group; "DWELLING DETAILS". If all household members have moved to the current address less than one year ago, code (1). If not all household members have moved to the current address less than one year ago, code (0).
6. Household has security devices	This variable was constructed from two items within the data item group; "ATTITUDE TO CRIME". The two items were "whether or not the household had electronic security devices" and "whether or not the household had physical security devices". If the household was fitted with either electronic or physical security devices, code (1). If the household was fitted with no electronic or physical security devices, code (0).

* John Walker suggested developing these variables.

EXPLAINING TRENDS IN REPORTED RAPES: AN ALTERNATIVE TO CRIME VICTIM SURVEYS

Stuart Ross

National Criminal Courts Statistics Unit; Australian Bureau of Statistics

David Brereton

*Research & Co-ordination Division, Queensland Criminal Justice Commission**

INTRODUCTION

Over the last decade or so, virtually all Australian jurisdictions have experienced substantial increases in the number of rapes reported to police (Walker 1994). Most crime researchers have assumed that this trend is attributable primarily, if not exclusively, to an increased willingness on the part of rape victims to report offences to the police (Weatherburn & Devery 1991; Broadhurst & Maller 1991). However, various commentators and activists have argued that the police statistics point to a real increase in the underlying incidence of sexual violence – and violence against women generally – in the community.¹

For a variety of reasons, it has proved very difficult to obtain evidence with which to test these competing interpretations. Only a relatively small proportion of rapes are reported to the police. As a result, even small changes in the reporting behaviour of victims can have a significant impact on the 'official' statistics. Moreover, police statistics can be affected by altered legal definitions and changes in police recording practices. Crime victim surveys provide an indication of the extent of under-reporting, but such surveys are of limited utility when it comes to interpreting trends. In Australia, these types of surveys have been conducted only infrequently: the last two Australian Bureau of Statistics (ABS) national crime victim surveys have been ten years apart and employed different methodologies. In addition, because rape is a relatively uncommon event, even the large-scale surveys undertaken by the ABS have produced estimates of sexual assault victimisation rates with relatively large standard errors. The other main sources of information in this area – self-selecting phone-in and mail-back surveys – have well documented limitations. These surveys can be used to generate estimates of the proportion of rapes which are not reported, but serious doubts have been raised about the representativeness of the data obtained by such means. In addition, self-selecting surveys are usually conducted as 'one-offs' and so are of little value for measuring changes in reporting behaviour over time.

This paper outlines an alternative research strategy for interpreting and explaining data on sexual assault trends which overcomes some of these difficulties. This strategy was developed in order to investigate the causes of a substantial increase in the number of rapes reported to the Victoria Police in the early 1990s. The research which we undertook involved examining changing patterns in the characteristics of reported rapes and comparing data on the date of occurrence of the offence and the date on which it was reported. This analysis presents a strong case that the primary cause of the rise in police rape statistics during this period was an increase in the reporting rate, rather than any change in the underlying rate of offending.

* The views expressed in this paper are those of the authors and do not necessarily reflect the views of the Australian Bureau of Statistics or the Queensland Criminal Justice Commission.

1 For example, in June 1993 *The Age* newspaper in Melbourne ran a series of articles on the theme *The War Against Women*, with the lead article stating "there is a worsening epidemic of violence against women in our society". *The Age*, 7 June 1993, p. 1.

The research reported here is also relevant to the broader debate over the uses and limitations of large-scale crime victim surveys. One of the main arguments for undertaking these types of surveys is that they provide a counter-balance to police crime statistics and enable researchers to more accurately track underlying trends in crimes against the person. However, as noted above, crime victim surveys are of limited utility, especially in the Australian context, for measuring changes in the incidence and reporting of relatively infrequent offences such as rape. In addition, such surveys are very expensive to conduct on a regular basis. By contrast, the strategy outlined here is relatively inexpensive, makes use of information already routinely collected by police, and has the potential to be extended and adapted to other jurisdictions and other offences.

The paper is based largely on data extracted from Victoria Police Crime Reports and databases held by the now-defunct Victorian Bureau of Crime Statistics and Research, and the Victorian Community Council Against Violence. The paper focuses primarily on the offence of rape as that offence is defined by Victorian law (see Appendix 1). The Victoria Police publish separate statistics for sexual penetration offences against children, but the relatively small numbers of offences recorded, and the counting rules used, make it extremely difficult to analyse trends in relation to these offences.

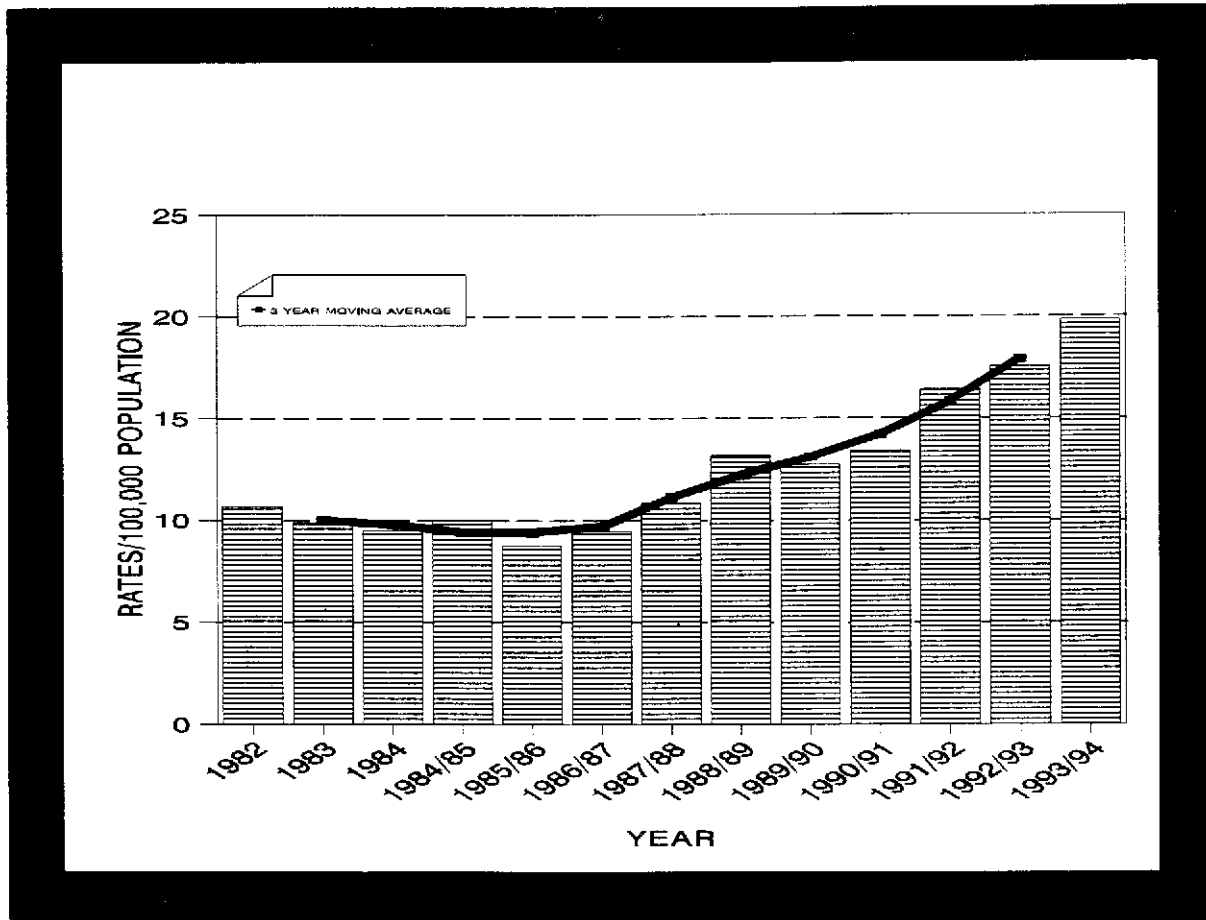
The next section of the paper presents trend data on rapes reported to the Victoria Police between 1982 and 1993/94, and identifies various legal, institutional and social factors which may have impacted on the reporting environment over this period. This is followed by a discussion of the utility of crime victim surveys and 'self-selecting' sexual assault victim surveys for measuring changes in victim reporting behaviour. The paper then presents an analysis of changing patterns in rapes reported to the Victoria Police in the late 1980s and early 1990s. The final section of the paper discusses some substantive and methodological implications arising from this research.

TRENDS IN REPORTED RAPES

Figure 1 shows the annual number of rapes and attempted rapes per 100,000 people² reported in Victoria between 1982 and 1993/94.³ As a means of 'smoothing' essentially random year to year variations in the rate of offences, Figure 1 also plots the *three year moving average*; this being, for each year, the average of that year, the previous year and the next year. The graph is constructed primarily from data published in the annual Victoria Police *Statistical Review of Crime*, adjusted to take account of a change from an offender-based counting rule to a victim-based rule in 1987/88. This adjustment was made by dividing the pre-1987/88 reported rates in the *Statistical Review* by 1.29. This figure represents the estimated average ratio of rape offenders to rape victims according to data collected by the Victorian Community Council Against Violence (CCAV) (1991a, p. 16).

2 In analysing long term crime trends, it is standard practice to compare offences per 100,000 people, rather than just the total number of offences reported. This index adjusts for the impact of population changes on reported crime figures.

3 In 1984 the Victoria Police moved from calendar year to financial year reports. To allow for this change, Figure 1 shows rates for both 1984 and 1984/85.



**FIGURE 1 - RAPE OFFENCES REPORTED TO VICTORIA POLICE
1982 - 1993/94**

Source: Based on data from Victoria Police, *Statistical Review of Crime* (annual).

Figure 1 shows that the rate of reported rape offences in Victoria has been trending upwards since the late 1980s, but at an uneven rate. Most notably, the marked rise in reports between 1991/92 and 1993/94 was well above the trend shown by the moving average for the previous three years.

The 1991/92 increase was partly attributable to a change to the legal definition of rape brought about by the *Crimes (Sexual Offences) Act 1991* in August 1991. This legislation extended the definition of rape to include acts that would previously have been classified as indecent assaults. The Appendix describes how we estimated the impact of this change on the number of rapes reported in the first year after proclamation of the Act. On our calculations, if there had been no change in the law, the number of reported rape offences in 1991/92 would have been about six per cent less than the actual figure. However the overall trend shown in the graph is not significantly affected by this definitional change.

The increase in reports from the mid-1980s onwards corresponded with several developments in Victoria which might have been expected to increase the reporting rate for rape and other serious sexual offences. During the 1980s a network of sexual assault centres was established throughout Victoria to provide counselling and support services to sexual assault victims. Over the same period the Victoria Police made

considerable efforts to improve their handling of sexual assault cases, culminating in the adoption of a *Code of Practice for Sexual Assault Cases* in early 1992 (Heenan & Ross 1994). Significant legislative changes were also introduced to evidentiary and courtroom procedure with a view to reducing some of the trauma of court appearances.

Reform of rape law and procedure was a particularly salient issue in Victoria between 1989 and 1991, due to the activities of the Real Rape Law Coalition, the work of the now-defunct Law Reform Commission of Victoria, and the interest shown in the issue by the then Premier, Mrs Joan Kirner (Brereton 1994). Several North American studies have shown that the introduction of rape law reform packages can lead to a significant increase in reported rapes. For instance, Lebeau (1988) found an increase in reports after reform of rape laws in California, especially by individuals known to the complainant. Roberts and Gebotys (1992) examined the outcomes of significant legislative reforms introduced in Canada in 1983 which had a high level of publicity, and strong political support from prominent advocacy groups and the government. These authors also found a significant increase in rape reports following the introduction of these new laws.

More generally, recent American research has suggested that broad social trends also influence reporting rates. For example, Orcutt and Faison (1988) sought to explain why reports of acquaintance rape – particularly ‘date rapes’ and assaults by relatives – had increased during the 1980s at a much greater rate than reports of stranger rape. The authors concluded that declining ‘sex role’ traditionalism had enabled more women to conceptualise sexual assaults by intimates as rape, and had created a social climate which was generally more conducive to reporting (in the British context see Lloyd & Walmsley 1989).

Taking account of all of these factors, it is reasonable to hypothesise that the increase in reported rape offences shown in Figure 1 was primarily attributable to an increase in the willingness of rape victims in Victoria to report offences to the police. However, as discussed at the outset of this paper, the difficulty lies in obtaining confirming evidence of this trend. It is to this issue that we now turn.

THE LIMITATIONS OF SURVEY DATA

The ABS conducted national surveys of crime victimisation in 1983 and 1993, and also undertook a number of State surveys during this period, including a 1994 survey in Victoria. The 1983 survey estimated that 0.4 per cent of Victorian women aged over 18 had been the victim of sexual assault⁴ in the previous year; in 1993 this estimate had risen to 0.6 per cent and in 1994 the estimate was 0.5 per cent. In both the 1983 and 1993 surveys, the rate of sexual assault in Victoria was essentially the same as the national rate (0.5% in 1983 and 0.6% in 1993). Similar survey data are available from New South Wales, where an ABS crime victimisation survey incorporating questions about sexual assault was also conducted in 1992. The sexual assault victimisation rate for New South Wales was 0.6 per cent in 1983, 0.6 per cent in 1992 and 0.8 per cent in 1993.

The ABS crime victimisation surveys also asked respondents to say whether they reported the offence to police. The 1993 survey found that 33.1 per cent of Victorian sexual assault victims had reported the crime to police, but the 1983 survey was not able to provide a statistically reliable estimate of the reporting rate for Victoria. In New South Wales, the reporting rate in 1983 was 16.8 per cent. By 1992 this had increased to 24.6 per cent, and in 1993 a reporting rate of 28.8 per cent was recorded.

4 Sexual assault was defined as including all incidents of a sexual nature involving physical contact, but excludes sexual harassment that did not lead to an assault.

In theory, crime victimisation surveys supply a relatively unbiased measure of the level of crime. However, in practice these surveys are of very limited value for investigating rape trends, especially over relatively short time frames and within specific jurisdictions. The ABS surveys measure the incidence of sexual assault generally, taking account of all assaults or threatened assaults of a sexual nature. Rape assaults almost certainly account for less than 10 per cent of the sexual assaults recorded by the surveys. Consequently, a change in the total number of sexual assaults could easily conceal a contrary change in the much smaller number of rapes: for example, a one per cent rise in all other sexual assaults would mask a 10 per cent fall in rape assaults. In addition, statistical problems arise due to the relatively small number of assaults reported by the survey samples. For example, even using a broad definition of sexual assault, the 1983 survey estimate for victimisation rates in the Victorian population had a standard error of over 25 per cent and fell outside the ABS reliability criterion.

Comparisons between the 1983 and 1993 national surveys are also problematic because of significant methodological differences between the two surveys. Most importantly, the 1983 survey was conducted using personal interviews, while the 1993 survey used a mail-back survey method (Wong 1992). Koss (1992) has argued, in relation to the U.S. National Crime Survey, that incidence rates for rapes are sensitive to a range of methodological factors, including the mode of delivery of the survey, the characteristics of interviewers and the context of questioning. In the Australian context, de Mel and Carcach (1994) have argued that the use of the self-completion methodology in the 1993 ABS survey produced estimates of assault rates significantly below what would have been obtained from face-to-face interviews. A further complication is that factors which affect the reporting of sexual offences to police may also influence reporting to crime victim surveys. Hence, a rise in the willingness of victims to report sexual assaults to police may be mirrored in the willingness of survey respondents to report sexual assaults to crime victimisation surveys.

Another research strategy has been to allow respondents to self-select, by means of a phone-in survey or mail-back questionnaire. Several such initiatives have been undertaken in Australia in recent years. These surveys have typically included questions asking the respondent to indicate when the offence occurred and whether it was reported to the police. In the larger surveys, this has enabled reporting rates to be compared for those victims who were victimised in recent times, and those who were victimised several years earlier. The main Australian study of this kind is that reported by Easteal (1993). In September 1992, the Australian Institute of Criminology (AIC) undertook a survey of sexual assault survivors, using a 'self-selecting' methodology. A copy of the survey was published in the Sunday newspapers of the News Ltd organisation, and readers who had been subjected to a sexual assault were invited to fill in the survey and forward it to the AIC. In addition, following screenings of the documentary 'Without Consent' on the ABC, an announcement was aired inviting people to participate in the survey. In all, approximately 2,700 people responded to the survey.

Of those respondents to the AIC survey who said that they had been raped within the last five years, 30 per cent had reported to the police. By contrast, only 22.5 per cent of those who had been raped five to 10 years earlier had reported. For those who had been raped more than 10 years earlier, the reporting rate was even lower: 18 per cent. However, while these findings are in the predicted direction, it would be unwise to place too much reliance on them. Due to the methodology employed, it is not possible to determine if this survey was representative of the total population of rape victims: for instance, it is *possible* that victims who had been raped some years previously were more likely to respond to the survey if they had not reported the offence. This could have occurred, for example, if respondents saw the survey as an opportunity to express their views about something which had not been resolved at the time. Methodological problems aside, the AIC survey reports only a broad national trend. It would be a considerable – and unwarranted – leap to rely on this general data to account for the recent rise in reported rapes in Victoria described above.

AN ALTERNATIVE APPROACH

Given the limitations of existing survey data, we opted to use an alternative strategy for determining whether the increase in reported rapes in Victoria in the early 1990s could be attributed to changes in the reporting behaviour of victims.

First, we sought to establish if there had been any change in the characteristics of rape reported to police over the period under consideration. Our assumption was that if the overall reporting rate had gone up, the greatest increase in reports would be by victims who knew their assailant well. There is substantial research showing that traditionally, sexual assault victims have been less likely, all other things being equal, to report to the police if the offender is well known to them (Williams 1984; Lizotte 1985; Temkin 1987, pp. 9–13). It is plausible to assume that changes in the reporting climate would have more impact on victims in this group than on, say, victims of stranger rapes, because there is more scope for the removal of reporting barriers to make a difference. Education of the public about the ‘myths’ of rape is likely to have relatively little impact on the reporting behaviour of victims of stranger rapes, because society has always treated such people as legitimate victims (Williams 1984; Lizotte 1985; Estrich 1987). By contrast, education can have a significant effect in changing society’s responses to victims of rapes by intimates, and thereby may encourage more of these victims to come forward. In addition, campaigns to increase reporting have often been targeted specifically at those victims who have traditionally been the most reluctant to report (such as victims of intra-familial rape).

Second, we sought to estimate the length of time which had elapsed between the date on which the offence occurred and the date on which it was reported to the police. This was done in order to determine how many rapes reported to the police in a given year were incidents which had actually occurred in earlier years. Our assumption was that, if the environment had become more conducive to reporting, victims who had previously remained silent would have been encouraged to come forward and notify the police of the incident.

The data sources which we used to test these propositions were as follows:

1. *The Victoria Police Victims Index Database.* Since 1988, the Victoria Police have entered basic offence details such as the date and time of occurrence, and the location of the offence, on to a computerised database known as the Victims Index. A sub-set of this database – covering all sexual offences reported in the period 1989/90 to March 1993 – was made available to the then Victorian Bureau of Crime Statistics and Research for the purposes of this study. These data were used primarily to map changes in the extent of delay between the occurrence of an offence and the reporting of it to police.
2. *The Bureau Study.* With the permission of the Victoria Police, researchers from the Victorian Bureau of Crime Statistics and Research examined police Crime Reports for all rapes and attempted rapes reported to the police in 1991/92. The purpose of coding the reports was to obtain additional offence data to that recorded in the Victims Index Database. These items included: the physical act(s) which constituted the alleged rape, the relationship between the victim and offender(s), the number of offenders involved, the location of the offence, whether a weapon was involved, and the action, if any, taken by the police.
3. *The CCAV Study.* The Bureau also had access to a database compiled in 1991 by the Victorian Community Council Against Violence (CCAV). This database, which covered all rapes and attempted rapes reported to the Victoria Police between 1987/88 and 1989/90, contained similar information to that collected in the Bureau study (1991a; 1991b). In designing the Bureau study, care was taken to use coding categories compatible with those employed in the CCAV study.

CHANGES IN THE PROFILE OF REPORTED RAPES

RELATIONSHIP BETWEEN VICTIM & OFFENDER

By combining the data collected in the CCAV and Bureau studies, it was possible to compare the statistical profile of rapes reported in 1991/92 with those reported in the two year period 1987/88 to 1989/90 (Table 1). This comparison showed that a much larger proportion of the rapes reported in 1991/92 involved rapes by non-strangers. Specifically, the proportion of reported rapes committed by a person known to the victim increased from 55 per cent of reports in 1987/88 to 69 per cent in 1991/92. A more detailed comparison of the data for the years 1989/90 and 1991/92 indicates that the growth in reports was concentrated in the following areas:⁵

- 63 additional reports of rapes by parents and other relatives were received in 1991/92; nearly three times as many as two years previously
- reports of rapes by spouses and ex-spouses more than doubled from 24 to 51
- reports of rapes by intimate or ex-intimate friends nearly doubled from 19 to 36
- reports of rapes by co-residents of institutions (not shown separately in the table) went up from one to 15
- 35 fewer stranger rapes were reported in 1991/92 than in 1989/90, and the contribution of stranger rapes to the total number of reported rapes fell from 36 per cent to 19 per cent.⁶

5 Until 1991, the Victoria Police counted each distinct act of sexual penetration as a separate offence. Hence, if the number of sexual penetration offences increased by 20, this could have indicated that an additional twenty children had been victimised or, alternatively, that one child had been penetrated on 20 separate occasions. A victim-based counting rule (i.e. one offence counted for each victim) was adopted in 1992.

6 It was suggested to us by a senior detective that the decline in the number of stranger rapes reported in 1991/92 reflected the success of the Victoria Police in apprehending a number of very active serial rapists. Further research is required to assess the significance of this factor. However, it seems likely that the incidence of stranger rape is more sensitive to policing initiatives than are other categories of rape.

**TABLE 1 – RELATIONSHIP BETWEEN VICTIM AND OFFENDER RAPES
REPORTED TO VICTORIA POLICE 1987/88–1991/92**

Victim- Offender Relationship	DATA SOURCE					
	CCAV 1987/88		CCAV 1989/90		Bureau 1991/92	
	n	%	n	%	n	%
Stranger	151	38.1	172	35.8	137	19.4
Spouse/defacto	17	4.3	24	5.0	51	7.2
Parent/step-parent/other relative	24	6.1	35	7.3	98	13.8
Intimate/ex-intimate friend	10	2.5	19	3.9	36	5.1
Authority relation	17	4.3	13	2.7	34	4.8
Other known (e.g. met that day; neighbour; acquaintance; colleague; co-resident)	150	37.9	200	41.6	272	38.4
Relationship not known	27	6.8	18	3.7	80	11.3
TOTAL	396	100.0	481	100.0	708	100.0

Sources: 1987/88 CCAV (1991a, p. 49); 1989/90 CCAV database; 1991/92 Bureau database.

Note: The low number of reports coded as 'relationship not known' in 1989/90 is attributable to the CCAV having access to additional documentation for that year in the form of victims' statements to the police.

It is important to note that the substantial increase in reports of intra-familial rape, many of which are committed against children, corresponded with very active police campaigns around the issue of child sexual assault.⁷ As with other police sexual assault reporting campaigns, the significance of this initiative may not have been so much that it generated reports of child sexual assault, but rather that it contributed to changes in the community's perceptions of what constitutes sexual assault and helped to remove the social stigma previously associated with reporting of child sexual assault. The increase in reports of marital rape was almost certainly connected with the abolition of the spousal immunity in the mid-1980s.⁸ More specifically still, the increase in reports of intra-institutional rapes in 1991/92 appears to have been connected with the publication in mid-1991 of a report detailing a number of cases of sexual assault at one institution, and a consequent change in reporting policy by the main government agency, Community Services Victoria.

⁷ The most prominent of these has been Operation Paradox, an on-going campaign requesting the public to report suspected cases of child sexual assault. This Operation began in 1989 and there have been five since, with the last two coinciding with Child Protection Week. Unfortunately, the police have not recorded data on the number of additional crime reports generated as a result of this or other campaigns.

⁸ *Crimes (Amendment) Act 1985*. Prior to this Act, a husband could only be convicted of raping his wife if they were living "separately and apart" at the time the assault occurred.

TRENDS IN REPORTING DELAY

Our second assumption was that the creation of a more conducive reporting environment would have had an impact on past as well as recent rape victims. On this basis, we hypothesised that at least some of the increase in offences reported to the police from 1991/92 would be due to an increase in reports of rapes which had occurred a considerable time prior to the report date.

Reporting delay is the time that elapses between the occurrence of a sexual offence and the victim's report of the offence to police. Unfortunately, it was not possible to get a precise measure of the extent of such delays from the data which we had available to us. The Victoria Police Victims Index recorded the date and time of each offence and the date on which the offence was recorded in the database, but not the date of the victim's report. A further complication was that the *system entry date* was affected by variable delays in processing the report by the Victoria Police Information Bureau.

In order to determine whether there had been an increase in the level of retrospective reporting, we distinguished between recent reports (that is, those offences reported immediately or after only a short delay) and delayed reports (those reported after a substantial delay of months or years). Bearing in mind the processing delay associated with Victims Index data, we used a conservative definition of recent reports, as being any report where the delay between offence and system entry was under three months. Delayed reports were classified as those where the delay between the date of the offence and the system entry was between three and 12 months. Very delayed reports were those with a delay of over 12 months.

As a check on this classification, we also examined delays for the offence category of Wilful and Obscene Exposure. This is the least serious form of sexual offence, with relatively little social stigma attached to victimisation. It was therefore assumed that there would normally not be any substantial reporting delay for such offences. Moreover, the process for entering these offences on the Victims Index is the same as for more serious sexual offences.

Table 2 shows that over 95 per cent of Wilful and Obscene Exposure offences had a delay between offence occurrence and system entry of less than three months. Between 1989/90 and 1992/93 (the most recent year for which data were available) the proportion of recent exposure offences declined only marginally, from 98 per cent to 96 per cent. We took this as confirmation that the three month criterion for recent offences was valid.

**TABLE 2 – DELAY IN REPORTING WILFUL & OBSCENE EXPOSURE OFFENCES
VICTORIA: 1989/90–1992/93**

ELAPSED TIME BETWEEN DATE OF OFFENCE AND ENTRY ON DATABASE								
YEAR	UNDER 3 MTHS		3 – 12 MTHS		OVER 12 MTHS		TOTAL	
	n	%	n	%	n	%	n	%
1989/90	1,820	(98.0%)	31	(1.7%)	7	(0.4%)	1,858	(100%)
1990/91	1,524	(96.0%)	56	(3.5%)	8	(0.5%)	1,588	(100%)
1991/92	1,688	(95.9%)	62	(3.5%)	11	(0.6%)	1,761	(100%)
1992/93 (8 months)	997	(96.3%)	32	(3.1%)	6	(0.6%)	1,035	(100%)

Source: Victoria Police Victims Index.

Note: Data were only available from the index for the period up until March 1993.

The pattern for reported rapes was very different. Table 3 shows that the proportion of very delayed reports (that is, rapes which had occurred more than one year prior to the offence being reported) more than doubled between 1989/90 and 1992/93, from 4.9 per cent to 11.1 per cent. The proportion of reports made between three and 12 months after the offence nearly doubled, from 9.7 per cent to 17.8 per cent. Eleven of the offences reported in 1991/92 had actually been committed more than 10 years earlier, whereas none of the offences reported in the preceding two years dated back this far.

**TABLE 3 – DELAY IN REPORTING RAPE OFFENCES
VICTORIA: 1989/90–1992/93**

ELAPSED TIME BETWEEN DATE OF OFFENCE AND ENTRY ON DATABASE								
YEAR	UNDER 3 MTHS		3 – 12 MTHS		OVER 12 MTHS		TOTAL	
	n	%	n	%	n	%	n	%
1989/90	502	(85.4%)	57	(9.7%)	29	(4.9%)	588	(100%)
1990/91	485	(79.8%)	82	(13.5%)	41	(6.7%)	608	(100%)
1991/92	584	(78.4%)	91	(12.2%)	70	(9.4%)	745	(100%)
1992/93 (8 months)	371	(71.1%)	93	(17.8%)	58	(11.1%)	522	(100%)

Source: Victoria Police Victims Index.

Note: Only rapes recorded on the PATROL database up to March 1993 are included.

By matching the CCAV, Bureau and Victims Index data, it was possible to obtain additional information about the characteristics of delayed reports. This analysis established that substantial delays in reporting were most common in the cases of intra-familial rape. For example, 38 per cent of the intra-familial rapes reported in 1991/92 had occurred a year or more previously, compared with only three per cent of

'stranger rapes' and seven per cent of rapes by acquaintances and friends. It was also relatively common for victims of rapes by authority figures to delay reporting: in 1991/92 20 per cent of such reports had been delayed by more than one year, and 34 per cent by more than six months.

In summary, the rise in the number of reports of delayed offences in 1991/92 and 1992/93 was primarily due to the marked increase in reports of intra-familial rape and, to a lesser extent, a parallel growth in reports of rapes by authority figures. However, even within these categories some shifts in reporting practices were apparent (although the numbers involved were too small to satisfy the criterion of statistical significance). For example, 38 per cent of the reports of intra-familial rape recorded in 1991/92 concerned offences which had been committed more than a year earlier – compared to 23 per cent in 1989/90. Likewise, only one (7%) of the 15 reports of rape by an authority figure received in 1989/90 was delayed by more than a year, compared with eight of 40 such reports (20%) in 1991/92.

DISCUSSION AND CONCLUSION

Our research established that the rise in reported rapes in Victoria in the early 1990s corresponded with two interrelated developments: (1) a substantial increase in the number of reports of rape by family members, spouses, and other 'intimates'; and (2) an increase in the number of reports relating to rapes which had actually occurred a year or more prior to being reported. A definitional change in August 1991 also had some impact on the figures for 1991/92.

These trends provide strong indirect evidence of an overall increase in the reporting rate for rape. First, the greatest increase in reports was from those victims who have traditionally been the least likely to report to the police. Apart from possibly being influenced by broader social, institutional and political developments, these groups were the target of various initiatives – such as definitional changes, media campaigns and public reports – which were intended, at least in part, to bring more offences to the attention of the police. Second, the increase in the number of substantially delayed reports made to the police indicates that a significant number of victims who had initially not reported had subsequently been prompted to take action.

We are unable to quantify the extent to which the reporting rate for rape increased in Victoria during this period, as no reliable, statistically robust measures of actual offence incidence are available. However, even a relatively modest increase in the proportion of rapes reported – say, from 30 per cent to 35 per cent – would have been sufficient to account for all of the additional offences recorded from 1991/92 onwards. Although we are not able to say with certainty that there was *no* increase in the underlying incidence of rape over this period, any change would have been substantially smaller than indicated by reported crime statistics. This conclusion is also consistent with the sexual assault trends evident in recent Victorian crime victimisation surveys and those undertaken in other States such as New South Wales (see above).

Overall, the findings of this research provide further confirmation (if any is needed) that reported crime statistics cannot be interpreted as simple measures of the level of social violence. A rise in the number of reported crimes may reflect a real increase in the underlying rate of offending. However, in the case of offences like rape, where a high proportion of offences normally go unreported, a rise in reporting may be just that.

At the methodological level, this paper has drawn attention to a useful, low cost, strategy for interpreting trends in reported crime, particularly in relation to relatively low frequency offences such as rape. Much of the data on which the paper is based are now recorded routinely by police services, particularly those which have implemented computerised crime recording systems. It therefore should be a relatively straightforward exercise for researchers in these organisations to undertake the kind of analysis outlined here. Moreover, the approach used here could be adapted to investigate trends in other reported offences,

such as assault: for instance, by tracking the extent to which the increased number of assaults recorded by the police is attributable to a rise in intra-family assaults. Crime victim surveys should not be discounted as a source of data on underlying offence trends, but it is important to acknowledge their limitations for addressing the questions with which this paper has been concerned. Apart from being expensive to conduct, these surveys have their own problems of comparability. Most importantly, because the surveys only sample a very small proportion of the total population, they cannot provide statistically robust measures of changes in the incidence or reporting of relatively uncommon offences such as rape, unless these changes are very large, or there is a relatively lengthy time series available.

At a practical level, this research has important implications for the way that reported crime statistics are presented. A significant percentage of the additional rapes reported in Victoria between 1989/90 and 1991/92 occurred over 12 months prior to the date of reporting: that is, they were not committed during the year in which they appeared in the official crime statistics. As it seems inevitable that reported crime statistics will continue to be used as a defacto measure of actual crime rates, at least some of the influence of changing reporting rates could be adjusted for by distinguishing between offences occurring in the reporting year, and those occurring in previous years. In addition, to enable analysis of the type used in this paper to be undertaken, it would be very helpful if published police statistics showed the break-down of reported sexual assaults according to the relationship of the victim to the offender.

A final point is that researchers need to recognise that for an offence like rape, changes in reporting rates are important for their own sake, and not merely as an indication that underlying incidence rates have or have not changed. As detailed in this paper, the Victorian Government and Victoria Police have implemented a variety of initiatives in recent years aimed at reducing the trauma of sexual assault and improving the effectiveness of the criminal justice system. One of the objectives of these initiatives has been to encourage an increase in reporting on the part of sexual assault victims, especially amongst those groups which have traditionally been least likely to report. Closer attention to patterns of reporting is one way to gain a better appreciation of how well these reforms are working.

ACKNOWLEDGMENTS

Data collection for this study was undertaken by June Baker, with the assistance of Ann Normoyle, Glenda James and Emma Cornall. We would especially like to thank the Victoria Police for their cooperation in this study. Thanks are also due to the Victorian Community Council Against Violence for providing unpublished data from the Council's study.

REFERENCES

- Brereton, D. 1994, 'Real Rape. Law Reform and the Role of Research: The Evolution of the Victorian Crimes (Rape) Act 1991', *Australian and New Zealand Journal of Criminology*, vol. 27, no. 1, pp. 74-94.
- Broadhurst, R. & Maller, R. 1991, *Sex Offending and Recidivism*, Crime Research Centre, University of Western Australia.
- de Mel, R. & Carcach, C. 1994, 'Comparison of Victimization Rates Reported in the 1991 Queensland Crime Victims Survey and the 1993 National Crime and Safety Survey', Paper presented at the Symposium on Crime Victims Surveys, Griffith University, 28-29 November 1994.
- Easteal, P.W. 1993, 'Survivors of Sexual Assault: A National Survey', in Easteal, P.W. (ed), *Without Consent: Confronting Adult Sexual Violence*, Australian Institute of Criminology, Canberra.
- Estrich, S. 1987, *Real Rape: How the Legal System Victimises Women Who Say No*, Harvard University Press.
- Heenan, M. & Ross, S. 1994, '*The Police Code of Practice for Sexual Assault Cases: An Evaluation Report*', Department of Justice, Victoria.
- Koss, M.B. 1992, 'The Underdetection of Rape: Methodological Choices Influence Incidence Estimates', *Journal of Social Issues*, vol. 48, no. 1, pp. 61-75.
- Lebeau, J. 1988, 'Statute Revision and the Reporting of Rape', *Social Science Research*, vol. 72, pp. 201-207.
- Lizotte, A. 1985, 'The Uniqueness of Rape: Reporting Assaultive Violence to the Police', *Crime and Delinquency*, vol. 31, pp. 169-90.
- Lloyd, C. & Walmsley, R. 1989, *Changes in Rape Offences and Sentencing*, Home Office Research Study No. 105, HMSO, London.
- Orcutt, J.D. & Faison, R. 1988, 'Sex-Role Attitude Change and Reporting of Rape Victimization, 1973-1985', *The Sociological Quarterly*, vol. 29, no. 4, pp. 589-604.
- Roberts, J.V. & Gebotys R.J. 1992, 'Reforming Rape Laws: Effects of Legislative Change in Canada', *Law and Human Behaviour*, vol. 16, pp. 555-573.
- Temkin, J. 1987, *Rape and the Legal Process*, Sweet and Maxwell, London.
- Victorian Community Council Against Violence 1991a, *Source Book of Victorian Sexual Assault Statistics 1987-90*.
- 1991b, *A Profile of Rapes Reported to Police in Victoria 1987-90*, Melbourne.
- Walker, J. 1994, 'Trends in Crime and Criminal Justice', in Chappell, D. & Wilson, P. (eds), *The Australian Criminal Justice System: The Mid 1990's*, Butterworths, Melbourne.

Weatherburn, D. & Devery, C. 1991, 'How Violent Is Australia?', in Chappell, D., Grabosky, P. & Strang, H. (eds), *Australian Violence: Contemporary Perspectives*, Australian Institute of Criminology, Canberra, pp. 23-39.

Williams, L. 1984, 'The Classic Rape: When Do Victims Report?', *Social Problems*, vol. 31, pp. 459-67.

Wong, B. 1992, 'Issues in the Design of Crime Victim Surveys', Paper presented at Conference on Measurement & Research Design in Criminal Justice, Griffith University, Queensland, 3-5 August 1992.

APPENDIX

IMPACT OF THE *CRIMES (SEXUAL OFFENCES) ACT 1991*

In simple terms, Victorian law defines rape as non-consensual sexual penetration. Prior to proclamation of the *Crimes (Sexual Offences) Act 1991* in August 1991, 'sexual penetration' was defined as the insertion of the penis into the vagina, anus or mouth of another person, or the insertion of an object into another person's vagina or anus. This definition of the physical element of rape was introduced by the *Crimes (Sexual Offences) Act 1980*. The 1991 Act extended the definition of sexual penetration to include penetration of the vagina or anus by parts of the body other than the penis. As a result, the offence of rape now includes non-consensual digital penetration of the vagina or anus, and non-consensual cunnilingus. Prior to August 1991, such acts would have been counted as indecent assaults, unless they formed part of the circumstances of an attempted rape, or an assault with intent to rape. For instance, under the old law an accused who inserted his finger into a woman's vagina could have been charged with attempted rape or 'assault with intent' if this act was committed with the aim of effecting penile penetration. However, if the accused intended to do no more than digitally penetrate the woman, the appropriate charge would have been one of indecent assault.

As described in the body of this paper, the Victorian Bureau of Crime Statistics and Research collected data on 708 reports of rape recorded in 1991/92, representing 97 per cent of all reports received by the Victorian Police Information Bureau for that year. Analysis of the relevant Crime Reports identified 96 cases in which the only forms of sexual penetration engaged in were digital penetration of the vagina or anus, or cunnilingus. Six of these reports related to offences committed prior to August 5: these were all classified in the crime reports as attempted rapes or assaults with intent to rape. The remaining 90 reports, all of which were classified as rapes, related to offences committed after August 5.

On our estimate, around half of these 90 reports would have been classified as indecent assaults if the pre-August 1991 definition of rape had been retained, with the other 50 per cent being recorded as attempted rapes. Our grounds for suggesting a 50/50 split are as follows:

- In 1991/92, the number of attempted rapes recorded fell by 46, even though reports of rape were well up overall. This presumably was due to the definitional changes introduced by the *Crimes (Sexual Offences) Act*.⁹
- In July 1991, the month prior to the introduction of the new definition, there were three attempted rapes reported in which the offender had digitally penetrated the victim. On the assumption that this was not an unusual month, there would have been at least 36 such cases in the full year. Quite probably there would have been more than this number, given that fewer rapes were recorded in July than in some other months.

On the basis of these estimates, it can be concluded that the net effect of the new law was to transfer some 45 offences from the category of indecent assault to that of rape/attempted rape. Thus, if there had been no change in the law, the total number of rapes/attempted rapes recorded by the Victoria Police in 1991/92 would have been 683 rather than 728 – that is, about six per cent less than the figure actually shown in police statistics.

⁹ The *Crimes (Sexual Offences) Act 1991* abolished attempted rape as a separate offence in the *Crimes Act*. However, we have been assured that, notwithstanding this change, the police have continued to record attempted rapes separately.

APPLICATION OF THE FEAR OF CRIME AND INCIVILITY MEASURES BASED ON THE 1991 QUEENSLAND CRIME VICTIM SURVEY: ILLUSTRATING METHODOLOGICAL ISSUES IN CRIMINOLOGY

Kay L. Thomas

Justice Studies, Queensland University of Technology

Maarten Post

Commissioner's Inspectorate, Queensland Police Service

Carlos Carcach

Queensland Government Statistician's Office

INTRODUCTION

A tension exists in the area of social methodology concerning the nature of the data required to "prove" the existence of various factors and describe how phenomena relate to social conditions. This is so when considering offending and victimisation. Questions such as how much data is needed to describe the impact of social factors on offending and victimisation, how detailed these data bases should be, and how sophisticated the methods of data analysis need to be, raise important methodological issues regarding efficiency, effectiveness, reliability, precision, data analysis and cost.

Research into crime and victimisation is still in a pioneering phase. It is still the case that much of the research being conducted can be described in terms of simple statistics provided the samples are large enough and are representative. There is the possibility of using more sophisticated statistical methods as Farrington, et al., (1993) have demonstrated. However, the basic requirement is still for carefully collected, precise data with big enough numbers to allow for comparison of important subgroups in the data. Having said this, there is also a place for short, quick, efficient surveys to be conducted based on findings from the more elaborate and extensive crime victims' surveys.

This paper addresses the balancing of quality and efficiency in statistical research in the area of victimisation and offending, relative to the operationalisation of important findings in the form of policy and programs. The special place of crime victims surveys will be considered in this context. To illustrate the issues raised, the paper draws upon experience from various research projects aimed at understanding the social aspects of crime. There is no single answer to what is the best research strategy. Rather, there are many factors to take into account and there are several options with respect to methodology.

METHODOLOGICAL ISSUES

QUALITY OF THE DATA

Some years ago, a Danish sociologist Dr. Erik Høgh wrote an article describing the results of the Copenhagen Metropolitan Study consisting of 11,532 subjects. He wanted to show the results of sequences of variables and their outcomes in terms of registered deviance and choice of occupation. It is generally

the case amongst Scandinavian empirical sociologists that the emphasis is on securing good data by using impeccable collection methods, on training staff to use comparable data collection methods and on aiming for large samples, or preferably, complete populations (as in this one year birth cohort born in Copenhagen in 1952).

Given this obsession, if you like, with the quality of data, it is also assumed that the statistical methods used will be of high quality. Hogh claimed further that it was possible to show important interrelationships in terms of simple statistics, at least in the first instance:

my proposition is that, in order to show that time-consuming research is worth the effort, the interrelationships must be able to be demonstrated without statistical subtleties. Are the expected relationships to be found in the data or not? These relationships are scientific propositions if they are expressions of assertions that are made beforehand and thereafter verified using the most reliable, valid and precise observation methods possible and capable of being reproduced. (Hogh 1984, p. 2)

This paper follows this reasoning, i.e. that "good" data will illustrate important interrelationships between variables using simple statistics. The database from the 1991 Queensland Crime Victims Survey (QCVS) conducted by the Government Statistician's Office fulfilled, as shown below. This however, does not mean that more powerful statistical methods should be set aside. On the contrary, once having secured the data, the logical next step is the use of more sophisticated statistical processes.

MODERN METHODOLOGICAL DEBATE

Modern empirical research has become much more powerful through the incorporation of mathematics and development of a powerful logical technique, able to answer many problems which before were the prerogative of metaphysics (Russell, 1961 p.787). One important example of the relationship between mathematics and modern analytical empiricism is the introduction of structural equation modelling into sociology by Blalock, who drew on the work of Herbert Simon. Simon believed that 'the essential elements of a wide range of postulates about human behaviour, individual and social, can be translated into mathematical models' (Simon, 1982, p.234).

The debate has continued in the social sciences, however, as to the applicability of a natural science methodology to social and human affairs. The "verstehen" argument is that the mode of interpretation in the social sciences is fundamentally different to that of the natural sciences. Social life is symbolic, dynamic and interactional – qualities which make social life meaningful, subjectively, to the participants, and presumably impossible to measure. Many students of sociology have rejected the quantitative method because of this requirement for greater qualitative interpretation of the social dynamics. Interpretation is, however, essential to scientific work as well. Can these more human and esoteric questions be treated in a scientific manner?

Rules of scientific method are designed to overcome the "human" problems of observation, perception, analysis and interpretation (Pinch: 1985). This does not mean they have been overcome in practice, or that observation, interpretation and analysis are easier in the natural sciences. The notion amongst "verstehen" sociologists seems to be that the social sciences deal with much more difficult subject matter than the natural sciences. However, the rules for overcoming bias and establishing reliability and validity do not relate to the subject matter so much as to the process of inquiry itself. These processes relate to:

1. Composition, or questions which relate to the selection of specific substances, ingredients or to specific means of instrumentation. (Knorr-Cetina 1981, p. 355)

In the social sciences, these are questions concerning the nature of the population to be studied, the attributes or attitudes of individuals, or the properties of certain groups, or classes. To establish a method of inquiry as reliable, the questions asked must be able to be applied uniformly across the units of study. In sociology, these are individuals or groups. Validity can be established by ensuring that the methods used really enable precise answers to be given to the questions posed. Thus instrumentation in the social sciences demands verification in the same way using the same rigour as in the natural sciences.

2. Quantification, or questions which bear on the selection of how much of a substance is to be used, of how long a process should be maintained, or when a measurement or a sample should be taken, etc. (Knorr-Cetina 1981, p. 355)

In the social sciences, these questions pertain to the number of subjects required, the kinds of questions needed, and the period of time over which observations need to be made in order to answer the questions posed. Although quantification is required at some stage, the ultimate goal of quantification is to answer qualitative questions, whether in the natural or social sciences.

A popular attitude exists that measurement is easier in the natural sciences, and the question is often raised as to the worth of trying to measure human affairs. Whatever the arguments about the worth of the exercise, it is clearly possible to measure many characteristics of human life and social existence. In so doing, the overriding aim is to ensure the validity and reliability of the methodology used.

3. Control, or questions which refer to such methodological options as simplicity of composition versus complexity, strict versus indirect comparability, etc. (Knorr-Cetina 1981, p. 355)

Control is necessary in all scientific endeavours in that the scientist is trying to replicate or simulate some naturally occurring phenomena in such a way as to establish comparability between their functioning in some way. In the social sciences, comparability can be established in two ways. Either it can be planned for in the study design itself, i.e. the case-control method; or it can arise out of the data, providing the number of observations are made large enough to include many "naturally-occurring" comparisons (survey method), preferably over a period of time (longitudinal method). The purpose of control is essentially to separate out factors which may be a cause, or consequence, of the phenomena under investigation. Quantification is then used to measure similarities and differences between phenomena as part of a controlled comparison.

In the so called hard sciences – physics and mathematics – there has been a revolution in thinking and a total reassessment of the argument between classical induction and classical empiricism. The argument has revolved around the question of whether one can know the world inductively prior to observation or whether one can only make valid statements afterwards. Far from being abstract philosophical problems, these are fundamental questions of methodology, i.e. of how we approach the task of knowing the world around us, including the role of subjectivity.

Popper's methodology (1976) has become a basis for modern scientific inquiry. He combined strict deductivism with strict empiricism to produce his distinctively hypothetico-deductive position. According to this approach statements can indeed be made a priori, but they are only tentative, working hypotheses. The hypotheses are then subjected to empirical falsification in a strictly empiricist way.

THE ISSUE OF REPRESENTATIVENESS

Representative sampling is an important way of achieving "control". This is often combined with stratified random sampling. However, in matters concerning criminal deviance, such sampling is often not possible. Purposive selection (Madsen, 1971) is the only avenue possible. Thus, in issues concerning social deviance, researchers are often faced with captive audiences, so to speak. This type of selection can only be purposive and does not conform to the demands of "scientific" probability sampling.

This marks a large difference in the approach of statisticians used to working with large representative samples and sociologists or criminologists used to working with data which can never be representative. One important way of overcoming this has been to use longitudinal methods of data collection. However, these are expensive and take a long time to reach maturity. Australia has a dearth of longitudinal studies which could be used for purposes of tracing the causes of crime, although the Mater Hospital Study in Brisbane is an important exception to this rule.

GULF BETWEEN THE STATISTICIAN'S APPROACH AND THE CRIMINOLOGIST'S APPROACH

There is a gulf in understanding between criminologists and statisticians in terms of interpreting and processing data on basically the same issues.

The criminologist's approach is very much determined by a knowledge of the criminal justice system in terms of government responses on the one hand, and the community response on the other. The criminologist knows the limitations on data collection methods used in various government departments. There is a recognition that what actually occurs in the field as opposed to what is recorded can be quite large. With limited funding and the emphasis on practical evaluation rather than on long-term issues of prevention, it is difficult to stretch funding to take into account a broad cross-section of respondents.

There are also differences in the degree to which criminologists process the data. The emphasis has been on descriptive techniques, given the more limited nature of the data. Statisticians do not have the same involvement and subsequent demands placed on them by the reform process now operating in our justice system, nor is it necessary for them to tailor their research interests to the daily workings of the police, corrections, courts etc.

EXAMPLES OF METHODOLOGICAL ISSUES

The research projects are described below to illustrate the methodological issues and the different solutions reached by each in answer to the demands of efficiency, accuracy and practical applicability of the results.

THE 1991 QUEENSLAND CVS AND FEAR OF CRIME

The QCVS is an example of classical, empirical and statistical quality product. This kind of research provides a basis for generating new concepts which we found to be extremely relevant to the more mundane, practical, level of evaluation. However, the results have been under-utilised with respect to extracting higher level variables. From our point of view, the data revealed a great deal of useful results which could be taken further.

An analysis of the fear of crime questions in the QCVS was conducted by the Queensland Government's Statistician's Office. The QCVS used a stratified multistage clustered design to survey households throughout Queensland from which 6,315 completed personal crime questionnaires were obtained. The scope of the survey consisted of all persons aged 15 and over who were residents of private dwellings in Queensland. The major objective of the survey was to obtain an estimate of the volume and nature of crimes occurring in the State over the 12 months preceding it. Its secondary objective was to obtain information on types of crime, their location, time of occurrence, and other characteristics such as fear of crime.

Basically, the analysis conducted by the Government Statistician's Office showed that incivility was the next most important factor after gender in predicting the fear of crime. Incivility was an index constructed from a number of questions about the perceived risk of theft, litter, noise, vagrants, vandalism and graffiti, and the rundown appearance of houses in the neighbourhood.

Incivility is an important variable because it describes situations which can be changed by authorities, by the public and the police. By reducing the occurrence of these events, the fear of crime may also be reduced.

Respondents were asked about how safe they felt when walking alone in their areas after dark. Answers to this question were arranged in an ordinal scale with the following categories: very safe (1), fairly safe (2), not very safe (3), and not at all safe (4). In addition, data were collected on other variables which previous research suggested were highly correlated with fear of crime. Some of these variables were: personal characteristics related to vulnerability such as sex and age, area characteristics related to environmental cues and conditions such as neighbourhood cohesion and presence/absence of incivility, and data on knowledge of crime either personal or from others.

THE PRELIMINARY DATA ANALYSIS

As referred to earlier, "good" data will readily open up possibilities even in the early stages of data analysis, where simple methods are used to pin-point those variables most likely to explain the outcome variable. This is illustrated below:

The first step of the analysis was to investigate the relationship between various predictor variables and fear of crime, operationalised (as explained) above. The fear of crime measure was assumed to be an underlying continuous unobservable variable (latent variable). The categories of the variable were seen as intervals on a continuous scale. It was further assumed that an increase in the probability for the specific value of the observed variable manifested an increase in the value of fear of crime.

A single explanatory variable was considered at a time. All explanatory variables were converted to a dichotomous nominal scale. This enabled the differences between the cumulative probabilities of the groups determined by the explanatory variable to remain constant (or at least near constant) and of about the same magnitude across the categories of the dependent variable. A logistic distribution was assumed to fit the data and cumulative logits were used as measures of the cumulative probabilities for each category of fear of crime.

The assumption here is that the relative amount of fear of crime among the groups, as measured by the odds ratio, increases at a constant rate as we move from very safe to not safe at all. This assumption is known by the name of proportional odds.

The process of dichotomising input variables and constructing odds ratios served as a simple method of testing the suitability of each variable as a potential component of the final regression model. It also provided an overview of these variables and their contribution to the fear of crime.

The procedure, illustrated by using the relationship between fear of crime and gender, consisted of the following steps:

Odds ratios were computed. The results from this exploratory analysis suggest that the following variables are related to fear of crime in a way that a logistic ordered linear model could be used:

- (a) **Gender**
The odds of feeling fear of crime were estimated to be 4.5 times greater for females than for males.
- (b) **Ethnicity**
The odds of feeling fear of crime for people of non English speaking background were about 1.3 as large as those people from English speaking backgrounds.
- (c) **Neighbourhood Cohesion**
The odds of feeling fear of crime for residents of areas in which people get together to help each other are 1.5 times as large for those residents of areas in which people tend to go their own way.
- (d) **Crime in the Own Area Compared to the Rest of the State**
These variables seem to make a strong contribution to fear of crime. The odds of experiencing fear of crime for residents of areas where more crime is perceived to exist, are 2.3 times as large as for those residents who do not share this perception.
- (e) **Perception of Personal Risk**
All the variables included under this heading were strongly associated with fear of crime. The odds of feeling fear of crime for persons who consider themselves at high risk of being victimised are between about 3 times as large as those for persons considering themselves at low risk of victimisation.
- (f) **Incivility**
The odds of feeling fear of crime for residents in areas that present problems with graffiti on walls or buildings, noisy neighbourhoods or loud parties, or vandalism and deliberate damage to property are about 1.6 times larger than in areas where these problems were absent.

From this preliminary analysis of variables using dichotomised input variables and odds ratios, it became clear that several variables describing the way people feel about their neighbourhood i.e. neighbourhood cohesion, perception of personal risk, knowledge of crime in their own area and incivility components, were important factors in the fear of crime. They were also conditions which were amenable to change in contrast to age and gender. The results suggested that neighbourhood cohesion appeared to be an important environmental condition which could offset the problems of incivility, which, when present, created an unattractive and unpleasant neighbourhood.

THE INDEX OF INCIVILITY

The index of incivility was constructed from questions describing how subjects experienced their neighbourhood in terms of environmental variables such as observing graffiti on walls, drunks and vagrants on the streets, vandalism and deliberate damage to property, homes and gardens in bad condition and the perceived likelihood of having the home broken into.

By constructing odds ratios for dichotomised environmental variables in the same way as for gender, above, it was observed that these variables, i.e. graffiti, vandalism, vagrancy, vandalism and homes/gardens in poor condition and the perceived likelihood of house theft, all made a contribution to fear of crime. Exceptions were noisy parties and rubbish and litter lying around.

THE REGRESSION ANALYSIS

The regression analyses later confirmed these preliminary findings. The presence of incivility in the area makes the second largest contribution to fear of crime among Queenslanders. The larger the value of the index of incivility for an area, the larger the probability of fear for its residents. A negative interaction with gender indicates that the difference in level of fear of crime between males and females decreases as the level of incivility increases.

Methodologically, the analysis by simple statistical methods indicated the way different variables behaved in relation to the outcome, fear of crime. For example, in the case of the perceived likelihood of being broken into and theft occurring, the differences between the cumulative logits have the same sign and are of about the same magnitude. The odds of feeling "not at all safe" are about 3.1 times as large for those perceiving a risk of being victims as for others. In summary, the preliminary analyses of the data using dichotomisation of input variables revealed that overall, a linear model was likely to be the most applicable to the data. It suggested that some variables could be combined under a single index of incivility which was the term used to describe these environmental, neighbourhood factors.

The valuable finding was that factors describing how people viewed their neighbourhood in terms of incivility, perceived crime and cohesion all seemed to be important to the fear of crime, a finding which was further underlined by the regression analysis. These factors were both tangible and readily identifiable.

THE FURTHER USE OF FINDINGS – THE POLICE BEAT SHOPFRONT EVALUATION

In our evaluation of the Queensland Police Service Police Beat Shopfront programs (Post and Thomas 1993) we used the fear of crime measure to see whether it was an indicator of change in the public's reaction to the setting up of Police Beat in several locations throughout Queensland.

The methodology here was not accurate, refined and precise compared to the victims of crime survey (1991), nor was the sample drawn in a random way, which would have been impossible. Instead, we took consecutive interviews of people coming into shopping centres at different times of the day. Despite this, the surveys showed a marked difference in the fear of crime after the introduction of Police Beat Shopfront, than before, which was probably due to a number of factors that had not initially occurred to us.

We had not realised that for most of the shopping day, women and the elderly were the main customers. It was precisely these two groups which were most likely to have a heightened fear of crime. The Police Beat Shopfront program unwittingly targeted a group with a high fear of crime. Thus the program was more likely to be successful because these groups responded positively to the Police presence. More broadly speaking, the program targeted effectively the attitudes of the public rather than the incidence of crime as such. In this sense, it was successful.

It seemed likely that reduction in the fear of crime would follow from interventions which targeted these neighbourhood factors.

Given the association between the neighbourhood and environmental variables and fear of crime, it is likely that the variables such as incivility, social cohesion and perceived crime would be applicable as indicators of community level interventions, be they by police or other organisations. The QCVS has provided a series of variables which can be developed further as indicators for the effectiveness of programs which hitherto have remained elusive to cold, hard measurement. We all know that this is extremely important in terms of policy and funding, to be able to "prove" the effectiveness of social/community interventions.

YOUTH SURVEYS & YOUTH OFFENDING

In our surveys of youth offending, we followed the principle of large sample sizes. We were able to achieve a sample size of 1,640 across three large communities in the State. We targeted all schools for subjects in the age range, and then selected classes rather than individuals. This was more practical. Thus even with some drop off of schools, the sample was still representative. To obtain the older youth, it was necessary to use employers and youth welfare organisations. Again, this is not perfect. However, given a short time frame, we chose to use bigger numbers to achieve a degree of representativeness and to ensure we had enough numbers in the categories of registered offenders, Aboriginal youth and so on.

The large sample size allowed for breakdowns of the data according to such factors as family conflict, aspirations, alcohol and drug use and so on, and gave the ability to compare offenders with non offenders according to such factors. Both the offender group and the Aboriginal group made up around 5 per cent of the sample. The ultimate sample size is very important in ensuring that groups of this size are adequately represented in the data.

The method of sampling was a combination of stratification (choosing age sets, sex ratio, and school background i.e. private or public) and purposive. In this project, random sampling would not have been possible; nor would it have much justification in terms of actually achieving representativeness. The objective of the exercise was to find those youth who were in the risk categories as part of the total population of youth in the area.

Since the target population was extended to all youth and the survey contained a large number of variables, a 7.5 per cent sample was considered manageable given the constraints of time, money and backup resources. The latest 1991 preliminary figures released by the Australian Bureau of Statistics were used to draw the sample from the youth population of Logan and Beenleigh according to statistical areas.

Response rates varied. In Mackay, 78 per cent of questionnaires sent out were returned, 65 per cent in Logan City and 60 per cent in Cairns. A total number of 1,659 youth from the three cities responded to the survey. Of these, 18 were older than 17 years and one less than 12 years and were not included in the analysis. Thus, the number entered for analysis was 1,640.

The analyses required an Odds Ratio and Relative Risk ratio to ensure that Confidence Limits were acceptable when dealing with much smaller subsets of the whole sample. Where subsets were used, these Confidence Limits were checked although not stated. If not met then the Chi Square statistic although "significant" was not regarded as being valid.

This research showed that there are a constellation of factors surrounding families whose youth are disadvantaged. The two groups which were of interest were young offenders and youth of Aboriginal and Torres Strait Island background. The employment, education and training profile of these young people was markedly poorer than that of the sample as a whole. Our research points to the need for a change in direction of policies in this area if there is to be an improvement for these disadvantaged groups.

We were able to illustrate many aspects of offending using simple statistics.

FAMILY

There was a high, full-time unemployment rate in the large sample (30% for fathers, 64% for mothers) but there is still higher unemployment among parents of Aboriginal youth (51% for fathers, 76% for mothers) and young offenders (31% for fathers, 69% for mothers). Problems associated with parental unemployment in the family are centred around arguments, conflict, poorer parental supervision, violence, alcohol and drug abuse, poor relationships between young people and their parents, and running away from home.

In considering fighting at home in which the respondent is involved 30 per cent report that they get involved in fights or punchups. Of these, over one third are with brothers while 22 per cent report that they get into fights or punchups with sisters. However, 17 per cent report that they fight with their father or stepfather, 7 per cent with their mother and 2 per cent mention parents but do not specify more.

There was a significant relationship between how often parents reportedly argue and whether they are affected by drugs or alcohol ($p < 0.001$). The more frequently the parents are rated to argue, the greater the frequency of reported alcohol or drugs being involved in parental arguments. Forty-five per cent of the parents who argued "all the time/most of the time" were, according to their responding offspring, affected by alcohol or drugs, whereas for those parents who argued "occasionally/some of the time", alcohol and drugs were involved in only 17 per cent of cases. It was also found that in cases where the police are called, 60 per cent involved alcohol or drugs ($p < 0.001$).

RUNAWAYS

There was a considerable number of the Logan/Beenleigh youth who admitted to running away from home. One quarter of youth (27%, $N=206$), 15-21 years, report having run away from home. There were 18 per cent of youth under 15 years who had also run away. These rates increased to 44 per cent for Aboriginal youth.

POOR SOCIO-ECONOMIC CIRCUMSTANCES

The Commonwealth Employment Service and the Department of Social Security were the main sources of information about social security benefits for all groups. Austudy was the most common benefit received, as to be expected given that half of the responses were school based. There was certainly a high proportion of the young offenders in receipt of unemployment assistance. Among Aboriginal youth, 22 per cent felt that they did not receive all that they should and this figure rose to 26 per cent among young offenders. Agencies mentioned for information about benefits were Legal Aid, Linkup, Choices, TAFE/Colleges, YFS, YES, Tax Office, Post Office, DEET and newspapers, and information leaflets.

UNEMPLOYMENT

There was a high youth unemployment rate in Logan/North Albert (44% for 18 year olds rising to 54% for 21 year olds). Training programs did not have great credibility because of the clear awareness that these programs rarely led to jobs for those without experience or a Year 12 pass. Most of the youth (89%) reported that they had not had problems getting information about jobs in the past 12 months. However, 15 per cent of Aboriginal youth and 16 per cent of young offenders reported having trouble getting such information. This was twice as high as for the whole sample where only 8 per cent reported having had trouble. Most of the problems getting information related to the unavailability of vacant positions. However, also mentioned were the distance to travel to get information, as well having literacy/language

difficulties and still being in jail. There is a lack of awareness of where they might look at some time in the future particularly among Aboriginal youth. There is perhaps also a greater reliance on their own network of friends when they are seeking jobs. Given that employment among the Aboriginal youth in the sample is very low, this reliance might be better directed to other agencies which could possibly offer job information and opportunities. Certainly, the Commonwealth Employment Service was well known to the majority of youth.

DRUGS & ALCOHOL

Drugs and alcohol use amongst youth has become a concern. The survey attempted not only to gain a measure of drug and alcohol use, but also an understanding of why youth use and abuse drugs and alcohol, and what information they have to gain support if they require it. A quarter (26%) of the total sample are using drugs. More than half (61%) of Aboriginal youth admit to having taken drugs with 37 per cent still doing so. Over 80 per cent of young offenders have tried drugs with 58 per cent of the total offending group still using them. For youth under 15, 26 per cent have taken drugs and 18 per cent are still using them.

IMPLICATIONS FOR UNDERSTANDING OFFENDING

The pattern of offending showed that the most common offences are "serious" – stealing, break and enter and assault – as opposed to the less serious offences of shoplifting or vandalism. Possession of drugs appears to be a relatively common offence. Apart from reported offences, young people were asked about asocial behaviour and the degree to which drugs and alcohol were involved. There were considerably more offenders who admit to using alcohol and drugs while shoplifting and committing vandalism compared to the 15 to 21 year olds in the sample. There was a high level of alcohol and drug use by all respondents in the case of vandalism. Substance abuse appears to play a large part in this offence.

Young offenders lack the motivation and self-confidence to independently attend agencies which might be able to assist them in terms of education, employment or training. They have little or no assistance and support from families or friends – those who, in stable families might provide encouragement, transport or other means of helping. Young offenders believe that they are marked for failure by their lack of education, lack of experience and their record. They do not trust the system, or feel that the system is interested in them, or in helping them.

What the survey does show is that there is strong evidence from a number of family variables describing the relationship between young offenders and their parents that young offenders experience poorer relationships with both parents, experience more parental arguments, violence and alcohol use which result in calling the police more often. These results are consistent with the theories of youth behaviour which stress the importance of family relationships in the development of social behaviour.

Young offenders' use of illicit drugs was very much greater than for young people as a whole. The principal motivation is hedonistic, more so for offenders than the group as a whole. However, in either case, it seems that a strategy of directly attacking drug-taking as a harmful activity is likely to be the hardest way to go in terms of preventative action. Nevertheless, many videos are made along these lines.

Finally, youth have overwhelmingly nominated the school as the place from which they preferred getting information about drugs.

The results suggested that a model could be constructed for testing using the family background variables as predictors and youth offending as outcome. The family variables can be broken down into relationship, conflict, violence, alcohol use and calling police. This scenario is one familiar to those concerned about

family violence. The results here therefore suggest that family violence is important in acting as a genesis for youth drug taking and offending as well as for creating intra-familial violence. Youth themselves want the school to be the source of information about drugs. The results concerning the social and emotional factors in the family, i.e. close relationships with parents and low offending rates, was borne out in Martens (1992) study of 800 high school students in Stockholm.

At the same time, these data can be used for more sophisticated data analysis because of the large sample size, the comparability of data collection methods across the centres and the reasonable degree of accuracy in the replies. The results lead to the conclusion that it is possible to plan prevention of youth offending by targeting family violence and alcohol abuse around these two statutory bodies: the local police and the local school.

One of the biggest problems facing organisations wanting to help young people with offending and drug taking, and to help prevent family conflict/violence as well, is the difficulty in gaining access to these cases. Once young people leave school, it is almost impossible to gain access to them in enough numbers to plan a concerted preventative program. The same is the case for family violence. Unless women come forward themselves, and ask for help, it is very difficult to access these families. Yet, the police are being regularly called out to family disputes.

Therefore, a multi-faceted program aimed at helping young people and families counter conflict, deal with violence, and address drug use, which involves local police and local schools, would be a good place to start. The program should involve developing an information package for young people. In addition the program should target police and teachers by providing them with some practical tools for communication and mediation for them to hand on to the youth and families they come into contact with. A program of teaching communication skills to replace violence to young people through police and teachers would be warranted.

WHERE TO NOW?

The studies presented here show the range of questions and methodologies being used at present given the constraints of the data itself (purposive samples) and the demands of addressing crime prevention through statutory and community authorities. Using the social/environmental factors revealed in the CVS, the positive reaction of different sections of the public to Police presence in terms of the fear of crime, and knowledge of the social factors associated with youth offending from many different angles, it is possible to say what is needed in programs addressing crime and to predict the associated community reactions.

For example, an Inspector of Police in a low socio-economic urban area wants to intervene with truanting youth to encourage them into alternative schooling and job training. We now know the level of truanting, the family background, the experience with job training and so on to inform organisations wanting to participate in the program. Truanting impacts on the local business/shopping centre and a police presence here will have an effect on the local public's perception of their safety. We could confidently predict that, if the local council or housing department were to improve the appearance of houses, if the police were to take better care of drunks and vagrants and reduce the amount of vandalism and graffiti done by the truants, that the level of social well being would rise. Even better, we can measure this improvement, even though the dimensions we use are "intangible" and "subjective" like the fear of crime, incivility, social cohesion and perception of crime in the area.

The outcomes of survey research have a number of purposes. One is to guide policy and program development at the political and local community level. Another is to test theories of deviance and advance the cause of building theoretical knowledge. Another is to develop better methodological tools to explain increasingly complex data. Thus the market for survey research is dynamic. There are some political

forces driving the apolitical survey research enterprise. Decision-makers are looking for answers to problems of youth offending, public crime, destructive offences associated with alcohol and drug consumption, victimisation and family violence. The funding mill requires that researchers address these questions and that they do so in certain ways. The complex answers are not welcome. Decision-makers want short and tidy answers to these complex issues. There is always pressure to complete projects even though the results are not readily understood or enacted. This is one part of the juggling game.

The other part is the demands of scientific inquiry. Here, the practical issues are not welcome. Sophisticated data analysis concentrating on theoretical issues of conceptualisation and methodology are encouraged as being truly academic.

There is a possibility for the two disparate sets of demands to meet and benefit. Advances in statistical analysis make it possible to explain complicated data using more simple models based on regression analysis. This paper argues that "good" data, meaning *specifying selection processes, aiming for large sample sizes and the control of data by statistical or specific selection processes*, is the basis for sound statistical analysis. Provided the data is "good" as defined here, the findings can be used to shape new programs or evaluate existing programs.

This paper has attempted to show how the approach of victims of crime statisticians and sociologists-criminologists differ according to the demands and expectations of their areas. Statisticians who study victims of crime have been able to draw large representative samples across the population. Sociologists and criminologists have worked with more politico-social issues of deviant sub samples. The needs of each can be brought together as the examples, above, of applied research, have shown. Complex, subjective, concepts like the fear of crime, can be measured using simple techniques such as the dichotomisation of variables and odds ratios. The paper has also attempted to show that "good" data can be analysed using simple statistics because the interrelationships between important variables will emerge in the preliminary stages of data analysis.

Is it time to start building on the results of victims of crime surveys rather than simply repeating them every so often? Might it not be better for governments to commission similar quality projects which are more focused on particular issues and on particular need areas. In other words, the excellent quality of results from the victims of crime surveys can be utilised on subjects and issues which are more concentrated in nature and which perhaps cannot be accessed using a purely random selection survey design. As stated previously, there are other ways of achieving accuracy, validity and control. For example, some variation on the case-control design could be considered. The very best outcome would be to combine large numbers with a case-control design and purposive selection of subjects.

In any research, the method of data collection needs to be commensurate with the nature of the questions asked, to the ultimate uses to which the data will be put, and whether we are dealing with primary research questions or program evaluation, or government policy. The surveys have aspired to heights of methodological rigour and specificity. The question needs to be asked whether the current methods used in such surveys are too sophisticated and too elaborate for the questions being asked. Alternatively, should there be greater concentration of effort on some key questions which relate more directly to prevention of crime. This means greater consideration being given to current policy issues under consideration by law enforcement bodies and the academic community.

Overall, there is a need for fairly large data bases such as the victims of crime surveys provide, in order to achieve a modest coverage of deviance in relation to social factors measured in conjunction with offending and victimisation. In other words, to get reasonable cell sizes for statistical analysis there is a need for large sample sizes to make the collection efficient and worth while. The data needs to be as accurate as can be managed, but maybe not as refined as the statisticians' would want in a perfect world. Thus there is a place for large-scale data collection provided the content is relevant to the questions being asked in the community and to other research efforts. However, the large-scale victims of crime surveys

need to be much more focussed in terms of the questions being asked, in terms of their social and academic relevance. Purposive and stratified sampling has a place, especially when that is the only possibility. The requirements of relevance to other features of crime prevention and policy need to be considered when designing large, expensive surveys.

REFERENCES

- Carcach, C., Thomas, K. L., & Cranitch, M., 'The Fear of Crime: Analysis of the Effects of Victimization, Gender, Vandalism, Social Cohesion and Perceived Level of Crime on the Fear of Crime', *Journal of Statistical Criminology*, in press.
- Farrington, D. P., R. J. Sampson, & P-O. Wikstrom (eds) 1993, *Integrating Individual and Ecological Aspects of Crime*, National Council for Crime Prevention, Sweden.
- Hogh, Erik, 1984, 'En Livsforlobsundersogelse (a lifetime's analysis) of a birth cohort born in 1953 of Danish boys', in Eds. Preben Wolf, *Sequential Research*, Micro Publications Social Science Series, vol. 1, published by the Institute for Longitudinal Studies, Copenhagen.
- Knorr-Cetina, Karin 1981, 'Social and Scientific Method or What Do We Make of the Distinction between the Natural and the Social Sciences?' *Phil. Soc. Sci.*, Vol. 132, pp. 461-2.
- Madsen, Finn 1971, 'Udvaelgelosesmetoder (Selection methods)', in ed. K.Svalastoga, *Sociologisk Metodik (Sociological Method)*, Paludan's Forlag, Copenhagen.
- Martens, P. L., 1992 *Familj Uppvaxt och Brott. (Family Growing up and Offending)*, Stockholm's Project of the Swedish Crime Prevention Council, Allmanna Forlaget, Stockholm, Sweden.
- Pinch, Trevor 1985, 'Theory Testing in Science - The Case of Solar Neutrinos: Do crucial Experiments Test Theories or Theorists?' *Phil. Soc. Sci.* vol. 5, pp. 167-87.
- Popper, Karl 1976, *Unended Quest - An Intellectual Autobiography*, Fontana, Glasgow.
- Post, M. & Thomas K. L. 1993, *Police-Beat, An Evaluation for the QLD Police Service*.
- Russell, Bertrand 1961, 'The Philosophy of Logical Analysis', in the *History of Western Philosophy*, Allen & Unwin, London.
- Simon, H. A. 1982, Substantive and Procedural Rationality, in Simon, H. A., *Models of Bounded Rationality*, vol. 11, M.I.T. Press, Mass., pp. 401-3.
- Simon, H. A. 1982, Some Strategic Considerations in the Construction of Social Science Models, in Simon, H. A. *Models of Bounded Rationality* vol. 11, pp. 209-39, M.I.T. Press, Mass., first appeared in P.Lazarfeldt, P. ed., *Mathematical Thinking in the Social Sciences*, The Free Press, 1954.
- Thomas, K. L. & Post, M. T. 1994, A Model for Fear of Crime in Queensland, Crime Prevention Strategies Conference, Griffith University Conference, Brisbane August.
- Thomas, K. L. & Heim, H. 1994, 'Young People's Use of Drugs in Three Urban Communities: Offending, Family Background and Preferred Source of Information', presented at the Winter School in the Sun Conference, organised by the Queensland Alcohol and Drug Foundation, Brisbane.

REFINING VICTIMS OF CRIME SURVEYS: THE AGED AS A CASE STUDY

Simon Petrie
Justice Studies
Faculty of Law, QUT

INTRODUCTION

There now exists a considerable body of literature which focuses upon crime and older people. This literature ranges from examination of the levels of victimisation of older people to measures of levels of fear of crime to crime prevention strategies for older people. However, a considerable number of questions concerning crime and older people remain unanswered. These, in turn, highlight issues for Victims of Crime Surveys and for collection of data about crime victimisation.

The purpose of this paper is three-fold. First, the paper will focus upon the ways in which victimisation of crime can be measured accurately and reliably, utilising older people as a case study. Reference will be made to a pilot study.

Second, the paper will review the ways in which perceptions of crime or fear of crime are created and can be measured. Consideration will be given to media coverage of crime.

Third, the paper will consider various methodologies and methodological techniques of obtaining data from older people concerning the phenomenon of crime and how this can be related to studies of victims of crime. The paper will argue for the use of qualitative as well as quantitative methodological approaches to victims of crime surveys.

The background information for this paper is drawn from a pilot research project which explored the role of policing in the caring community with specific reference to older people. This, in itself, arose from the findings of the 1991 Queensland Crime Victims Survey which indicated that older people, whilst the least victimised group within the community, may have the highest levels of fear of crime.

CRIME AND OLDER PEOPLE IN THE AUSTRALIAN CONTEXT

Demographically, Australia's population is ageing. Edgar (1991, p. 6) has indicated that:

By the year 2031, our population will be 26 million, with an average age of 42 (now 32) and one in five (20 per cent) will be older than 60 (about 15.5 per cent now).

It is reasonable to assume that increasing numbers of the population not only can look forward to fit and productive old age but also that older people in the future will be better educated, healthier, better housed and more self-sufficient than any previous generation of the elderly (Edgar 1991). At present, however, Edgar would argue that ageing has a negative image bound up with "fear, stereotypes and alarmist projections". This negative approach is neither useful nor constructive but is indicative both of the level of community ignorance concerning old age and of community perceptions of ageing. It stands in contrast to attitudes in the Canadian context in which McDaniel (1988) points out an ageing society is seen as an indicator of success rather than one of failure. Nevertheless, the dominant perspective will be crucial in

determining future social policy for older people. In the Australian context, the dominant perspective is currently negative: older people generally, are made to feel inferior, unwanted and a burden to themselves, to relatives and to the community.

In recent years, a determined effort has been made at the level of social policy to recognise older people as an identifiable group in their own right in Australian society. The establishment of State and Commonwealth Government Departments is indicative of this trend, as is the increasing number of services available to cater for the needs of older people in any given community. For example, there now appears in the Brisbane Telephone Directory an entire page dedicated to Aged Services.

As older people have been "identified" so attention has focussed upon the specific needs that this group may have.

In the Australian context, during the 1980's, increasing concerns arose about crime and the older person. In 1988, the Australian Police Minister's Council requested that the National Police Research Unit examine the vulnerability of the elderly to criminal exploitation. Whalley and Gately (1991, p. 58) state that the objectives of this study were:

... to gather intelligence on the potential vulnerability of Australia's growing elderly population to criminal exploitation; especially personal violation, property crime and white collar crime. It was also intended to examine perceptions of vulnerability and to recommend what action might be taken by Australian police forces to provide the elderly with a greater sense of personal safety and security."

The study acknowledged that victimisation studies, not only in Australia (Biles 1983; ABS 1983) but elsewhere in the world (Hough & Mayhew 1983; Clarke et. al. 1985; Brillon 1987; US Department of Justice 1987) confirm the indication that older people are the least likely age group to become victims of crime, particularly predatory crime. Green (1990, p. 28) utilising a cross-cultural comparison of victimisation rates concluded that 'the physical and financial violation is not greater for elderly persons than for younger people'. The extent of emotional impact upon older people of criminal attack is more problematic, but despite fears about safety when walking alone the anxieties that older people express concerning loss of independence, loneliness or social isolation would appear to assume greater importance than fear of crime. It would appear also that older people are concerned with health, lack of transportation and other aspects of safety, related to dangers, for example, in the home or with traffic.

However, a number of issues remain outstanding which have considerable implications for Crime Victims Surveys generally and for the relationship between crime and older people, specifically.

First, as indicated by Fattah and Sacco (1989), there is no single definition as to what constitutes 'old age'. A single cut-off point (for example, 65 and over) may be overly simplistic and not sufficiently embracing to indicate the range of difference either in terms of older people's involvement in crime (criminality) or their involvement in crime as victims. The chronological age category designation says little or nothing about the stage of physical decline, mental decline or financial decline of particular individuals, each or any of which may have a great deal to do with levels of personal capability or vulnerability.

Second, and leading on from the point above, older people do not constitute a homogeneous group from a criminological perspective; the rates of crime committed by and against older people are likely to vary among the various sub-groups. As Fattah and Sacco (1989, p. 3) state:

Crime and victimization differentials are likely to be found not only among age sub-categories but also among health sub-categories.... Variations are likely to exist among residence sub-categories.... Differences may also be found between different income groups . . .

Third, in focussing upon crime, victimisation and older people, wider definitional issues also become focussed. How, for example, is "crime" defined? How are aspects of victim abuse or neglect, which is a phenomenon of increasing concern; (Yin 1985; Wolf 1986; Fattah & Sacco 1989; Pillimer & Finkelhor 1989; Clarke 1990, etc.), to be included or indeed "captured" methodologically, in considerations of

victimisation? Little is known in detail, for example, about the extent of abuse or neglect of older people or about the extent of abuse or neglect of older people in institutional settings. In relation to abuse or neglect, Clarke (1990) indicates that four primary characteristics of victims have been identified as the following:

They tend more often to be female. They tend to be among the very old, i.e. 75 plus. They tend to be suffering from physical and mental impairments, and they tend to be living with the perpetrator, i.e. abuse generally takes place in a family environment.

This raises two further factors for consideration. In gender terms, elderly females out-number elderly males in all western societies. Women outlive men for a variety of reasons but an immediate consequence of this situation is that more older women than older men are single (widowed, non-married) and live alone (contrary to popular perceptions, a relatively small percentage of older people live outside private households). It is also important to note (e.g. Stone & Fletcher 1980) that older people tend to be concentrated in urban environments and, in consequence, are more vulnerable in criminological and victimological terms. It is, however, possible to argue in this context that single, older males are more vulnerable to criminal attack and are more likely to be victims of crime because greater numbers of single, older males find themselves destitute and homeless in urban settings.

Finally, and again in a methodological vein, if older people, who are victims of abuse or neglect, live with the perpetrator, how is information about offences to be obtained without compromising the respondent or raising levels of fear?

Generally, Fattah (1993) has indicated that older people are less attractive, less accessible and less exposed as targets for criminal victimisation than other, younger members of the community. This is, in part, a product of life-style and the development of routines by older people which reduce their chances of personal victimisation or the likelihood of property victimisation. In part, older people are less involved in activities which increase the risk of criminal victimisation (i.e. low levels of involvement in deviant or illegal pursuits). Nevertheless, not enough is yet known about the victimisation of older people in situations where offending does occur, nor about the development of perceptions of crime or fear of crime among older people.

FEAR OF CRIME

A considerable amount of literature in the early 1980's was devoted to the issue of fear of crime among older people (Braungart et. al. 1980; The Figgie Report 1980; Lawton & Yaffe 1980; Ollenburger 1981; Lindquist & Duke 1982; Yin 1982; Janson & Ryder 1983; Jeffords 1983; Clarke 1984; Clarke et. al. 1985, etc.).

Few would deny that almost all members of our community will express some fears about criminal attack. Indeed, research (van Dijk et. al. 1991) indicates that the number of those fearful about crime is much larger than the number of those actually victimised.

However, Fattah (1993, p. 1) has argued that:

Fear of crime is problematic both as a research topic and a public policy issue. It is problematic as a research topic because it is difficult to define, operationalize and measure. And it is problematic as a public policy issue because our criminal justice policy is based largely, almost exclusively, on the promotion of fear.

Problems exist with defining fear, measuring fear and classifying fear, as well as in accepting that some level of fear is not necessarily a "bad thing". In terms of definition, it is necessary to distinguish between fear of crime from *concern* about *crime*; between what the Figgie Report called *concrete* fear and *formless* fear and between what Warr (1984) calls fear of *victimisation* or fear of crime. The former is defined as fear of criminal acts committed against one's own person or property. The latter is defined as general fear of crime (or its consequences) without necessarily fearing victimisation. Warr also distinguishes between personal fear (fear for one's own safety) and altruistic fear (fear that one might have for the safety of others). It is also important not to lose sight of the capacity of people to adapt or adjust their behaviour or life-styles to the 'wide array of risks, dangers and threats that are part of their daily existence' (Fattah 1993).

La Grange and Ferraro (1987) in their critical examination of the research into the relationship between age and crime suggest that because of the more vulnerable state of older people in terms of reduced income, health and power, the overall effects of criminal victimisation are especially traumatic for older people, but the elderly are no more fearful of crime than other age groups.

La Grange and Ferraro accept that the effects of criminal victimisation are especially traumatic for older people (see also Green 1990; Clarke 1990). Older people are vulnerable in a whole series of ways to the vicissitudes of everyday, modern, urban living but they point with caution to the dangers of over-generalising. "Older people" like "younger people" is an all-embracing label. In line with Fattah (1986) "older people" are no more a homogeneous group in social or cultural terms than the broad group defined as "the young" or "youth". These are all broad-bank labels which deny individuality and individual difference which, among any group in any community, are great and varied. Levels of fear of crime in any given community vary greatly depending on circumstance. Inevitably, perceptions of crime will vary amongst any social grouping, including that group defined as being older people.

Fear of crime may not be an overriding concern. La Grange and Ferraro suggest that 'older people are not actually afraid but "more uncertain" and anxious about their environment, or genuinely more concerned about the overall quality of life in their neighbourhoods'. Fear may be generated less by crime in its various forms than by "disorderliness" - the disruption to patterns of everyday life.

La Grange and Ferraro (1987, p. 386) are critical of the methodologies utilised by researchers, indicating that standard measures of fear of crime have been 'too general, too hypothetically abstract and too foreboding to have much relevance to everyday life'. The fears of older people have become exaggerated and the fears of younger people underestimated.

A major part of the problem in defining or measuring fear of crime lies in its complexity. Ito (1993) has suggested that many factors have been presented as the generators of fear of crime (see, for example, Box et. al. 1988; Parker & Ray 1990). These include vulnerability to crime, aspects of the social and physical well-being of the community environment and the levels of public confidence in the criminal justice system. Foremost among factors is knowledge of crime "which is denied from sources such as personal experience of victimisation, indirect victimisation (ie knowing about the victimisation of others) and media coverage of crime incidents" (Ito 1993, p. 385). It is necessary, at this point, to give consideration to sources of knowledge about crime.

MEDIA AND THE DEVELOPMENT OF PERCEPTIONS OF CRIME

Crime, as it relates to older people in our community, attracts considerable media attention. The brutal attack on an octogenarian couple on the Gold Coast (*Courier Mail*, February 1993) for example received headline attention. In many ways, this media attention is not surprising. Crime is an emotive, evocative subject; it provides excellent copy for newspapers; it is the back stop for television news broadcasts. When

young children or older people are the victims, particularly of physical attacks, then the reports generally become more strident and more extensive, for these groups represent the more vulnerable members of our community. They are less likely to be able to defend themselves against vicious attack. There is an underlying image of helplessness which is exploited by the media to attract attention.

In a recent study of the possible links between fear of crime and newspapers, as one definable source of crime news, Williams and Dickinson (1993) concluded that women, the elderly and those from low-income households felt most worried, most unsafe and gave the most pessimistic risk estimates of victimisation. In particular, newspaper readership was strongly related to feelings of personal safety, although not necessarily to behavioural measures.

Williams and Dickinson also confirmed that "tabloid" newspapers carried proportionately more crime reports and reported crimes in more sensational fashion than more up-market "broadsheet" newspapers.

The deficiencies of such studies are acknowledged. Certainly, newspapers provide one important source of crime news, but they are only one source and not nearly enough research has been done into the possible impact of other news sources (e.g. television and radio). Moreover, although the reporting of crime appears to vary enormously it is still not clear as to which aspects of the reporting create the greatest fear of crime.

The situation in Queensland has not been thoroughly researched but does reveal some interesting possibilities. For example, there is only one local daily newspaper and one local Sunday newspaper, both of which have enormous circulation rates (per capita) across the State. What is evident is that crime involving older people receives maximum coverage (see the *Sunday Mail*, for example, - 20/01/93, 17/02/93 - and the *Sunday Mail*, 27/11/94). Early indications from the Queensland Study (Petrie & Di Bartolo 1993) indicate that older people rely heavily upon the media for their knowledge of crime, but, acknowledging that older people are not a homogeneous group, different individuals will learn about crime in different ways. Certainly, living in high risk areas or areas in which particular types of crime are prevalent will influence perceptions of crime.

Similarly, the concept of secondary victimisation is now well understood in the criminological literature (Whitrod 1980; Shapland et. al. 1985; Fattah 1986; Gardner 1990; Sumner & Sutton 1992). The importance of such studies lies in extending the previous focus on offences, offenders and upon analysis of the ownership, structure and processes of the media to include consideration of the impact of police and the criminal justice system on victims. McGrath (1989) in his analysis of the post-traumatic experiences of the families of murder victims in South Australia indicates that the families found themselves "transformed into public property". Sumner & Sutton (1992) argue that there is a need to protect the rights of victims and their families from intrusion into their lives by the media.

The point here is that not enough is known about the impact of the media on the development of perceptions of crime victims. It is not unreasonable to assume that individuals, who have been offended against, or who have had negative experiences of the criminal justice system post-offence, may have jaundiced perceptions of crime, the extent of crime and the efficacy or efficiency of the system to cope with crime. These, in turn, may lead individuals to choose not to report crime.

THE PILOT STUDY (PETRIE AND DI BARTOLO, 1993)

The pilot study, conducted during 1993, focussed upon crime and older people. In particular, the study explored the perceptions of older people regarding the role of the police, the relationship if any between the police and older people within the community and extent of other services within the community available to support and assist older people. The overall objective of the study was to explore possibilities for network creation to assist in crime prevention.

The pilot study was conducted in two phases. First, a survey of twenty-four (24) government and non-government agencies which provide care or support for older people. Second, a random survey of a number (210) of older people.

The survey of agencies was utilised as a starting point to build up a picture not only of the network of care for older people but also to identify specific features of the older community.

The agencies contacted offer a diversity of services ranging from policy development and implementation at the Commonwealth or State Government level to health services, either domiciliary or in residential settings, to transport, counselling, recreation, including shopping and advocacy. The range of services is indicated in Figure 1.

* Frequency of Service	Type of Service
(1)	Policy Unit
(2)	Co-ordination of Services
(4)	Nursing and/or Health Care
(4)	Nursing Homes
(4)	Hostels
(4)	In-Home Respite Care
(3)	Centre based Respite Care
(5)	Provision of Daily Meals
(3)	Emergency Home Help
(3)	Domiciliary Nursing
(3)	Home Maintenance
(4)	Counselling, including Telephone Counselling
(3)	Wheelchair accessible Transport and Transport generally
(4)	Home Assessment
(3)	Mobile Continence Advisory Service
(2)	Independent Living Units
(2)	Information
(4)	Advocacy
(2)	Physiotherapy
(2)	Volunteer Services
(6)	Recreation (incl Music Therapy, Day trips, Shopping.
(1)	Hospital Visitors
	(* Service offered by more than one agency in almost every instance, n = 24)

FIGURE 1 – SERVICES OFFERED BY AGENCIES CONTACTED

It should be noted that some agencies have been established specifically to deal with older people in our community. Other agencies contacted offer services to the community generally but have some contact with older people. The range of services is both pro-active and reactive.

The Services Survey responses indicated that almost all of the agencies had contact with other services dealing with older people or assisted in co-ordinating responses for those in need of care and assistance.

Service agencies were asked to list, in order of priority, their perceptions of the major concerns expressed by older people in the community at this time. Concerns varied both in terms of range and frequency of response but can be summarised as follows in Table 1 below:

TABLE 1 - SERVICE AGENCIES PERCEPTIONS OF THE MAIN CONCERNS OF OLDER PEOPLE

CONCERN	TIMES X PREFERENCE					TOTAL
	1st	2nd	3rd	4th	5th	
1 Safety and security	6	4	4	3	4	21
2 Loss of independence	4	5	4	4	3	20
3 Finance	1	2	7	3	1	14
4 Loneliness/social isolation	6	3	2	-	1	12
5 Health	2	3	2	2	-	9
6 Transport	-	1	2	2	-	5
7 Crime/Victimisation	2	1	-	-	1	4

Other concerns mentioned included coping with loss or grief and, at a more specific level, fear of falling, fear of government documentation, adequate shelter, adequate food and home maintenance issues.

The second phase of the pilot study centred upon older people in the Brisbane community. This involved the use of a survey instrument devised by the researchers after examining the content and format of a number of surveys used by other researchers in relation to crime and older people or to crime victimisation generally (e.g. Midwinter 1990; Crime Victims Survey 1991, etc.). The instrument was also determined and refined in consultation with personnel from the agencies involved in the first phase of the project. In particular, the survey was kept brief.

A total of 420 surveys were distributed of which 219 useable replies were received.

The two-phase construction of instruments for the pilot study was valuable in a number of ways. First, the agencies were able to provide useful insight into the lives of older people, for example, through their perceptions of the major concerns of older people. The agencies also provided important information concerning the life-styles of older people and some of the difficulties associated with contacting older people. For example, it is clear that not all older people live at home, although this group may well be the most important to contact, in the sense that this group continue to live within the community and have the most direct and most frequent contact with the community. The immediate problem facing the researchers was to access this group of older people in their places of residence. This difficulty was overcome, in part, by approaches to a number of Senior Citizens' Clubs throughout one area of the city.

The clubs act as a social focus for older people and agreed to pass survey forms to their members. The completed survey forms were then handed back to the Clubs and mailed to or collected by the researchers.

It is necessary, for the purposes of this paper, to include details of a few selected items from the Community Perceptions Survey of the pilot study.

Item 2 asked respondents to indicate in order of importance which crimes they most feared happening to them. Table 2a indicates the types of crimes surveyed and the responses according to the number of times each was nominated and the preference it was given. This table is interpreted as follows, for example, in the case of home burglarised, 113 or 51.6 per cent of the total sample of 219 nominated this as their major concern. A further 51 respondents (23.3%) nominated home burglarised as their second concern, 12 or 5.5 per cent of the sample as their third concern and so on. No respondent nominated this crime as their sixth or seventh concern, while 37 (16.%) respondents did not indicate home burglarised as a concern. However it must be stated that some respondents chose not to respond to this question. It can be seen that of the total sample of 219, 176 respondents or 80.4 per cent nominated home burglarised as either their first, second, or third concern (see Table 2b).

Two other crimes also ranked highly in terms of concern for the elderly. "Car or property vandalised" was nominated by 100 respondents (45.7%) as being one of their three major concerns, and "being physically hurt during a robbery" was rated as one of their three major concerns by 97 respondents (44.4%).

Item 3 sought to obtain data on the type of crimes the elderly have been victims of in the past five years and also the number of times they have been victimised. Table 3 indicates the crimes surveyed, and their frequency within the sample group. This table is interpreted as follows: for example, in the case of "home burglarised" 184 of the 219 respondents indicated that they had not been a victim of this crime, 27 respondents had been victims of this crime once over the specified time period, six respondents had been victims twice and two respondents had been victims on three occasions each. There are two points of interest arising from Table 3. Firstly the most frequent crime committed against the elderly was "home burglarised". Secondly, nearly two-thirds of the respondents 137 (62.5 per cent) had not been the victim of any crime during that period. The first of these two points coincided with the previous survey item where "home burglarised" emerged as the predominant worry amongst the sample. The second point of interest seems to verify research that the elderly are in fact one of the least victimised groups in society when the figures are compared with other age groups. The only other crimes which were reported that were not on the list of crimes given included such things as "purse stolen while shopping" and "being mugged at the rail station".

The results for item 4 are shown in Table 4. Only 9 (4.1%) respondents indicated that they had not reported a crime committed against them to the police. Of those nine, three gave reasons for this and in each case the respondent felt that the item stolen was not important enough to report. The items stolen included such things as a pot plant, hose reel, and front door handle.

Item 5 drew an overwhelming response amongst the sample. 209 (95.4%) respondents felt that crime in Brisbane had increased in the past few years. Table 5 shows the response to this item.

Item 6 asked respondents for their perceptions of crime levels in their local neighbourhood. Table 6 shows the response to this item. An interesting point of comparison with the previous item shows up here in that a significantly smaller number of respondents 159 (72.6%) feel that crime has increased within the local area as compared to Brisbane as a whole. This may be explained in terms of the media attention given to crime, particularly violent crime within the Brisbane area. In this way the wider world is perceived as more crime ridden, whereas in their everyday activities, the respondents have little contact with crime in their local neighbourhood.

TABLE 2A – CRIMES THE ELDERLY ARE MOST CONCERNED ABOUT

Type of Crime	No. of Times Nominated by Level of Concern							
	1	2	3	4	5	6	7	No Resp
Car or property being vandalised	40 18.3%	36 16.4%	24 11.0%	11 5.0%	4 1.8%	3 1.4%	1 0.5%	100 45.7%
Home burglarised	113 51.6%	51 23.3%	12 5.5%	5 2.3%	1 0.5%	–	–	37 16.9%
Robbed on the street	14 6.4%	24 11.0%	36 16.4%	24 11.0%	8 3.7%	–	2 0.9%	111 50.7%
Being murdered	21 9.6%	8 3.7%	8 3.7%	15 6.8%	10 4.6%	3 1.4%	9 4.1%	145 66.2%
Being cheated out of your money by a stranger	–	–	3 1.4%	7 3.2%	13 5.9%	20 9.1%	5 2.3%	174 78.1%
Being cheated out of your money by someone you know eg friend, family, doctor, etc.	1 0.5%	1 0.5%	5 2.3%	1 0.5%	5 2.3%	9 4.1%	23 10.5%	174 79.5%
Being physically hurt during robbery	38 17.4%	33 15.1%	26 11.9%	17 7.8%	9 4.1%	8 3.7%	3 1.4%	85 38.8%

TABLE 2B – CRIMES ELDERLY MOST WORRY ABOUT HAPPENING TO THEM.
GROUPING FIRST THREE CONCERNS ONLY

Type of Crime	No	%
Home burglarised	176	80.4
Car or property being vandalised	100	45.7
Being physically hurt during a robbery	97	44.4
Robbed on the street	74	33.8
Being murdered	37	17.0
Being cheated out of your money by someone you know. e.g. friend, family, etc	7	3.3
Being cheated out of your money by a stranger	3	1.4
Total	219	100

TABLE 3 - TYPE/FREQUENCY OF CRIME AGAINST THE ELDERLY

Type of Crime	Frequency of Occurrences					
	0	1	2	3	4	Total
Car or property being vandalised	209	5	3	1	1	18
Home burglarised	184	27	6	2	-	45
Robbed on the street	217	2	-	-	-	2
Cheated out of your money by a stranger	218	1	-	-	-	1
Cheated out of your money by someone you know, e.g. friend, family, doctor, etc	217	1	-	1	-	4
Other	215	2	1	1	-	7

TABLE 4 - FREQUENCY OF NON-REPORTING OF CRIME

Non-Reports of Crime	No	%
Yes	9	4.1
No	66	30.1
No crimes committed against them	133	60.7
No Response	11	5.0
Total	219	100

TABLE 5 - PERCEPTION OF CRIME LEVEL IN BRISBANE

Level of Crime	No	%
Increased	209	95.4
Decreased	2	0.9
Stayed about the same	2	0.9
Don't know	4	1.8
No Response	2	0.9
Total	219	100

TABLE 6 – PERCEPTION OF CRIME LEVEL IN LOCAL NEIGHBOURHOOD

Level of Crime	No	%
Increased	159	72.6
Decreased	2	0.9
Stayed about the same	28	12.8
Don't know	26	11.9
No Response	4	1.8
Total	219	100

METHODOLOGICAL CONSIDERATIONS

Gardner (1990, p. 12) states the following:

The main aim of this study has been to examine in a systematic way victims' experiences with and attitudes towards the criminal justice system. The impact of the crime on victims' lives was also of primary interest. Although valuable insights can be gained from qualitative interviews, submissions, 'phone-ins' etcetera, this anecdotal evidence is of limited application and is sometimes mistakenly applied to a wider range of victims than is reasonable.

In adopting a quantitative, empirical approach and interviewing large numbers of randomly selected victims this study provides reliable and widely applicable information about victims of crime and the criminal justice system.

I wish to argue that I do not believe quantitative methodologies contain all the answers for crime victims surveys and that qualitative methodologies still have much to offer. At the same time, it is important that the quantitative-qualitative debate does not obscure more critical issues.

Research methodology embraces all aspects of inquiry, including agenda, epistemology and ethics, as well as methods or techniques. In this context, it is necessary to keep firmly in view the purpose of crime victims surveys. In a criminological sense, the surveys provide crucial information about crime, about the types of crime being committed in any given community at any given time, about the extent of victimisation and the distribution of victimisation. Information is also provided about the impact of victimisation. At times, however, the political agenda underlying the survey may override the criminological intent. Walklate (1989) has argued for the advantages of small-scale, localised surveys over large-scale surveys:

The local crime survey approach not only reveals the nature and extent of the patterning of criminal victimisation, it also encourages serious consideration to be made of the extent to which there is both intra-class and intra-racial criminal activity and victimisation . . . The local crime survey findings have also been used to construct political and policy initiatives with respect to policing.

Walklate suggests that age, gender and place of residence are significant variables when it comes to calculating chances of being a victim of household or street crime. This indicates the importance of focussing upon particular social groups, such as older people, whilst acknowledging the heterogeneity of such groups. At the same time, consideration must be given to localised, community circumstances and needs.

At one level the debate becomes one of determining whether crime victims surveys are research *on* victims or *for* victims. Research *for* victims has the potential to enhance the lives or empower victims – and is necessarily more qualitative in type. An agenda of crime victims studies *for* victims should assist victims to connect their personal experiences to the wider social context; provide a picture of how victims can struggle against and adapt to systems that disadvantage or oppress them; provide a vision and direction for justice within current systems; embrace the diversity of victims by race, class or age; and challenge prevailing concepts and assumptions with current criminological or victimological theory.

In epistemological terms, the issues become concern with concepts such as truth, reality and objectivity. How do we know what we know? Who can be a knower? What is the proper relationship between researcher and researched and so on? In criminology, as with other disciplines, there is no single epistemology, although this becomes a critical issue in the context of crime victims surveys. It is not the purpose of this paper to debate positivist approaches, but suffice it to say that in the context of crime and older people much remains to be done in terms of defining variables and producing reliable data.

All inquiry is value-sustaining and is politicised – and crime victims surveys have political connotations regardless of other intentions. Quantitative methodologies do not ensure objectivity and a closer connection with the subjects of the research may reconcile objectivity and subjectivity. Victims' experiences can be considered as a source and a justification for knowledge. Ultimately, it may be important to acknowledge that there is no such thing as truth.

Postmodernist social science is characterised by the stance that there is no absolute truth, no objectivity. Knowledge changes from moment to moment and postmodernists welcome many meanings to the same situations. Knowledge, of course, is connected to power and power accrues to those who say what counts as truth. The purpose of postmodern social science is not to discover truth but to displace dominant knowledges that oppress people. Certainly, it is possible to criticise traditional scientific approaches for treating the researched in unjust and oppressive ways: the objects of research can be mastered, manipulated, controlled, scrutinised, silenced, deceived, exploited or excluded.

This becomes pertinent in the Queensland context. In Queensland, as elsewhere, a Charter of Victims' Rights is still awaited. Efforts to concentrate more on victims than offenders are struggling, despite recommendations made by the Electoral and Administrative Reform Commission (EARC) that due recognition be given to rights particular to a victim.

In the context of crime victims surveys, it is useful to focus on two questions:

- 1 Is the research project exploitative of or empowering to participants and other people involved in the project?
- 2 How can the researcher avoid oppressive objectification of the research participants?

Victims studies deal with personal loss or even tragedy. Therefore, great care needs to be exercised. Can researchers be incorporated into the research project in ways in which they have meaningful opportunities for input? This may well involve small-scale intensive, qualitative projects, which in the eyes of many are not cost-effective. But in terms of social justice, should cost be the overriding concern?

Social justice considerations should characterise the process of research. Justice has two components – at least. The first is equality, which implies that all people participate fully. Everyone should be treated with equal worth and differences should be respected.

The second is freedom, which implies that people have the right to define their selves and their situations apart from the standards, constraints, demands and agendas of others. Again, in the context of Crime Victims Surveys, consideration must be given to the perspectives of victims and the outcomes for victims.

CONCLUSION

At the general level, large-scale quantitative crime victims surveys tell us much about levels of offending, types of offending, characteristics of victims and so on which is not readily available from other sources of crime statistics. By focussing upon a specific group, such as older people, it is possible to question some of the fundamentals of both research design and research outcomes. Moreover, it is possible to identify critical variables, or aspects of critical variables, which have been previously overlooked or neglected but which are critical to any understanding of the situation of a particular group of people within the community.

The pilot study (Petrie & Di Bartolo 1993) has been developed through networking, first, with the range of agencies and services that deal with older people, second, with older people themselves; and third, by returning to some of the key agencies. The refining process involves older people, as well as professionals working within the agencies and services. It acknowledges the heterogeneity of the older community. The larger project, when finalised, will be relatively small-scale, qualitative in orientation and rely heavily upon interview with and participation of older people. The interviews will include questions about perceived outcomes of the research and ultimately, will seek to complement the data obtained from the Queensland Crime Victims Survey (1991).

REFERENCES

- Australian Bureau of Statistics 1983, *Victims of Crime*, ABS, Canberra.
- Baker, M.H., Nienstedt, B.C., Everett, R.S. & McCleary, R., 'The Impact of a Crime Wave: Perceptions, Fear and Confidence in the Police', *Law and Society Review*, vol. 17, no. 2, pp. 319-335.
- Biles, D. 1983, 'Crime and the Elderly', *The Australian Journal on Ageing*, vol. 4, no. 2, pp. 22-23.
- Box, S., Hale, C. & Glen, A. 1988, Explaining Fear of Crime, *British Journal of Criminology*, vol. 28, pp. 340-356.
- Braungart, M.M., Hoyer, W.J. & Braungart, R.G. 1979, 'Fear of Crime and the Elderly', in Goldstein, A.P. & Hoyer, W.J. (eds), *Police and the Elderly*, Pergamon Press, New York.
- Brillon, Y. 1987, *Victimisation and Fear of Crime Among the Elderly*, Butterworth, Toronto.
- Clarke, A.H. 1984, 'Perceptions of Crime and Fear of Victimization among Elderly People', *Ageing and Society*, vol. 4, no. 3, pp. 327-42.
- Clarke, R., Ekblom, P., Hough, M. & Mayhew, P. 1985, 'Elderly Victims of crime and Exposure to Risk', *The Howard Journal*, vol. 24, no. 1, pp. 1-9.
- Clarke, R.V. 1990, Crime and the Elderly, *Journal of the Australian Society of Victimology*, vol. 1, no. 1, pp. 15-20.
- Clarke, R.V. 1990 'Why are the Elderly Less at Risk of Predatory Crime?', *National Police Research Unit Review*, vol. 6, pp. 30-33.
- Clarke, R.V. & Cormish, D. 1986, *The Reasoning Criminal: Rational Choice Perspectives on Offending*, Springer Verlag, New York.
- Cordner, G. 1986, 'Fear of Crime and the Police: An Evaluation of a Fear - Reduction Strategy', *Journal of Police Science and Administration*, vol. 14, no. 3, pp. 223-233
- Courier Mail* 1993, Brisbane.
- Edgar, D. 1991, 'Ageing', *Family Matters*, vol. 30, pp. 14-19.
- Electoral and Administrative Review Commission 1993, *Report on Review of the Preservation and Enhancement of Individuals' Rights and Freedoms*, GoPrint, Brisbane.
- Fattah, E.H. 1986, 'The Role of the Senior Citizen in Crime Prevention', *Ageing and Society* vol. 6, pp. 471-480.
- Fattah, E.H. 1993, 'Victimization and Fear of Crime Among the Elderly: A Possible Link?', Keynote address to the Crime and Older People Conference, Australian Institute of Criminology, Adelaide.
- Fattah, E.A. & Sacco, V.F. 1989, *Crime Victimization of the Elderly*, Springer Verlag, New York.

- Fielding, N., Kemp, C. & Norris, C. 1989, 'Constraints on the Practice of Community Policing', in Morgan, R. & Smith, D. J. (eds), *Coming to Terms with Policing*, Routledge, London.
- The Figgie Report on Fear of Crime: America Afraid 1980. *Part 1: The General Public*. Willoughby, ATO Inc, Ohio.
- Gardner, J. 1990, *Victims and Criminal Justice*, Attorney-General's Department, South Australia.
- Government Statistician's Office 1991, *Crime Victims Survey 1991*, Government Statistician's Office, Brisbane.
- Green, L. 1990, 'Examining the Vulnerability of the Aged to Criminal Exploitation', *National Police Research Unit Review*, vol. 6, pp. 22-29.
- Hough, M. & Mayhew, P. 1983, *The British Crime Survey: Home Office Research Study, No 76*. HMSO, London.
- Ito, K. 1993, 'Research on the Fear of Crime: Perceptions and Realities of Crime in Japan', *Crime and Delinquency*, vol. 39, no. 3 pp. 385-392.
- Janson, P. & Ryder, L.K. 1983, 'Crime and the Elderly: The Relationship between Risk and Fear', *The Gerontologist*, vol. 23, no. 2, pp. 207-212.
- Jeffords, C.R. 1983, 'The Situational Relationship between Age and the Fear of Crime Among the Elderly', *The International Journal of Aging and Human Development*, vol. 20, no. 4, pp. 241-56.
- La Grange, R.L. & Ferraro, K.F. 1987, 'The Elderly's Fear of Crime: A Critical Examination of the Research', *Research on Aging*, vol. 9, no. 3, pp. 372-91.
- Lawton, M.P. & Yaffe, S. 1980, 'Victimisation and Fear of Crime in Elderly Public Housing Tenants', *Journal of Gerontology*, vol. 35, no. 5, pp. 768-79.
- Lindquist, J. H. & Duke, J. M. 1982, 'The Elderly Victim at Risk', *Criminology*, vol. 20, no. 1, pp. 115-126.
- McDaniel, S. 1988, 'Prospects for an Ageing Canada: Gloom or Hope?', *Transition*, June, Vanier Institute, Canada.
- McGrath, G. 1989, 'Horror Revisited: towards effective victim assistance by policy in major crimes: a case study', Victims of Crime Seminar, Melbourne.
- Ollenburger, J.C. 1981, 'Criminal Victimisation and Fear of Crime', *Research on Aging*, vol. 3, no. 1, pp. 101-118.
- Parker, K.D. & Ray, M.C. 1990, 'Fear of Crime: An Assessment of Related Factors', *Sociological Spectrum*, vol. 10, no. 1, pp. 29-40.
- Petrie, S.D. & Di Bartolo, L. 1993, 'The Role of Policing in the Caring Community: Perceptions of Older People', Crime and Older People Conference, Australian Institute of Criminology, Adelaide.
- Pillimer, K. & Finkelhor, D. 1988, 'The Prevalence of Elder Abuse: A Random Sample Survey', *The Gerontologist*, vol. 28, no. 1, pp. 51-57.

- Shapland, J., Willmore, J. & Duff, P. 1985, *Victims in the Criminal Justice System*, Gower Publishing, London.
- Sumner, C.J. & Sutton, A.C. 1992, 'Victims of Crime and the Mass Media', *Criminology Australia*, vol. 3, no. 3, pp. 2-4.
- Sunday Mail* 1993, Brisbane.
- US Department of Justice 1987, *Elderly Victims*, Bureau of Justice Statistics, Washington, DC.
- Van Dijk, J.J.M., Mayhew, P. & Killias, M. 1991, *Experiences of Crime Across the World: Key Findings from the 1989 International Crime Survey*, 2nd edn., Kluwer, Deventer.
- Warr, M. 1984, 'Fear of Victimization: Why are Women and Elderly More Afraid?', *Social Science Quarterly*, vol. 65, no. 4, pp. 681-702.
- 1992, 'Altruistic Fear of Victimization in Households', *Social Science Quarterly*, vol. 73, no. 4, pp. 723-736.
- Whalley, P. & Gately, B. C. 1991, 'Crime, Safety and the Elderly', *Australian Police Journal*, April-June, pp. 58 - 62.
- Whitrod, R. 1980, 'The Work of the Victim's of Crime Service', in *Victims of Crime Seminar Proceedings*, University of Sydney.
- Williams, P. & Dickinson, J. 1993, 'The Fear of Crime: Read All About It?', *British Journal of Criminology*, vol. 33, no. 1 pp. 33-56.
- Yin, P. 1982, 'Fear of Crime as a Problem for the Elderly', *Social Problems*, vol. 30, no. 2, pp. 40-245.

THE FIRST AUSTRALIAN NATIONAL SURVEY OF CRIMES AGAINST BUSINESSES

A RETROSPECTIVE AND A FEW THOUGHTS ABOUT THE FUTURE

John Walker
Consulting Criminologist
John Walker Consulting Service

INTRODUCTION

Because of Australia's fragmented political system and its "cultural cringe", our political and bureaucratic leaders (including those in the criminal justice system) tend always to be looking overseas for ideas. While there is nothing at all wrong with this – it is to their credit in fact and far better than the insular view one often sees in American literature – it does tend to be sidetracked by political expediency. Politicians often look for or discover overseas solutions that appeal to them philosophically, and then simply pursue them without looking closely at their applicability to the Australian situation.

The information provided by international surveys of crime victimisation, designed as far as possible to provide comparative information across the participating countries, has already revealed a range of eminently understandable reasons why some overseas ideas work in Australia and some do not. Our very high levels of urbanisation, our high car ownership levels and our residential suburban design spring readily to mind as does our outdoor lifestyle and our drinking habits – all factors revealed by the International Surveys of Individual and Household Victimization. While this does not stop politicians going on the rampage pushing their philosophical barrows, it does provide sensible arguments to be used by those who wish to debate the issues, and thereby contributes to an improved level of policymaking.

In their relatively short life-span, crime victims surveys have already provided considerable essential policy-relevant data to a wide range of criminal justice and other agencies engaged in developing crime prevention policies: from the Commonwealth Grants Commission, which is currently using victim survey data to assist in the determination of the demand for law and order services, to a wide range of planning authorities which are using the data to help design out crime in urban areas.

But as a number of us pointed out at the 1992 UNICRI Conference in Rome, convened to discuss and promote the International surveys, offences against businesses account for considerable proportions of all crimes. These incidents will, in general, escape the attention of the traditional surveys, which are addressed only to crimes against individuals and households.

Police data indicate that, pro rata, businesses are considerably more at risk of crime than are households, and that the costs of crimes against businesses are a significant imposition on business. However, police statistics do not provide the sort of detail needed for crime prevention policy development, and there has been quite a clamour for such information in Australia in recent years, at least partly because of the economic rationalists' fetish about efficiency. The theory goes that anything that makes Australian businesses less efficient than those in other parts of the world should be eliminated. Economic rationalists

have a tragic inability to see that anything else matters, but in the case of crimes against businesses they are probably correct. It is a significant burden on business and it could be reduced; it is therefore rational to at least try to reduce these business costs to make them more efficient.

After a very positive response from the Rome conference, Prof. Jan van Dijk (Netherlands Ministry of Justice), Dr Pat Mayhew (U.K. Home Office) and Dr Joanna Shapley (University of Sheffield) and I set about designing a pilot survey, building on our collective previous experience. In March 1993, this committee met in Jan's office in the Hague, along with Prof. Per Stangeland (University of Malaga, Spain), to agree upon a basic methodology and questionnaire, and work commenced on setting up the necessary contacts and computer-assisted interview arrangements. The first step was essentially to set up pilot surveys in Australia, England and Wales, the Netherlands and Spain, using Computer Assisted Telephone Interview (CATI) techniques (except in Spain, where university students were available as face-to-face interviewers). The sample frame was to be of distinct business premises, as opposed to the businesses per se, some of which are multi-sited companies, and was to be drawn up from the business directories available in each country. As always, we had to be cost-conscious, knowing that our political masters would not be keen to invest large sums in data gathering, so our methodology and our sample sizes had to be frugal.

A three stage process was adopted to obtain the responses to the questionnaire. Firstly, the premises would be contacted by telephone to obtain the name of the most appropriate person to be contacted. A letter was then to be sent from the head of the national justice agency (in Australia's case, the Director of the Australian Institute of Criminology) to the individual in person, explaining the nature and intent of the survey, along with, if possible, a letter of support from a business oriented national body. In Australia, Peter Daly, the Chief Executive of the Insurance Council of Australia, wrote endorsing the project and encouraging businesses to respond to the survey. The letter also explained that the company would be contacted a few days later by telephone to conduct the actual interview, and contained a 'help sheet' to enable the respondent to compile responses to some of the more complex questions prior to the interview, saving time for both interviewer and interviewee. The agreed questionnaire addressed 12 issues:

- Levels of crime in the neighbourhood
- Burglaries (experienced in the last twelve months)
- Vandalism/damage to property
- Vehicle crime (e.g. thefts of/from vehicles)
- Thefts
- Frauds
- Robberies
- Assaults/Threats/Intimidation
- Corrupt practices
- Indirect losses due to crime
- Crime prevention measures being taken
- Opinion/experience of police/municipality activities against crimes against business.

The committee had agreed to conduct pilot surveys in mid-1993, ready for a full-scale survey in January 1994, along with any other countries that wished to participate. For these pilot surveys, sample sizes were to be limited in each country to a hundred in each category of industry – divided equally between small, medium and large businesses. The European members of the committee favoured further limiting the survey to business premises in the categories of Retail, Wholesale, Manufacturing, while I favoured a broader approach. In particular, in view of the importance of both the tourism/recreation and primary industry categories in Australia, I felt that it would be essential to include them too. A further divergence between the European and Australian surveys became necessary when it appeared that funding for the Australian Institute of Criminology (AIC) might be less generous in the 1993/4 budget than it had been in 1992/3, (a gross understatement as it turned out), and it was decided forthwith to run a full-scale survey straight off, including the extra industry categories.

In Australia, the Roy Morgan Research Company was selected to conduct the survey on behalf of the AIC. Interviewing took place through August 1993 and detailed results were provided on diskette in early September. The initial budget allowed for around 950 businesses to be surveyed overall, in the categories of Retail, Wholesale, Manufacturing, and the key exporting business categories of Primary Industry and Tourism/Recreation. In the event, 966 businesses were surveyed. Reaction from businesses contacted was overwhelmingly favourable and many commented that it was most timely and appropriate.

The sample of 966 business premises was effectively divided into 15 categories (five industrial sectors times three size categories). National figures were obtained showing the actual numbers of business premises in each of these 15 categories, and we ensured that we obtained a representative quota of businesses in each category.

SOME RESULTS FOR THOSE WHO HAVE NOT SEEN THEM BEFORE:

PERCEPTIONS OF CRIMES AGAINST BUSINESS, AND OTHER NEIGHBOURHOOD PROBLEMS

The Survey began by asking about general problems facing the neighbourhood around the premises and the business which was located there. Previous surveys of crime and planning had identified such factors as parking difficulties, noise and pollution problems, poor public services such as street lighting or public transport, and the presence of unsupervised children and adolescents as often associated with crime problems. Where the problems are linked, it is frequently possible to find practical solutions to crime through the urban planning processes. We needed to find out how prevalent were such conditions, and how often they were related to crime.

Crime is considered to be a serious neighbourhood problem by almost a quarter of Australian businesses. Other problems, such as poor public services, parking difficulties, litter and unruly young people, were much less likely to be considered serious problems to business. Overall, businesses in the retail non-food and the tourism/recreation industry sectors were most likely to perceive a serious or fairly serious problem of crime. Primary industry businesses were the least likely to have such a problem. In general, the medium sized businesses fared worse than either the smaller or larger businesses – particularly in the manufacturing industry sector – but there was a distinct tendency for perceptions of crime against retailers (both food and non-food) to worsen with increasing sizes of business. Almost half the large food retailers said they had a serious problem of crime in their neighbourhood. The complex links between perceptions of crime and other neighbourhood problems are explored in detail in the report.

Perceptions of crime are worse in 'built up areas outside city centres' than they are in the centres themselves, while the other neighbourhood problems are mostly distributed in the opposite direction. However, special business zones including 'industrial estates, business parks and, shopping precincts' appear to be much more likely to suffer from a whole range of neighbourhood problems, including crime, than other business locations.

BUSINESS EXPERIENCES OF CRIME IN 1992

Turning now to the actual incidence of crime (as opposed to perceptions) we find that almost half of all businesses were not in fact the victim of any of the 14 types of crime during 1992; almost three-quarters of primary industry businesses escaped victimisation, while almost three-quarters of retail food outlets and tourism/recreation businesses were victims of at least one crime. Victimisation was strongly size-related, with the large businesses much more likely to have been victimised than the smaller ones.

Burglary was the most common form of crime occurring to businesses in 1992, affecting over a quarter of all businesses. A similar proportion fell victim to some form of theft from the premises, most often committed by retailers' customers, but also by staff or others. Around one in six businesses were victims of vandalism, and fraud in total affected about one business in five. Around one business in ten experienced an assault on staff during the year. Other crimes, including robbery, bribery/extortion and motor vehicle thefts, were rare and affected fewer than one business in 25.

With the single exception of customer theft, all crimes were more prevalent amongst the large businesses than amongst the small ones. This applied to each industry sector as well as overall. When considered on a sector-by-sector basis, customer theft increases with staffing numbers, except in the manufacturing and primary industry sectors where retailing is not a major part of trading. On the face of it, this would seem to indicate the existence of considerable crime dis-economies of scale, but one should be careful not to over-interpret these data in this way. Staffing numbers are not necessarily a good measure of the size of a business; it would perhaps make more sense to relate incidence of crime against the business's annual turnover. In this case, one might find that even though crime incidence and costs may increase with business size (measured by turnover) they may still be a declining percentage of turnover. Future surveys must include annual turnover as a basic characteristic of the respondent businesses if the concept of crime economies of scale is to be explored in the analysis. Nevertheless, one can conclude that increases in staffing numbers do not, per se, offer protection from the incidence of crime in spite of the inherently greater surveillance potential of increased staffing.

Different patterns of victimisation occurred in different geographical regions and situations. Businesses located in town or city centres appear less at risk of burglary but at somewhat greater risk of the other crimes than businesses located outside the centres, while those located in 'special business zones' (defined as industrial estates, business parks and shopping precincts) are significantly more likely to have been the victim of virtually every crime type than those not located in a special business zone. These differences do not necessarily reflect badly on the concept of business zones – they may alternatively reflect differences in the types of businesses which choose to be located in such zones. One possibility is that business zones are attractive to the businesses most at risk of crimes, precisely because they appear to offer extra crime prevention protection.

CHARACTERISTICS OF DIFFERENT CRIME TYPES

Almost 60 per cent of victims of burglary were burgled (including attempted burglaries) more than once during the year; some in fact claimed to have been burgled at least once a week on average – perhaps misunderstanding the difference between burglary and shoplifting. A saving grace, at least as far as the

businesses were concerned, is the fact that almost two-thirds were insured for the full amount of any loss through burglary, and fewer than one in ten were completely uninsured. Average costs of burglary were comparatively small, because of the high percentage of businesses which were not victims at all during the year (72.6%), but burglaries costing over \$10,000 occurred in all industry sectors. Tourism/recreation and retail food businesses were the most likely victims, with primary industry much less likely to be burgled. According to the results of the Australian component of the International Crime Victims Surveys (ICVS) of 1989 and 1992, around 4.2 per cent of households were burgled each year, compared with 27.4 per cent of businesses.

Vandalism is widely believed to be a more common occurrence than burglary, yet these survey results have not borne this out, with over 80 per cent of businesses not experiencing such a crime in 1992. The costs to business, however, are still substantial, averaging about half of the costs of burglary. Tourism/recreation businesses appear to be most at risk, but manufacturing businesses actually suffered the greatest average losses. Again, primary industry was at least risk.

Around two-thirds of the businesses maintained vehicles for use at the premises. This was rather lower than the household ownership of motor vehicles, which is over 90 per cent in Australia. The percentage of businesses which had motor vehicles stolen was, at 2.6 per cent, the same as the percentage of households experiencing the crime, according to the ICVS report. The likelihood of vehicles being stolen, relative to vehicle ownership, is therefore rather higher for businesses than it is for households. Again, high levels of insurance would have taken some of the sting out of the crimes, as very few businesses were not covered against vehicle theft. A similar situation occurs in relation to thefts from vehicles. The frequency of 6.1 per cent of total businesses is very similar to that of households, of whom 6.4 per cent were victims of this crime, according to the ICVS.

Only those businesses which conducted at least some retailing are counted as victims of thefts by customers. Non-food retailers stand out as the most likely victims of this type of crime; indeed, almost a third of them were victimised at least once during 1992, with average costs considerably higher than those of other sectors. Food retailers escaped a little more lightly with only about a quarter falling victim. Overall, more than 85 per cent of victims of customer theft were victimised more than once during the year, with 'at least once a week' being a common response – particularly amongst non-food retailers. Almost 60 per cent of the businesses which were victims did not report any of the incidents. Fewer than one in four victimised businesses reported 'all' or 'most' of the incidents. Lack of evidence, and the offence not being considered serious were the most common reasons for non-reporting to police, although there was also some recognition that the police effectively 'could do nothing' to help. One in 12 victims mentioned 'too much trouble' as a reason for not reporting, suggesting perhaps that the time spent dealing with the legal system was not time well spent for the business.

Theft by employees was comparatively rarer than thefts by customers. When it occurred it was also much less likely to be referred to police, with almost one victim in five describing such action as 'inappropriate'. While tourism/recreation businesses had the highest average incidence of employee theft, the manufacturing businesses suffered the highest costs. Theft by persons other than customers and employees, and thefts by persons unknown, were extremely rare. Apart from thefts by customers, the percentages of businesses victimised by theft are very similar to the percentages of individuals suffering similar crimes (5.8 per cent according to the ICVS).

Fraud was experienced by over one in six businesses during 1992. The perpetrators were much less likely to be employees than outsiders. As for employee thefts, when employees were suspected of fraud it was very rare for the police to be brought in. It was thought to be inappropriate in many cases.

Assaults on employees were not uncommon, with almost one business in ten experiencing at least one such incident. Multiple victimisation was common. Robberies and bribery/extortion were extremely uncommon, although around one in six businesses believe that bribery/extortion is common in their industry.

RISK FACTORS ASSOCIATED WITH CRIME PROBLEMS

Information relating to perceptions of crime in the neighbourhood and the information on actual incidence of crime at the business premises are related to four sets of possible risk factors. The risk factors obtained from the survey were:

- the sector of industry in which the business trades, including additional activities which take place on the premises
- the presence or otherwise of 'children vandalising' things in the neighbourhood, together with the presence or not of 'teenagers hanging around'
- the location of the business premises, e.g. in the town or city centre, or special business zone
- the size of the premises and numbers of staff who work there.

The significance of these factors can be seen from the fact that where there are no 'children vandalising' and no 'teenagers hanging around', the odds of perceiving a serious local crime problem are about five to one against. The average business premises face odds a little worse than this: just over three to one against. Teenagers 'hanging around' bring these 'average' odds up to 5:4 on, but 'children vandalising things' bring the odds up quite considerably to 3:1 on or 5:1 on, depending upon whether both problems coexist. The data suggest it is the 'vandalising things' not the 'hanging around' which is most associated with the perception of a serious crime problem.

Special business zones, wherever they are located, actually bring increased probability of crime. Premises occupying more than 1,000 square metres were less vulnerable to crime than the smaller ones, but increased staffing numbers noticeably increased risks of crime.

CRIME PREVENTION ISSUES AND COSTS

The Survey asked a number of questions about crime prevention methods, including direct questions about the use of seven specific security measures: systems of entry control during business hours (e.g. gatekeepers or receptionists), caretakers or security patrols on the premises after business hours, the installation of burglar alarm systems, systems where security guards go to the premises if alarms go off, special security lighting, special window protection (e.g. shatterproof glass, bars gratings, window locks), and identification number marking on valuable equipment. A question was also asked about the annual maintenance and running costs of such systems.

Other questions related to sources of advice and help regarding crime and crime prevention, such as the police, the local authorities' business crime prevention cooperatives (e.g. Business Watch), insurance companies, recognised security firms, or specialist security officers employed by the business.

One feature to emerge is the extent to which the use of the various security measures varied by industry sector and business size. Large businesses were much more likely than smaller ones to use every type of security measure. The strength of the relationship with business size varies from sector to sector, and

differs between different security measures. Primary industry businesses were much less likely than others to use crime prevention measures, with the exception of equipment identification numbers. Special lighting was the most commonly employed measure overall, used by almost half of all businesses (but five-sixths of the bigger businesses), followed by after-hours security and window protection. Attendance by guards reacting to alarms was used by two-thirds of big businesses, but was the least used of all the measures amongst the small businesses.

Costs also varied widely, with small businesses spending very little on security measures – under \$1,000 per annum on average, with over half actually allocating nothing at all to security during the year. By contrast, large businesses averaged over \$70,000 per annum, with half of the premises spending over \$8,000 in the year. The overall average amount spent on security each year was around \$2,000 per business premises.

Only one in six businesses had contacted the police about crime or crime prevention (other than to report a crime); the larger businesses were more likely to have done so than the smaller ones. In general, however, there was satisfaction with how the police dealt with local crime problems, with over a quarter of respondents being 'very satisfied' and over 40 per cent 'fairly satisfied'. Fewer than one in seven were dissatisfied. No clear patterns of difference emerged in terms of sector of industry or size of business.

Only one in 20 businesses had contacted the local authorities about crime or crime prevention during the year; again, the larger businesses were more likely to have done so. One in four businesses had participated in some form of business community crime prevention effort (such as Business Watch) with primary industry and retailing businesses most likely to do so. More than two-thirds of businesses said that although they had contacts with the community crime prevention effort they had not participated. Very few said that such a thing did not exist in their business community.

By contrast, there was considerable variation in the sources of advice about crime prevention and security. Recognised security firms, the insurance industry and the police were the most prominent, although the larger businesses also sought in-house advice from security officers and others. Almost half of the smaller businesses and two-thirds of the primary industry businesses had not sought any advice in this area during the year.

THE COSTS OF CRIMES AGAINST BUSINESS

Indirect losses were defined by the question:

'Your company may also incur indirect losses through crime, such as lost orders or customers, delayed deliveries, disturbance to production, and so on. Can you give us an estimate of such indirect losses for 1992, arising from any crime against your business?'

Leakage and shrinkage was defined by subtracting the costs of all the crimes and the indirect losses from the responses to the question:

'In 1992, what was your estimated total loss from leakage, shrinkage and crime identified from your stock control procedures (including any incidents you have already mentioned)?'

The total cost of crime in the sectors of industry dealt with in this report is somewhere between \$3.8 billion and \$4.7 billion for 1992, depending on one's assumption about 'leakage and shrinkage'. Some of the \$915 million which is ascribed to leakage and shrinkage is undoubtedly due to crime, but not necessarily all. Thefts, of various kinds, account for the largest share of the direct costs of crimes against businesses, but the indirect costs, which include lost orders and disturbance to production, account for a third of all costs to business. Security costs are around one eighth of the overall total.

TABLE 1: THE TOTAL COSTS OF CRIME SECURITY AND STOCK LOSSES IN 1992, BY CAUSE

Cause of Crime Security and Stock Losses	Costs (\$m)
Burglary	435
Vandalism	226
Vehicle Thefts	102
Thefts from Vehicles	173
Thefts by Customers	179
Thefts by Employees	108
Other Thefts	664
Thefts, Unidentified	42
Employee Fraud	190
Other Fraud	190
Robberies	14
Security Costs	631
Indirect Losses	1,610
Leakage, Shrinkage	915
Grand Total	3,822-4,737

The question of what is the cost of crime is a debatable one. In particular, ascribing the whole of 'leakage and shrinkage' to crime is questionable. Leakage and shrinkage to many may include wastage by stock deterioration, poor stock control and so on. Nevertheless, these data provide ranges within which the "real" figure probably lies.

Many people are surprised at the extent to which the vague notions of 'indirect costs' and leakage and shrinkage increase the estimated direct losses due to crime. But many business people have said, in their correspondence concerning the survey, that such 'on-costs' are the very reason that such a high proportion of crime against business is not reported to police. The disturbance to the business incurred by following up a crime, which may itself have been relatively minor, costs more than the crime itself. It is more economically sound to rely on the insurance to reduce the loss and pass on the other costs to consumers through prices. While all businesses operate the same way, none are disadvantaged in terms of price-competitiveness, so there is no incentive to change. If we can find ways to reduce crime or these on-costs it will be to everyone's advantage, including the consumers.

This completes my summary of the result of the first Australian National Survey of Crimes against Business. I hope that readers have been persuaded that it was a worthwhile thing to try to do, and that it should be a regular feature of the monitoring of crime in Australia. Of course, there are improvements we would like to make in future surveys; in particular by increasing the size of the sample and the coverage of the full range of industrial sectors. Notable sectors omitted in this first survey included the finance and business services sector, the professions, transport and storage, and

the public service. Some of these areas were omitted because previous experience amongst the project team suggested that responses were generally poor; others were excluded for reasons of survey sampling and costs (it appeared best value for the survey's dollar to concentrate on a limited range of well-defined industry sectors). There is no doubt, however, that these important sectors of industry also suffer from crime problems that limit their productivity and damage their competitiveness, and future surveys might aim to capture the data that describe these problems. Such research ambition costs money, however, and is only likely to be realised if the likely results are acknowledged to be worthwhile, in terms of the future improvements in crime prevention and costs savings derived from the database.

THE FUTURE?

This survey received an overwhelmingly positive response from the media, politicians, police, the security industry and the broader business community. It has contributed to the debate about police resource allocation, by raising the question of 'in whose interest is it' to combat crimes against businesses. While they are insured and equally at risk it may appear that business managers can afford to ignore crime and let the customers pay a little more for their goods and services. Why should public resources, such as the police, be expended on such matters? The answer, of course, is that the classic "games theory" result applies: that is, it is in no-one's individual interest to expend resources unless everyone does – including your business competitors. Police are now taking very seriously their role as crime prevention advisers to shopping centre managements I have received feedback on a number of occasions that they found the survey results to be a valuable aid in this role.

The data provided by the survey, like those provided by surveys of crimes against households and individuals, have also had an impact on the current debate about crime prevention through environmental design. Urban planners can set ground rules for business districts, and can demand social and/or environmental impact statements prior to the granting of planning permission for even quite minor developments in Australia. Until recently, the consideration of crime as a social or environmental impact was rare, and certainly not anticipated as a central issue. Recently, however, the Australian and New Zealand Police Assistant Commissioners for Crime agreed to support a recommendation that crime impacts be automatically incorporated into urban development guidelines in all States and Territories.

There seems to be no doubt that even in its limited form, with major sectors of industry missing – such as the services and professional sectors, banking and finance sectors and so on – the survey has been worth doing. Some industry sectors, such as the retail traders and the tourism industry, have expressed a wish to conduct larger surveys, either of their own industry in isolation, or as part of a wider effort. Some, such as the bankers, are clearly very nervous about the adverse publicity which may accompany the public knowledge of the extent of criminality in their industry. There may be ways to overcome their fears. We did, after all, manage to conduct our survey without drawing attention to any individual respondent's data; if anonymity is all the bankers require, we can find ways of assuring them of that. So perhaps we could, with enough effort and political clout, rustle up enough support to do a survey of the whole range of Australian businesses, to identify where police resources should be directed, where crime prevention and urban planning can make a difference, and what the true costs of crime are to the community.

This reference to the costs of crime brings me to my final point. My paper last year on estimates of the costs of crime in Australia used admittedly extremely rubbery figures, but clearly suggested that the costs of fraud considerably outweighed all other types of crime even where the most modest estimates of fraud are used. These rubbery figures still appear to be the best available estimates of the costs of crime, and the study appears to have triggered similar studies in a number of other

countries. Unlike burglary, for example, where we can be fairly confident that police figures give some realistic ballpark figure for costs of reported crimes and that victimisation surveys give us some idea of the extent and costs of unreported crimes, fraud is an area where we have terrible trouble measuring the extent and costs of even the known crimes. We now also have the benefit of several parliamentary reports, such as last year's Elliott Report, to say that we do not have even the vaguest clue about the extent of unreported fraud.

It is obviously difficult to design a survey of crime victimisation in the area of fraud, where sometimes even the victims are unaware of being victimised; and sometimes the individual's loss may be trivial but there may have been millions victimised by the same scheme; and sometimes the bureaucracy itself may have been the victim and set in motion the usual damage controls and denials. However, the apparent size of the problem justifies a major effort to design such a survey tool. Some interesting work was produced early this year in New South Wales by Angela Gorta, working for the Independent Commission against Corruption. This work took the form of a survey of public sector employees' understanding of corruption and their willingness to take action, and measured the borderlines between what people understand as corruption and what they regard as 'normal' behaviour. A similar approach could be rewarding in the broader case of fraud. A survey of medium and large scale businesses' experience of fraud has also been carried out in Victoria by Kevin OToole et al. at Deakin University for the Major Fraud Group of the Victoria Police ('Fraud against Organisations in Victoria'). This survey followed fairly traditional victim survey methods, with a 22 category listing of fraud types, and asked about reporting to police, reasons why not, and relationship between offender and the business. It too provides a model for a national study.

Fraud has now become the focus of interest of the Australian Federal Police (AFP), together with so many other branches of the criminal justice system. The AFP are looking for measures of the extent and seriousness of fraud. If they do not find some meaningful figures soon, they are going to adopt the policy which I mentioned at the beginning of this paper: look overseas and see what they are up to. They will find, for example, that fraud is beginning to preoccupy the European Community as they discover - somewhat belatedly the British would probably say - the extent of the rip-offs in the Common Agricultural Policy, the regional development policies, the arms industries and a whole range of other bureaucratic schemes which lend themselves to fraud. The AFP will find that fraudulent business transactions linked to the various mafia-like organisations around the world involve vast amounts of money. They will naturally assume that the same scams are in operation in Australia, and that therefore the same prevention and control policies are necessary. And they may be right. But they may be wrong too, and grossly overestimate the threat to Australia - and grossly infringe on our civil liberties on the justification that it is necessary to catch these crooks. I think it is important that we get this right. For this reason, it is an important next step in crime victim survey developments to come up with some sort of methodology to measure the extent and costs of frauds, against both businesses and against the public sector.

NON-RESPONSE ADJUSTMENTS IN THE 1993 NATIONAL CRIME AND SAFETY SURVEY

Bernard Wong
*Social Statistics Branch
Australian Bureau of Statistics¹*

INTRODUCTION

The 1993 National Crime and Safety Survey² was conducted as a supplementary topic to the April 1993 Labour Force Survey. Information was collected using self-enumeration methodology. After collecting information on the labour force, the Australian Bureau of Statistics (ABS) interviewer introduced the Crime and Safety Survey and left the survey forms to be completed by the household members and returned to the ABS in prepaid, self-addressed envelopes.

The sample covered all persons aged 15 and over who were usual residents of private dwellings. Information was sought from approximately 60,500 persons of whom about 52,300 (86.4%) responded. Data pertaining to households were sought from approximately 28,970 households and about 24,860 (85.8%) replied. The response rate achieved is relatively high among mail surveys because of the considerable effort (- two mail follow-ups and one phone follow-up) to minimise the non-response, but it is still about 10 percentage points lower than the typical ABS household surveys such as the Labour Force Survey. This may largely be attributable to the self-enumeration mail-back methodology.

This paper describes the methods employed to compensate for the non-response in the 1993 National Crime and Safety Survey. Firstly, the general methods in dealing with non-response are reviewed. Secondly, the imputation and weighting adjustment employed in the estimating and weighing stage of the survey are described. Finally, the general issues involved in the use of the 'weights' are discussed.

GENERAL METHODS OF TREATMENT OF NON-RESPONSE

TYPES OF NON-RESPONSE

A common problem in surveys is the inability to obtain useful data on all questionnaire items for all members of the sample. Problems of non-response are generally classified into two categories: unit (or total) non-response and item non-response.

In unit non-response, the responding unit fails to participate in the survey. Some of the common reasons for unit non-response are the inability to participate (as in cases of language problems), not-at-homes, and refusals. The second level of non-response is item non-response in which the responding unit participates in the survey, but for any of several reasons such as item refusals, "don't knows", edit failures or omissions, data on particular items of the questionnaire are unavailable for analysis.

¹ Points of view and opinions expressed in this paper are those of the author and do not necessarily represent the official position and policies of the Australian Bureau of Statistics (ABS).

² Australian Bureau of Statistics 1994, *Crime and Safety, Australia*, Cat. no. 4509.0, ABS, Canberra.

In general the only information available about total non-respondents is that on the sampling frame from which the sample was selected. Such information can usually be incorporated into weighting adjustments to compensate for the non-response. Therefore unit non-response is generally handled by weighting adjustments.

In the case of item non-response, however, much more information is available on the unit involved, such as the responses for other survey items. The usual adjustment procedure for item non-response is to retain the actual responses to items for which the answers are acceptable and impute responses for data items that are missing or unusable. Imputation is a planned process in which each missing data item is replaced by a value that is intended as a prediction of the missing value.

WEIGHTING ADJUSTMENTS

The essence of all weighting adjustment procedures is to increase the weights of specified respondents so that they represent the non-respondents. Two types of weighting adjustments, the population weighting adjustments (also known as post-stratification) and the sample weighting adjustments, are outlined below.

In population weighting adjustments, the sample of respondents is divided into a set of classes, called the weighting classes (or post-strata), defined by the available auxiliary information on the population. The most common auxiliary information available for household surveys is the population benchmark distribution by age, sex and geographical areas. The weights of all respondents within a weighting class (such as males 15 to 19 in NSW) are then adjusted by the same multiplying factor, with different factors in different classes, to make the sample distribution conform to the population benchmark distribution.

With sample weighting adjustments, similar procedures as in population weighting adjustments are employed, but with different auxiliary information. With the former, the non-response adjustments for the weighting classes are made proportional to the inverses of the response rates in the classes. In order to calculate these response rates, the number of respondents and non-respondents in the weighting classes have to be known. It is therefore necessary to know which class each respondent and non-respondent belongs to. In general, very little information about the non-respondents is known. One exception is the case of a supplementary survey using an existing collection as the survey vehicle. Information on non-respondents may be available from the survey vehicle if the latter has a very high response rate.

Population and sample weighting adjustments employ different information and thus address different potential sources of bias. If some relevant information on non-respondents is available, the two forms of adjustment can be used in combination to reduce non-response bias, usually by applying sample weighting adjustment first, followed by population weighting adjustment.

The bias of the unadjusted respondent mean can be expressed as two terms, **A** and **B**, as follows (Kalton & Kasprzyk 1986):

$$\begin{aligned} \text{Bias} &= R^{-1} \cdot \sum W_h \cdot (\bar{Y}_{rh} - \bar{Y}_r) \cdot (R_h - R) + \sum W_h M_h \cdot (\bar{Y}_{rh} - \bar{Y}_{mh}) \\ &= \qquad \qquad \qquad \text{A} \qquad \qquad \qquad + \qquad \qquad \qquad \text{B} \end{aligned}$$

where W_h is the proportion of elements in class h
 R_h and M_h are proportion of respondents and non-respondents in class h
 R is the overall response rate
 \bar{Y}_{rh} is the response mean in class h
 \bar{Y}_r is the overall response mean
 and \bar{Y}_{mh} is the non-response mean in class h

Term **A** is the component of bias related to differences in the response rate between weighting classes and term **B** is the component of bias related to the differences between response and non-response means within each weighting class. Term **A** can be eliminated (in theory) or reduced using weighting adjustment procedures. Adjustments for term **B** are more difficult and usually require making assumptions on responses obtained in follow up actions. In the case of mail surveys where several waves of responses are obtained, it may be assumed that the remaining non-respondents are best reflected by the last wave of respondents. Under such assumption, term **B** may be reduced by forming weighting classes based on the later waves of responses.

IMPUTATION

A number of imputation methods have been employed by national statistical agencies and they have one important common objective: to assign a value that is as "similar" as possible to the value of the missing item. Similarity is defined according to the values of a set of auxiliary variables that are correlated with the variable with the missing data. Data for the auxiliary variables have to be available for both respondents and non-respondents. The following are some common imputation procedures (ABS 1993):

- Deductive imputation occurs when a missing value is corrected by using other information that reveals the correct answer. For example, the missing value of household income can be imputed by summing the income of all household members.
- Central value imputation involves replacing a missing or erroneous item with a value considered to be "typical" of the sample or sub-sample concerned. It involves using the mean or median of all valid responses as the imputed value. The usual approach is divide the total sample into similar groups (the *imputation classes*) according to some auxiliary variable(s). Within each imputation class, the respondent class mean or median is assigned to all missing responses.
- Cold-deck imputation involves assigning previous survey data to the missing item. This method is most useful in periodic surveys, where a similar value can be obtained from a respondent (the donor) of the same imputation class in an earlier survey.
- Sequential hot-deck imputation sorts the data of the current survey and then assigns the last valid response to an item that needs imputation within the same imputation class. The deck (of record cards) is hot because it is taken from the current survey.
- Hierarchical hot-deck imputation involves sorting and matching donors and recipients on a reasonable number of auxiliary variables with matching carried out in a hierarchical manner. If a match cannot be made in the initial imputation class, classes are collapsed and the match is made at a lower level of detail.
- Random hot-deck imputation within classes involves the choosing of a respondent at random within an imputation class, and the selected donor's value is assigned to the non-respondent.
- Regression imputation involves regressing the variable for which imputations are required on the auxiliary variables using only respondents' data. The regression equation obtained is then used to derive values for the non-respondents.
- Distance function matching involves the use of auxiliary variables to define a notion of distance between two units. An imputed value is then taken from the "closest" unit.

THE COSTS OF NON-RESPONSE ADJUSTMENTS

Both weighting adjustments and imputations are complex procedures requiring skilled staff and computing resources, but there are other costs involved. While these adjustments should reduce the non-response bias of estimators of univariate parameters such as means and totals, the variance may be affected as well. There is therefore a trade-off to be made between bias reduction and variance increase.

With weighting adjustments, it may seem desirable on occasions to use several auxiliary variables in forming the weighting classes for population or sample weighting adjustments. If the full cross-classifications of all the auxiliary variables are employed in the formation of weighting classes, there will be a large number of classes. Unless the sample is very large, the sample sizes for some of the weighting classes will be small, with only a few sampled elements in each. This will result in unstable response rates for the weighting classes which in turn gives rise to a large variation in the weights leading to increase in variance and loss of precision in the survey estimates. A common solution is to collapse some of the weighting classes.

The use of the last wave of response as weighting classes has the same problem (Holt & Elliot 1991). In general, the number of respondents decreases with each wave of reminders or call backs. The weight associated with each observation from the last wave could be several times as large as other responses, leading to an increased variance of the survey estimates. Paradoxically, the situation will become worse as the number of reminders or call backs is increased.

The situation with imputation could be even worse. With weighting, the increase in weights is evenly spread across the respondents in a weighting class. Some imputation schemes, however, are equivalent to the weighting scheme that adds the weight of the non-respondent to that of the respondent who in the scheme donated the imputed value. Such assignment of increased weights to a sample of respondents will increase the variance of the survey estimates. However, this can be reduced by choosing suitable random imputation methods.

In theory, the decision on adjustments for non-response can be made by evaluating the cost and benefits – the reduction in mean square error of the survey estimate. In practice, the impressive amount of research in the last couple of decades on this topic has not come up with any hard and fast rules (Lessler & Kalsbeek 1992). However, two points clearly emerge from the massive methodological research. One is that there is no substitute for complete response. The other is that it is better when attempting to reduce non-response bias to use a well-chosen adjustment method than to do nothing at all, unless the response rate is very low.

NON-RESPONSE ADJUSTMENTS IN THE 1993 SURVEY

IMPUTATION OF SEXUAL ASSAULTS

In the 1993 National Crime and Safety Survey information on sexual assaults was collected from females aged 18 and over in a separate, voluntary questionnaire because of the perceived sensitivity of the topic. About 8 per cent of females aged 18 and over in the sample who responded to the other questionnaires did not respond to the sexual assault questionnaire.

One obvious option to compensate for the missing sexual assault data is weighting. However, although a separate questionnaire was employed, the information on sexual assaults of a respondent is actually part of a record which contains the socio-economic and demographic characteristics of the respondent as well as the information on other types of offence. Weighting adjustments would mean a separate weight for

sexual assault, i.e. a different weight for the same record. This gives rise to two problems. The first one is that inconsistency would result in the distribution of marginal totals of certain cross-tabulations. The second one is the difficulty in choosing which set of weights to use in a multivariate analysis. It was therefore decided to regard the non-response to the sexual assault questionnaire among the respondents of other questionnaires as item non-response, and handle it by imputation.

The random hot-deck imputation within classes method was adopted, because it could be applied in such a way that the survey estimates would be the same as if separate weighting was employed for sexual assault. Moreover the increase in variance of survey estimates was less serious in a random imputation method (see above). The procedures were as follows:

- The analysis of the socio-economic and demographic characteristics of the respondents identified age as the only auxiliary variable significantly correlated with the incidence of sexual assault.
- Imputation classes were defined using age groups by State/Territory. The sexual assault prevalence rate was calculated for respondents in each imputation class. The rates were then applied to the number of non-respondents in the corresponding imputation classes to determine how many of them should be imputed as victims of sexual assault.
- The required number of non-respondents to be imputed as victims were then selected randomly from each imputation class.
- The same number of known victims among the respondents were selected randomly from the corresponding imputation class and used as donors.
- All remaining non-respondents were imputed as non-victims.

Of the 23,600 female respondents aged 18 and over, 1,869 did not respond to the sexual assault questionnaire. The breakdown of the imputation by State/Territory is summarised in the following table:

State/Territory	Victim	Non-Victim
NSW	4	482
VIC	2	410
QLD	1	298
SA	1	209
WA	1	223
TAS	-	100
NT	-	39
ACT	1	98
Total Imputed	10	1,859

WEIGHTING ADJUSTMENTS USING LATER WAVES OF RESPONSES

The victimisation rates among respondents in the successive wave of responses were compared to investigate any indication of bias due to the difference between respondents and non-respondents. To eliminate the effect of different demographic composition in successive waves of responses, demographic specific victimisation rates were compared. There was no statistically significant difference between the corresponding rates for second wave (responses after the first mail or telephone follow up) and third wave (responses after the second mail follow up). The second and third wave responses were then combined and compared with the first wave (responses without any follow up). There were only three demographic subgroups which showed statistically significant differences and, at the same time, displayed a consistent trend of victimisation rate in the successive waves. They were:

- Victoria – personal respondents born overseas and arrived in Australia after 1980;
- South Australia – household respondents with person living alone; and
- New South Wales – household respondents in urban areas outside the metropolitan area.

Since the response rate of the April 1993 Labour Force survey was very high (over 96%), the demographic characteristics of the most non-respondents were known. Most if not all non-respondents belonging to these demographic groups were identified. To reduce the bias arising from the difference in victimisation rate between respondents and non-respondents in these groups (term B of the bias described in paragraph 13 above), it was assumed that the non-respondents would be best represented by the corresponding respondents in the combined second and third wave of responses in the same group. The latter were employed as weighting classes, i.e. the weights of respondents in these classes were increased proportional to the inverse of their respective response rates so that they represent the non-respondents in the same class.

The results of the adjustment are as follows:

Demographic Groups	Victimisation Rate before Weighting	Victimisation Rate after Weighting
Persons in Vic arriving in Australia after 1980	2.3%	2.9%
Households in SA with Persons Living Alone	10.2%	12.3%
Households in NSW Urban Areas outside the Metropolitan	5.6%	6.6%

SAMPLE WEIGHTING ADJUSTMENTS

To identify the auxiliary variables that were correlated with the response rate, the demographic composition of the respondents and non-respondents were compared. Using chi-square tests, significant differences between the distribution of personal respondents and non-respondents were found in the auxiliary variables of age, country of birth, year of arrival, labour force status and household type. Further investigation revealed that weighting classes defined by the auxiliary variables age followed by

household type had the highest interclass variance (Tremblay 1986), a measure of correlation with the incidence of personal crime. Since the age auxiliary variable would be used in population weighting adjustments (described in the next section), only household type by State was employed in defining the weighting classes for the sample weighting adjustments for personal respondents.

Similar investigation with household respondents identified household type as the only auxiliary variable correlated with the response rate and household crime. Household type by State was the only variable used in defining weighting classes for the sample weighting adjustments for household respondents.

POPULATION WEIGHTING ADJUSTMENTS (POST-STRATIFICATION)

The standard population benchmark data for the Labour Force Survey, viz. the population distribution by State by metropolitan/ex-metropolitan by age group by sex, were employed as post-stratification factors. The full cross-classifications of the four factors were employed. Population weighting adjustments for personal respondents were carried out in the form of ratio estimation, i.e. the sample respondents in each of the post-stratification cells or weighting classes were inflated to the independent population benchmark for that cell. The procedures for household respondents were similar, except that the household estimates obtained from the Labour Force Survey were used as benchmarks. This final step of the adjustment process compensates for the non-response to the survey vehicle and coverage errors, and reduces the sampling error at the same time. It also ensures that the survey estimates are consistent with known population benchmarks.

THE USE OF 'WEIGHTS'

The confidentialised unit record file of the 1993 National Crime and Safety Survey has been made available to some institutional users on a cost recovery basis. To produce statistical tabulations from the unit record file, the 'weights' attached to each individual record must be used. Otherwise, the estimates in the statistical tables could be seriously biased. While in the majority of cases this might appear to be obvious, it may not be so clear-cut when analyses such as means and proportions are produced. Most common statistical software packages have provisions to tabulate using 'weights'.

The use of 'weights' in statistical modelling of survey data of a complex design is a difficult and controversial issue. One school of thought has argued that the unweighted model-based inference is appropriate if the survey design variables such as stratification are included as dependent variables in the model, or the correct model of the population structure is specified (Skinner, C.J. et al. 1989). However, others have recommended that weighted estimates should be used since they are robust to model specifications (Kott 1991). In any case, standard procedures based upon simple random sampling and the assumption that the sample is independently and identically distributed (IID) are generally not appropriate for complex survey data such as the 1993 National Crime and Safety Survey.

CONCLUSION

There are very few rules of thumb in the literature on an "acceptable" response rate in population surveys, perhaps because acceptability is related to one's expectation. The response rate expected from a survey depends on such factors as the method of data collection, the topic itself and sponsoring agency, which vary from one survey to another. However, the acceptability of a reported response rate also depends on whether and what types of methods have been employed to reduce or compensate for non-response. For example, a 60 per cent response rate in a mail survey with non-respondent subsampling and weighting adjustment would be viewed more favourably than the same response rate in a similar survey where nothing is done to deal with the non-response problem.

REFERENCES

- Australian Bureau of Statistics 1993, *The Editing Manual*, ABS, Canberra.
- 1994, *Crime and Safety, Australia, April 1993*, Cat. no. 4509.0, ABS, Canberra.
- Holt, D. & Elliot, D. 1991, 'Methods of weighting for unit non-response', *The Statistician*, vol. 40, pp. 333-342.
- Lessler, J.T. & Kalsbeek, W.D. 1992, *Nonsampling Errors in Surveys*, John Wiley & Sons, New York.
- Kalton, G. & Kasprzyk, D. 1986, 'The Treatment of Missing Survey Data', *Survey Methodology*, vol. 12, pp. 1-16.
- Kott, P. 1991, 'A Model-Based Look at Linear Regression with Survey Data', *The American Statistician*, vol. 45, pp. 107-112.
- Skinner, C.J. et al. (eds) 1989, *Analysis of Complex Surveys*, John Wiley & Sons, New York.
- Tremblay, V. 1986, 'Practical Criteria for Definition of Weighting Classes', *Survey Methodology*, vol. 12, pp. 85-97.

THE FUTURE OF THE ABS CRIME AND SAFETY SURVEY

Ian Crettenden
Australian Bureau of Statistics
National Court Statistics Unit

INTRODUCTION

In 1990, the Australian Bureau of Statistics (ABS) published *Crime and Safety, NSW*, the first major survey of crime victims by the ABS since the 1983 national survey. This survey heralded a significant increase in ABS involvement in crime victim surveys, and was followed by further annual surveys in New South Wales, as well as surveys in Western Australia, South Australia and Victoria. This increasing interest in the crime victimisation area culminated in the 1993 National Crime and Safety Survey, at which time the ABS made a commitment to carry out future national crime victimisation surveys at regular five year intervals.

These surveys have all generated considerable public as well as academic interest. The fact that in at least two jurisdictions the surveys are funded by the State government, and that in addition, most States have made a commitment to carry out a crime and safety survey in 1995, indicates that governments too, recognise the value to policy and planning activities of this type of information.

Given the level of activity and interest in this area, it is timely to examine the content and method of the ABS Crime and Safety Survey, and to consider options for its future development.

METHODOLOGY OF THE ABS CRIME AND SAFETY SURVEY

All crime victimisation surveys currently conducted by the ABS follow essentially the same method, based on that adopted in the 1990 New South Wales survey. This survey was conducted on a user-funded basis by the New South Wales Office of the ABS, for the New South Wales Police and Attorney-Generals' Departments.

The survey used a self-enumeration questionnaire given to respondents as a supplement to the regular ABS Monthly Population Survey (MPS). MPS interviewers explained the questionnaire and its purpose to respondents and left mail-back forms for completion by each adult (over 15 years) member of the household, asking questions about their experience of personal crime. A single form for household based crimes such as break, enter and steal was also provided. In addition, an optional form was provided for each female household member aged 18 years and over seeking answers to questions relating to sexual assault.

Multiple follow-ups of non-respondents were found to be necessary, using a combination of mail follow-up and telephone interviewing. Extensive testing of non-respondent characteristics was also carried out, and imputation procedures for non-respondents were applied to the final dataset. As the New South Wales survey was essentially a pilot test of a new method, extensive methodological research was conducted for this survey. These issues are discussed in detail in a number of papers by Bernard Wong, but the essential result was that from the point of view of response rate and sampling reliability, the self enumeration mail-back method was found to be acceptable, when compared to the usual interview-based methods.

This was an important outcome for future ABS activity in this area, as it set in place a particular type of survey methodology which has determined the nature of ABS crime victim surveys ever since. It is necessary at this point then to understand the merits of the approach and so understand why it has continued to be the method of choice for this type of survey.

ADVANTAGES OF THE CRIME AND SAFETY SURVEY METHOD

The origin of the *ABS Crime and Safety Survey* as a user funded survey is crucial. The survey was designed initially to meet a relatively specific goal of establishing measures of incidence for a number of major personal and household crimes. In addition, the survey is designed to meet these needs at a minimum cost to the user. Thus the resulting survey must be seen as both a trade-off between cost and the depth of information to be obtained, and as a specific instrument designed to meet limited objectives.

A further advantage of the relatively low cost of the self-enumeration methodology is its suitability for frequent replication. Thus, in New South Wales, an annual survey has been conducted each year since 1990, providing a significant time series of crime victimisation data over this period. It is also the cost factor which has allowed the ABS to make a commitment to fund a national survey at its own expense at five year intervals, and has allowed other State governments to consider carrying out surveys of their own.

The cost advantage of the self-enumeration method derives from a number of sources:

- as the survey is a supplement to the already existing MPS, there is no requirement to develop a specific sampling frame and sampling procedures
- travel and staff costs are substantially reduced through the self-enumeration method, and by the use of MPS interviewers for the drop-off of the questionnaires
- the initial response rate is higher than would be expected from a mail-out/mail-back method as the MPS interviewer has, to some extent, already gained the co-operation of respondents, leading to lower follow-up costs than would occur with standard mail-out/mail-back methods
- a much larger sample size is available to the survey than would be possible from an interview-based method at the same level of cost.

In addition to the advantages of cost, the *Crime and Safety Survey* method has the following advantages:

- it provides a more private means for respondents to answer sensitive questions. This may be particularly important when attempting to measure sexual assaults
- there is no opportunity for bias on the part of the interviewer, as the only role for the interviewer is to introduce the survey and leave the questionnaires
- from the point of view of administration, the survey is relatively easy to co-ordinate on a national basis.

Due to these cost and other advantages, and to the fact that the *Crime and Safety Survey* is now a well tested and relatively widely-used survey instrument, with a large time series being developed, this survey has become the de facto standard for crime victim surveys in Australia. The instrument does, however, operate under a number of significant constraints, and these must be recognised when considering whether to adapt the current survey to obtain new information, or to develop a completely new instrument.

LIMITATIONS OF THE METHODOLOGY

A number of limitations of the *Crime and Safety Survey* methodology have been cited by commentators. These include the following:

- As the questions are self-administered, there is no control over respondents' interpretations of questions. Thus, the problem associated with crime victim surveys in ensuring that incident definitions are consistent across respondents is compounded, as there is no opportunity for interviewers to ask further clarifying questions for ambiguous responses, or to clarify respondents' queries.
- There is no control over the possibility of proxy responding. This may be particularly problematic where information is sought on incidents of domestic violence.
- There is a possibility of difficulties in obtaining information from respondents with literacy problems.
- The survey is not based on a specific criminological or other theoretical framework from which hypotheses, and hence questions, may be derived. It is instead, an empirical instrument, designed primarily to measure the incidence of a small range of important offences. More recent surveys, including the 1993 national survey, contained a number of questions relating to risk factors, but again it can be argued that these do not derive from a particular theoretical framework.
- The ABS MPS is the vehicle for administering the survey. The MPS is one of the major regular surveys undertaken by the ABS. As a result, any material included as a supplement to this survey cannot significantly influence response rates to the primary survey instrument. This limits both the type and range of questions which can be asked of respondents. It therefore also favours the use of a mail-back rather than interview method. Thus the scope to expand or alter the *Crime and Safety Survey* to include different questions may be constrained.

It is clear then, that the *ABS Crime and Safety Survey* must be viewed as the result of trade-offs between competing demands between: cost, ease of administration and the need to avoid radical alterations in the survey design so as to develop a significant time series of data on the one hand; and the need for a theoretical underpinning, comprehensiveness and detail and the ability to interpret results obtained on the other. It must therefore also be accepted that any new or revised survey will require a similar consideration of the impact of these demands.

THE FUTURE FOR THE CRIME AND SAFETY SURVEY

In the Preface to the 1993 *National Crime and Safety Survey* the ABS made a commitment to carry out crime victimisation surveys at five year intervals with the expectation that the current methodology would be used. In addition, New South Wales and now, Victoria, are using the same methodology to conduct State surveys at more frequent intervals. There already exists, then, a significant investment in the current *Crime and Safety Survey*. An alteration to the basic nature of the survey will thus need to take into account this existing investment, and demonstrate that it better meets the needs of a wider range of potential users of crime victimisation data than does the current method. It is therefore worthwhile to consider who such users might be, and how their requirements would alter the existing instrument.

USERS OF CRIME VICTIMISATION DATA

Potential users of crime victimisation data fall into three broad categories: government departments, academics and the public. (It should be recognised at the outset, however, that the requirements of these groups are not necessarily mutually exclusive.) The needs of these users may be characterised as follows:

GOVERNMENT AGENCIES

The primary focus of government agencies using crime victimisation data is to either guide government policy in resource allocation, crime prevention and other law enforcement effort or to provide performance indicators as a guide to the success of such activities. Much of the impetus behind recent interest in crime victimisation surveys has derived from this source. As government agencies also represent the group able to provide funding for such surveys, their needs must be seen as central to any assessment of changes to the Crime and Safety Survey methodology.

The uses to which crime victims data have been put by this group may be characterised as follows:

- *Interjurisdictional comparisons.* Crime victimisation data is used here to provide performance comparisons between the States and Territories in law enforcement, particularly crime prevention. As an example, the Industry Commission sponsored Review of Commonwealth/State Service Provision which is currently being conducted plans to use crime victimisation data as one performance measure in its battery. The stated aim of this exercise is the development of comparative measures leading to best practice in areas such as crime prevention.
- *Comparisons of victimisation rates over time.* This use of crime victims data relies on developing a time series of data through the consistent application of a survey instrument over a number of years. The New South Wales Bureau of Crime Statistics and Research, for example, has used data from the *New South Wales Crime and Safety Survey* as one measure of trends in "real" (as opposed to reported) crime rates in that state.
- *As a measure of "real" crime rates and reporting behaviour.* As indicated under the previous point, one of the principal uses of crime victimisation data for government agencies is to gain a measure of the rate of unreported crime in the community. This is seen to be a measure of the success of campaigns which encourage reporting to police of incidents such as domestic violence or sexual assault. The reasons respondents give for not reporting offences to police is also seen as a measure of these campaigns, as well as a measure of the relative seriousness of unreported offences.
- *As a measure of risk factors to guide government policy.* The requirements of government agencies in this area are likely to be very similar to those of academic users with the same interest. The focus is on identifying sociological and behavioural characteristics of victims and non-victims and "profile" the typical victim of different offence types, so that crime prevention strategies can be more tightly focused on "at-risk" groups.
- *As with academic users, some agencies will require detailed information on relatively small geographical areas.* Such small area statistics may be based on administrative regions such as neighbourhood watch areas or police regions. Agencies such as the Commonwealth Grants Commission also have a requirement for crime victimisation data at a small area level. Data from

the surveys will therefore need to be capable of being reorganised into such regions. Whilst it is currently possible to disaggregate crime victims data to Collector District (CD) level, not all administrative regions used by government agencies are capable of being constructed from a groupings of CDs.

It may be seen then that there is a similar disparity of interests among government agencies as with academic users of crime victimisation data. In general, however, these types of user may be characterised as requiring broad level indicators of the incidence of crime, measured consistently over time so that comparisons may be made. It is also clear that in many areas there will be a set of common requirements among both academic and government users.

ACADEMIC USERS

One of the difficulties in assessing the requirements of academic users is that to date, the *Crime and Safety Survey* has not sought to meet the needs of this group, and so the use to which crime victimisation data would be put by this group is to some extent speculative. It seems reasonable, however, to make the following points.

For some academic users, an ideal survey would be developed to test hypotheses derived from criminological theory. The focus of the survey would be likely to be on sociological or behavioural characteristics of both victims and non-victims which would enable various causal theories to be evaluated. In terms of methodology, it would be important to examine in detail the meaning ascribed to the victimisation incidents by the victim. The emphasis would be less on obtaining incidence counts than on evaluating the nuances of each victimisation episode.

In this instance, the interest would be more on the qualitative information provided by respondents, and the methodology of choice would thus involve face-to-face interviews, possibly with a longer questionnaire with complex sequencing patterns. A large number of questions regarding lifestyle and other explanatory information would be desired. It is also likely that somewhat smaller sample sizes would be sufficient if quantitative measures of incidence were not the primary focus of the survey. It is also possible that such users may wish to use entirely different instruments to that of the large scale survey, such as focus groups or in-depth, unstructured interviewing. Such targeted research techniques may be seen as additional to the *Crime and Safety Survey*, rather than being incorporated within it.

Other academic users on the other hand, may be interested in the quantitative measures of incidence, but, in addition, would want to evaluate theories of crime prevention or objective risk of victimisation, and so, would want to include, in a structured form, a number of lifestyle or other types of factors leading to differential risk. Again, other users may be interested in developing conceptual models of law enforcement and reporting behaviour. Yet other users may be interested in spatial or demographic factors and so may require small area statistics for a finer level of analysis. For these types of use, a quantitative instrument would be required, but face-to-face or telephone interviewing would be desirable in order to ensure that ambiguous responses could be clarified. In these cases, particularly those involving small area data, very large sample sizes would be required. In these cases, a more targeted sampling method may be more appropriate.

It is apparent from this account that one of the difficulties in meeting the needs of academic users is that they are a very heterogeneous group with possibly incompatible requirements. A survey instrument designed to meet these types of needs would thus need to include a high degree of flexibility, so that a different focus could be applied from time to time, as well as maintaining a "core" which would allow time series models to be developed as well.

Finally, an important aspect of the requirements of academic users is that they are likely to act as leading indicators for the later requirements of government users. The theoretical debates which are current at present in this area will have a direct impact on the policy analysis carried out by government agencies in the short to medium term. Current issues of theoretical interest such as multiple victimisation and lifestyle factors contributing to risk, are examples of areas which should influence government policy research. This group of users is thus an important constituency both through their own requirements, and through their potential to influence the policy research of government. These users, if given an appropriate forum, will be able to provide a stronger theoretical and methodological base to the research projects carried out by government.

NON-SPECIALIST USERS

Members of the public also have an interest in crime victimisation data. These users will often be interested primarily in information about their local area, but are unlikely to require detailed quantitative information of the kind required by academic and government users. The obligation with regard to this group is to ensure that the broad survey results are made widely available. The question of the mix between published general results and more detailed information provided at cost to the specialised user can, however, be a difficult one. For this reason, the content of the publication from the *Crime and Safety Survey* is also a matter which requires debate.

OPTIONS FOR FUTURE DEVELOPMENT OF THE CRIME AND SAFETY SURVEY

In the light of all the issues outlined in the previous sections, a number of options for the future development of the *Crime and Safety Survey* can be described. This paper does not attempt to make specific recommendations on these options, but to encourage debate among current and potential users of crime victimisation data.

SURVEY OBJECTIVES

It is apparent from much of the previous discussion, that the *Crime and Safety Survey* was designed to meet a particular set of requirements. What is now required, however, is a statement of the objectives of a broadly-based national survey designed to meet a number of diverse needs. Without such a statement it is difficult to assess the relative importance of many of the issues raised by users. Is the survey, for example, primarily an instrument for law enforcement agencies to measure "real" rates of victimisation to compare with reported rates? Is it on the other hand intended to provide detailed information on the lifestyle and behavioural characteristics of victims and non-victims and to develop models of relative risk? These objectives would put different emphases on the design of both the survey content and methodology. A necessary preliminary to considerations of detail is thus to determine a set of objectives for the *Crime and Safety Survey*. (It should also be noted that there is a presumption currently that the objectives of the national survey and the State surveys will be the same. Clearly however, national and intra-jurisdictional surveys can potentially serve quite different purposes.)

One option for resolving this issue is to institute a more permanent group of crime victimisation data users, who would be able to represent the diversity of interests in this area, and as a body, determine the relative priorities of the possible objectives which the *Crime and Safety Survey* might have. Once these broad objectives are determined, it will be possible to make decisions with regard to a number of more detailed matters.

DATA COLLECTION METHODOLOGY

There are essentially three different types of data collection method available at present. These are self-enumeration, telephone interview and face-to-face interview. The relative advantages and limitations of the self-enumeration method have been outlined above. By way of comparison, the two alternative methods have the following characteristics:

TELEPHONE INTERVIEWING

This technique is placed mid way between self-enumeration and face-to-face interviewing in terms of cost. Unlike self-enumeration, it allows interviewers to clarify ambiguous responses and to obtain more detail. It is possible to centralise fieldwork operators, and hence gain greater control over any interviewer bias.

However, the technique also has a number of disadvantages in that a lower response rate than that obtained with face-to-face interviewing should be expected. There are problems with construction of the sampling frame as there will be systematic undercoverage of households with no telephone. There is a need to make repeated call backs to obtain a response. This will be a particular problem with sensitive questions, when interviewers will need to make appointments to ring back when respondents are alone. There will also be repeated call backs in multi-person households. The scope for asking detailed questions, and so of obtaining additional qualitative information, is also constrained by this method.

FACE-TO-FACE INTERVIEWING

The face-to-face interview technique is superior from a technical point of view in that there are no problems of sampling frame as with telephone interviewing, or with ability to control proxy responding as with self-enumeration. This technique provides the highest initial response rate of the three techniques; it also offers the greatest scope for more detailed information.

However, the technique suffers from disadvantages of cost, particularly if run as a "stand alone" survey (ie: not as a supplement to the MPS). It also entails difficulties of co-ordination, particularly on a national basis. There is, as with telephone interviewing, a requirement for repeated visits, particularly in multi-person households. The technique also provides the least control over interviewer bias, with a consequently greater requirement for comprehensive initial training of field operators.

None of these techniques will be clearly superior in all cases, and user requirements will dictate which is best in a particular situation. The discussion of the various uses of crime victimisation data above indicates that where qualitative "narratives" are required, face-to-face interviewing will be the method of choice, while for users requiring basic incidence measures, a self-enumeration method may suffice.

It is also possible to use different data collection methods in combination. For example, self-enumeration could be used to identify victims, who could then be interviewed in person or by telephone to obtain more detailed information from them. This type of hybrid technique recognises one of the difficulties of these types of surveys: the relatively low "hit rate" in identifying victims, particularly of personal crimes, leading to a requirement for very large sample sizes. Such screening techniques reduce initial costs by avoiding interviews with a large number of non-victims.

Technological advances are also likely to reduce the relative costs of telephone and face-to-face interviewing. Computer aided personal interviewing and telephone interviewing (CAPI/CATI) techniques, allow editing to be carried out at the time of interviewing, reducing subsequent processing costs. The disadvantage of such techniques, however, is that they may reduce the flexibility of interviewing in

obtaining qualitative information. The present state of the technology also means that set up costs for the survey are high, leading to much greater pressure not to alter the survey in any major way once constructed as there will be a significant re-programming cost entailed.

MODIFICATION OF THE EXISTING METHODOLOGY

Finally, there is also the possibility of progressively modifying the existing methodology to take up some of these issues in an evolutionary way. The possibilities of the mail-back method have not been exhausted, and it seems reasonable that many of the issues raised by users may be able to be met through some modification to the existing instrument. Where such progressive change can be carried out it would seem to be preferable to a complete change in methodology, with the consequent loss of time series information.

OFFENCE DEFINITIONS

One of the major issues raised by users of crime victimisation data is the validity of measures of incidence for specific offences. Many users wish to be able to match reported rates of victimisation of personal crimes with official rates of offences recorded by the police. There is some doubt, however, as to how closely self-defined instances of victimisation will match with legal categories of offence in official statistics. To overcome these problems, some overseas surveys, such as the US Crime Survey, use a separate questionnaire for each crime incident identified during the screening phase and record all pertinent details for classification purposes, so that the incidents reported in the survey can be classified in a similar manner with those in official statistics.

The use of such an approach must be seen in terms of a trade-off with other survey content. Ensuring that there is an accurate match with recorded crime statistics may require a large number of questions, depending on the nature of the offence. This will prove to be particularly problematic where there are significant differences in the legal definitions of offences, based on some circumstance of the offence. Sexual assault, for example, is subject to wide variation in offence definition in different jurisdictions, and may require a considerable number of additional questions to allow State by State matching with official statistics to be carried out. An alternative is to adopt the nationally agreed standards employed in the ABS compilation of national crime statistics; this would reduce the number of additional questions required as well as providing a valid basis for comparison between jurisdictions, although with some consequent loss of detail.

Users must therefore assess the relative demands of achieving an accurate match of self-reported and official victimisation rates and of seeking answers to other questions such as risk factors. The use of a combination of collection methods discussed in the previous section may be of use in this instance.

COMPARISONS OVER TIME

As has been indicated, there is already a considerable body of data based on the current methodology for a number of jurisdictions. The benefits of preserving this time series must be weighed against the benefits of improving the survey instrument. This will, of course, be a continuing issue, as many users will want to alter aspects of the survey from time to time to examine new hypotheses or to examine some more or less transient issue. It seems likely, then, that what must be done is to identify a "core" part of the survey which will remain essentially unaltered from one survey to the next, to ensure that comparisons over time can be made. A supplementary part of the survey can then provide the ability to analyse issues on a one-off basis. The first task would therefore be to identify this "core" set of questions.

SUPPLEMENTARY QUESTIONS

In addition to basic information about the incidence of crime victimisation, there is a requirement for additional questions with regard to issues such as victim and non-victim lifestyle and behavioural characteristics, lifestyle factors and measures of relative risk. Other lines of questioning will arise in response to new theories of crime victimisation. The survey will need to be flexible enough to be able to accommodate this material in addition to the questions on incidence. Another possibility is to use two separate survey instruments to assess each class of question.

COST ISSUES

As indicated throughout this paper, each of the choices available carries with it a cost implication. More detailed questioning and collection of qualitative data are relatively expensive options. An additional consideration is that whilst the MPS is used as the vehicle for distribution of the *Crime and Safety Survey*, there are severe constraints on the degree of alteration which can be made to the existing survey. On the other hand, a stand alone survey, even if it employs a mail-back methodology, will entail significant set up and administration costs.

A further difficulty with costs is that those users with the more complex requirements from the survey may not necessarily be those users best able to supply funds. This makes the need for a central steering group for the survey more essential as it provides a forum for requirements to be included as part of a "group bid".

ANALYSIS OF CRIME VICTIMISATION DATA

To date, the information obtained from the *Crime and Safety Surveys* has not been analysed to its full potential by either the ABS or other users. As a result, it is not clear at this point whether many user requirements could be met through analysis of existing data rather than collection of new information. Release of unit record information to users is one avenue for increasing the use made of this information. Another is to increase the capacity of the ABS Crime and Justice Units to carry out more detailed analyses themselves. The possibilities of joint studies, ABS Fellowships and the like are all possible ways of solving these problems.

A related question is that of survey development. For the ABS to develop a more sophisticated instrument will require a much greater input from academic and other users. One possibility is to follow the British model and invite experts in various areas to construct parts of the survey instrument. Again, increasing the research capabilities of the Crime and Justice Units would also help to increase the theoretical depth of the *Crime and Safety Survey* both through enabling the Units to better design the surveys themselves, and by enabling them to liaise more effectively with expert users.

CONCLUSION

This paper has highlighted some of the features and limitations of the current *ABS Crime and Safety Survey*. It has also indicated some possible changes to the Survey to meet user requirements. The ABS is committed to providing the next national *Crime and Safety Survey* in 1998. It is therefore an opportune moment to examine the nature of the survey and to consider the options for its further development while there is ample time for user consultation and testing to be carried out.

**AN OVERVIEW OF
VICTIMS OF CRIME SURVEYS
1975 – 1995**

Lineke Quartel and Fiona Boorman
Crime Statistics Unit
Queensland Government Statistician's Office

**A summary table of crime victims surveys conducted in Australia
(national and State-based) since 1975.**

August 1995

EXPLANATORY NOTES

1. The purpose of this table is to provide a snapshot of the available data from crime victims surveys that have been conducted in Australia since 1975. Every effort has been made to include all major national and State surveys. Several recent overseas surveys have been included – the International Crime Victims Surveys, the British Crime Victims Surveys and the Canadian Violence Against Women Survey. The table has been divided into three parts:
 - 1975–1989
 - 1990–1992
 - 1993–1995

2. The categories include:
 - Data Collection Methods
 - Demographics
 - Household Details
 - Property Crime
 - Motor Vehicle Crime
 - Personal Crime
 - Consumer Crime
 - Reporting to Police
 - Perceptions and attitudes to crime, crime prevention, police effectiveness and sentencing.

3. Before attempting to compare results of these surveys, it is necessary to carefully examine the questions asked in each survey, as they often differ slightly in wording and/or meaning.

4. Any suggestions on expanding or refining this table would be welcome.

Lineke Quartel (07) 3225 8811

Fiona Boorman (07) 3224 4124

Crime Statistics Unit, Queensland Government Statistician's Office.

**CRIME VICTIMS DATA AVAILABILITY
1975 - 1990**

		DATA AND SURVEY NAME							
		1975	1983	1985	1987	1987	1989	1989	1990
	ABS General Social Survey Crime Victims	May	March - May	October	July	July	October	Jan - March	April
Publication/ABS Catalogue No.		4105.0	4506.0	4504.4	4507.2	4506.3	4511.6	AIC	4509.1
Sample Size		18,694 pers 8,414 hshlds	18,000 hshlds	2,500 hshlds	3,200 hshlds	2,400 hshlds	.5 ABS TAS LFS (1 of 140 hshlds)	2,012 pers	12,400 pers 5,800 hshlds
Cost			\$2.5m		\$150,000 est	\$65,000 est			\$130,000
POPULATIONS		15+ yrs	15+ yrs	18+ yrs	18+ yrs	18+ yrs	18+ yrs	16+ yrs	15+ yrs
Qld		Y	Y			Y		Y	
Other States		All (Except NT)	All	Adelaide Statistical Div.	VIC		TAS	NSW VIC	NSW
Australia		Y	Y					Y	
Overseas								Y	
DATA COLLECTION METHOD									
Telephone interview								Y	
Personal interview		Y	Y	Y	Y	Y	Y		
Self completed questionnaire									Y

	1975 ABS	1983 ABS	1985 Adel.	1987 VIC	1987 QLD	1989 TAS	1989 INT	1990 NSW
DEMOGRAPHICS								
Age	Y	Y	Y	Y NP*	Y	Y	Y	Y
Sex	Y	Y	Y	Y NP	Y	Y	Y	Y
Marital Status	Y	Y		Y NP				Y NP
Level of Education	Y	Y						
Language Spoken at Home								
Country of Birth	Y	Y			Y			
Place of Residence	Y city size	Y city size	Y		Y region	Y	Y city size	Y region
ATSI								
Labour Force Status	Y	Y	Y NP	Y NP	Y			Y
Household/Personal Income	/Y	/Y					Y/	
HOUSEHOLD DETAILS								
Member Neighbour or Rural Watch				Y	Y	Y		Y
Length of Occupancy			Y			Y		
Freq. of Travel >6pm								
Freq of attending entertainment >6pm								
Owned or Rented			Y		Y	Y		

	1975 ABS	1983 ABS	1985 Adel.	1987 VIC	1987 QLD	1989 TAS	1989 INT	1990 NSW
HOUSEHOLDS								
Break and Enter (B&E)								
Garage & shed incl.			Y					Y
Garage & shed not incl.							Y	
Attempted B&E								
Garage & shed incl.			Y					Y
Garage & shed not incl.								
B&E or attempted B&E								
Garage & shed incl.		Y		Y	Y			Y
Garage & shed not incl.	Y							
Property Theft at time of B&E	Y	Y						
Attempted Theft at time of B&E							Y	
Offender Known/Related to Victim	Y	Y						
Insurance Cover	Y	Y						
Time of Offence								
Method of Entry					Y			
Victim Contact with Offender								
Net Losses	Y	Y					Y	
Damage to Property	Y	Y						
Recovery of Property		Y						
Freq. of offence in last 12 months	Y	Y	Y-last 5 yrs					Y
No./Sex/Age of Offender(s)	Y/Y/	Y						
Type of Losses		Y						Y

	1975 ABS	1983 ABS	1985 Adel.	1987 VIC	1987 QLD	1989 TAS	1989 INT	1990 NSW
MOTOR VEHICLES								
Motor Veh. Theft	Y	Y					Y	
Motor Veh. Damage	Y	Y					Y	
Theft from MV		Y					Y	
Location of MV Theft	Y	Y					Y	
Offender Known/Related to Victim	Y	Y					Y	
Attempted MV Theft								
Attempted Theft from MV								
Recovery of Vehicle	Y	Y					Y	
Net Loss to Victim		Y						
Impact on Victim								
Time of Theft/Damage	Y							
Security Measures								
No./Sex/Age of Offender(s)	Y/Y							
Freq. of Offence in last 12 mths		Y						
Insurance	Y	Y						

	1975 ABS	1983 ABS	1985 Adel.	1987 VIC	1987 QLD	1989 TAS	1989 INT	1990 NSW
PERSONS								
Robbery	Y	Y		Y incl.MV			Y	Y
Attempted/Threatened Robbery								
Threat of Assault		Y						
Assault	Y	Y		Y				Y
Attempted Assault		Y						
Threat of Assault & Assault							Y	
Sexual Assault	Y**	Y***						
Attacker Known/Related to Victim	Y	Y					Y	
Weapon Used?	Y	Y					Y	
Type of Weapon								
Verbal Attack/Abuse		Y						
Type of Verbal Attack/Abuse								
Sexual Harassment		Y						
Nuisance Calls	Y							
Location of Attack	Y	Y						
Offender Affected by Alcohol								
Impact on Victim	Y - Medical Treatment	Y - Injury					Y - Injury	
Frequency in last 12 months	Y	Y						Y
No./Sex/Age of Offender(s)	Y/Y/	Y/Y/						
Time of Attack/Day or Night	Y	Y						

** Sexual Assault questions asked of females 18 years and over.

*** Sexual Assault questions asked of females 15 years and over.

	1975 ABS	1983 ABS	1985 Adel.	1987 VIC	1987 QLD	1989 TAS	1989 INT	1990 NSW
CONSUMER FRAUD								
Cheated in terms of Quality or Quantity of Goods & Services	Y							
Frequency in last 12 months	Y							
REPORTING								
To Police	Y	Y	Y		Y		Y	
Why Not?	Y	Y	Y		Y		Y	
Satisfied with Police action								
Police identified offender(s)							Y	

Some of the surveys include questions on the following aspects of crime:

Perceptions of crime/ magnitude of crime in area			Y	Y/N	Y/N	/N		Y
Perceptions of safety			Y	Y	Y			
Satisfaction or otherwise with residential area								
Attitudes towards police effectiveness				Y		Y		
Perceived risk								
Type of crimes of most concern			Y	Y	Y	Y		
Methods to reduce crime/ increase police effectiveness				/N		Y/Y		
Opinions on sentencing							Y	
Practise crime avoidance behaviour			Y				Y	

**CRIME VICTIMS DATA AVAILABILITY
1991 - 1992**

		DATA AND SURVEY NAME									
		1991	1991	1991	1991	1991	1991	1992	1992	1992	1992
		ABS SA Crime and Safety	April - June	ABS NSW Crime & Safety	ABS WA Crime Victims	ABS NSW Crime & Safety	ABS NSW Crime & Safety	ABS NSW Crime & Safety	International Crime Victims Survey	British Crime Victims Survey	SA Health Omnibus Survey
Publication/ABS Catalogue No.	April	4509.4	QLD GSO	4509.1	4506.5	4509.1	4509.1	4509.1	AIC	HMSO	SA Alt-Gen
Sample Size		4,400 hshlds	6,315 hshlds	14,100 pers 6,500 hshlds	7,691 pers	13,950 pers	13,950 pers	13,950 pers	2,006 pers	10,000 pers	3,093 pers
Cost		\$76,000	\$350,000	\$130,000	\$100,000 est	\$150,000	\$150,000	\$150,000			\$12,500
POPULATIONS		15+ yrs	18+ yrs	15+ yrs	15+ yrs	15+ yrs	15+ yrs	15+ yrs	16+ yrs	16+ yrs	15+ yrs
Qld			Y						Y		
Other States		SA		NSW	WA	NSW	NSW	NSW	All		SA
Australia											
Overseas									Y		
DATA COLLECTION METHOD											
Telephone Interview									Y		
Personal Interview			Y							Y	Y
Self Completed Questionnaire		Y		Y	Y	Y	Y	Y		Y	

	1991 SA	1991 QLD	1991 NSW	1991 WA	1992 NSW	1992 INT	1992 BRI	1992 SA HOS
DEMOGRAPHICS								
Age	Y	Y	Y	Y	Y	Y	Y	Y
Sex	Y	Y	Y	Y	Y	Y	Y	Y
Marital Status	Y NP*	Y	Y NP	Y	Y NP	Y	Y	Y
Level of Education		Y NP				Y		Y
Language Spoken at Home		Y NP						
Country of Birth		Y					Y	
Place of Residence	Y region	Y region	Y region	Y region	Y region	Y	Y	Y region
ATSI		Y NP						
Labour Force Status	Y	Y	Y	Y	Y	Y	Y	
Household/Personal Income						Y/		Y/
HOUSEHOLD DETAILS								
Member Neighbour or Rural Watch	Y	not explicitly	Y	Y	Y	Y	Y	
Security Devices Fitted		Y NP				Y	Y	
Household Type	Y	Y NP	Y	Y	Y	Y	Y	
Length of Occupancy		Y NP						
Freq. of Travel >6pm								
Freq of attending entertainment > 6pm								
Owned or Rented		Y NP				Y		

	1991 SA	1991 QLD	1991 NSW	1991 WA	1992 NSW	1992 INT	1992 BRI	1992 SA HOS
HOUSEHOLDS								
Break and Enter (B&E)								
Garage & shed incl.	Y	Y	Y	Y	Y		Y	Y
Garage & shed not incl.						Y		
Attempted B&E								
Garage & shed incl.	Y	Y	Y	Y	Y		Y	
Garage & shed not incl.						Y		
B&E or attempted B&E								
Garage & shed included	Y	Y	Y	Y	Y			
Garage & shed not incl.								
Property Theft at time of B&E				Y		Y	Y	
Attempted Theft at time of B&E		Y						
Offender Known/Related to Victim		Y NP					Y	
Insurance Cover								
Time of Offence		Y NP					Y	
Method of Entry		Y NP					Y	
Victim Contact with Offender							Y	
Net Losses		Y				Y	Y	
Damage to Property		Y					Y	
Recovery of Property							Y	
Freq. of offence in last 12 months	Y	Y	Y	Y	Y	Y	Y	Y
No./Sex/Age of Offender(s)		Y/Y NP						
Type of Losses	Y NP	Y		Y		Y NP		

	1991 SA	1991 QLD	1991 NSW	1991 WA	1992 NSW	1992 INT	1992 BRI	1992 SA HOS
MOTOR VEHICLES								
Motor Vch. Theft		Y		Y	Y	Y	Y	
Motor Veh. Damage		Y				Y		
Theft from MV		Y				Y	Y	
Location of MV Theft		Y				Y	Y	
Offender Known/Related to Victim		Y NP						
Attempted MV Theft							Y	
Attempted Theft from MV							Y	
Recovery of Vehicle		Y NP				Y	Y	
Net Loss to Victim		Y					Y	
Impact on Victim		Y				Y	Y	
Time of Theft/Damage		Y NP					Y	
Security Measures							Y	
No./Sex/Age of Offender(s)		Y/Y NP						
Freq. of Offence in last 12 months		Y		Y	Y		Y	
Insurance								

	1991 SA	1991 QLD	1991 NSW	1991 WA	1992 NSW	1992 INT	1992 BRI	1992 SA HOS
PERSONS								
Robbery	Y	Y	Y	Y	Y	Y	Y	Y
Attempted/Threatened Robbery		Y				Y		
Threat of Assault		Y		Y		Y		
Assault	Y	Y	Y	Y	Y	Y		
Attempted assault								
Threat of Assault & Assault		Y				Y		
Sexual assault		Y NP**		Y**	Y***	Y		
Attacker known/ related to Victim		Y				Y	Y	Y
Weapon Used?		Y		Y		Y	Y	
Type of Weapon		Y NP		Y		Y	Y	
Verbal Attack/Abuse		Y						
Type of Verbal Attack/Abuse		Y NP						
Sexual Harassment		Y NP		Y				
Nuisance Calls								
Location of Attack	Y	Y		Y		Y	Y	Y
Offender affected by alcohol		Y NP					Y	
Impact on Victim		Y - Medical Treat. NP				Y	Y	
Frequency in last 12 months	Y	Y	Y	Y	Y	Y	Y	Y
No./Sex/Age of Offender(s)		Y/Y/Y NP				Y - for sexual assault only	Y	
Time of Attack/Day or Night		Y NP		Y				

** Sexual assault questions asked of females 15 years and over.

*** Sexual assault questions asked of females 18 years and over.

	1991 SA	1991 QLD	1991 NSW	1991 WA	1992 NSW	1992 INT	1992 BRI	1992 SA HOS
CONSUMER FRAUD								
Cheated in terms of Quality or Quantity of Goods & Services	Y			Y		Y		
Frequency in last 12 months								
REPORTING								
To Police	Y	Y	Y	Y	Y	Y	Y	
Why Not?	Y	Y	Y NP	Y	Y NP	Y	Y	
Satisfied with Police Action		Y				Y		
Police Identified Offender(s)		Y						

Some of the surveys include questions on the following aspects of crime:

Perceptions of crime/magnitude of crime in area	Y	Y NP	Y	Y	Y		Y	
Perceptions of safety		Y NP				Y	Y	Y
Satisfaction or otherwise with residential area		Y NP						
Attitudes towards police effectiveness						Y	Y	
Perceived risk		Y NP				Y		
Type of crimes of most concern	Y			Y				
Methods to reduce crime/increase police effectiveness				Y				
Opinions on sentencing		Y				Y		
Practise crime avoidance behaviour						Y		

**CRIME VICTIMS DATA AVAILABILITY
1993 - 1995**

		DATE AND SURVEY NAME										
		1993	1993	1993	1993	1994	1994	1994	1994	1994	1994	1995
		SA Health Omnibus Survey Oct - Dec	ABS National Crime & Safety April	CANADA Violence Against Women Feb - June	AIC Crimes Against Business Aug - Sep	ABS VIC Crime & Safety April	NATSI Survey April - July	ABS NSW Crime & Safety April	British Crime Victims Survey*	SA Health Omnibus Survey Oct - Dec	ABS** Crime & Safety	
Publication/ABS Catalogue No.		SA Att-Gen	4509.0	Stats Canada	ACPS	4509.2	4190.0	4509.1	HMSO	SA Att-Gen	4509.0	
Sample Size		3,004 pers	52,300 pers	12,300 pers	966 businesses	10,850 pers	15,700 pers	11,646 pers 5,470 hshld	10,000 pers	3,010 pers	6,500 hshld (QLD)	
Cost		\$12,500	\$750,000			\$96,800		\$150,000		\$12,500	\$96,000 QLD \$40,000 ACT \$165,000 NSW	
POPULATIONS		15+ yrs	15+ yrs	18+ yrs		15+ yrs	13+ yrs	15+ yrs	16+ yrs	15+ yrs	18+ yrs	
Qld			Y				Y				Y	
Other States		SA	All			VIC	All	NSW		SA	VIC WA NSW SA ACT	
Australia			Y		Y		Y					
Overseas				Y					Y			
DATA COLLECTION METHOD												
Telephone interview				Y								
Personal interview		Y					Y		Y	Y		
Self completed questionnaire			Y			Y		Y	Y			Y

* Limited data available

** State versions of the ABS Crime and Safety survey were administered in Queensland, Victoria, South Australia, Australian Capital Territory and New South Wales, in April. Data are to be released in September 1995. The same survey is due to be administered in Western Australia in October.

	1993 SA	1993 ABS	1993 CAN	1993 AIC	1994 VIC	1994 NAT	1994 NSW	1994 BRI	1994 SA	1995 STATE SURVEYS
DEMOGRAPHICS										
Age	Y	Y	Y		Y	Y	Y		Y	Y
Sex	Y	Y	Y		Y	Y	Y		Y	Y
Marital Status	Y	Y	Y		Y NP***		Y NP		Y	Y
Level of Education	Y		Y			Y			Y	
Language Spoken at Home						Y				
Country of Birth	Y	Y			Y NP		Y NP		Y	Y
Place of Residence	Y region	Y	Y		Y	Y	Y region		Y region	Y
ATSI						Y				
Labour Force Status		Y			Y	Y	Y			Y
Household/Personal Income	Y/		Y/			Y/			Y/	
HOUSEHOLD DETAILS										
Member Neighbour or Rural Watch		Y		BUSINESS DETAILS	Y		Y		Y-victim only (vo)	Y
Security devices fitted		Y		Y	Y		Y		Y (vo)	
Household type		Y			Y	Y	Y			Y
Length of Occupancy		Y			Y		Y		Y (vo)	
Freq. of Travel >6pm		Y			Y		Y			
Freq of attending ent/ment>6pm		Y			Y		Y			
Owned or Rented		Y							Y (vo)	

*** NP = NOT PUBLISHED

	1993 SA	1993 ABS	1993 CAN	1993 AIC	1994 VIC	1994 NAT	1994 NSW	1994 BRI	1994 SA	1995 STATE SURVEYS
HOUSEHOLDS				BUSINESS						
Break and Enter (B&E)				Y						
Garage & shed incl.	Y	Y			Y		Y	Y	Y	Y
Garage & shed not incl.										
Attempted B&E										
Garage & shed incl.	Y	Y			Y		Y	Y	Y	Y
Garage & shed not incl.										
B&E or attempted B&E										
Garage & shed incl.		Y			Y		Y		Y (vo)	
Garage & shed not incl.										
Property theft at time of B&E		Y		Y	Y NP		Y NP	Y		Y
Attempted Theft at time of B&E										
Offender Known/Related to Victim										
Insurance Cover				Y					Y (vo)	
Time of Offence									Y (vo)	
Method of Entry									Y (vo)	
Victim Contact with Offender									Y (vo)	
Net Losses				Y					Y (vo)	
Damage to Property				Y					Y (vo)	
Recovery of Property										
Freq. of Offence in last 12 mths	Y	Y		Y	Y		Y	Y	Y	Y
No./Sex/Age of Offender(s)										
Type of Losses				Y			Y NP		Y (vo)	

	1993 SA	1993 ABS	1993 CAN	1993 AIC	1994 VIC	1994 NAT	1994 NSW	1994 BRI	1994 SA	1995 STATE SURVEYS
MOTOR VEHICLES										
Motor Veh. Theft		Y		OWNED BY THE BUSINESS Y	Y		Y	Y	Y (vo)	Y
Motor Vch. Damage										
Theft from MV				Y				Y		
Location of MV theft		Y			Y NP					Y
Offender Known/Related to Victim										
Attempted MV Theft										
Attempted Theft from MV										
Recovery of Vehicle										
Net Loss to Victim										
Impact on Victim										Y
Time of Theft/Damage										
Security Measures										
No./Sex/Age of Offender(s)										
Freq. of Offence in last 12 months		Y		Y	Y		Y			Y
Insurance				Y	Y NP		Y NP			Y

	1993 SA	1993 ABS	1993 CAN	1993 AIC	1994 VIC	1994 NAT	1994 NSW	1994 BRI	1994 SA	1995 STATE SURVEYS
PERSONS				EMPLOYEES						
Robbery	Y	Y		Y	Y		Y	Y	Y	Y
Attempted/Threatened Robbery										
Threat of Assault		Y	Y	Y						
Assault		Y	Y	Y	Y	Y	Y	Y		
Attempted Assault										
Threat of Assault & Assault	Y	Y							Y	Y
Sexual Assault		Y****	Y		Y		Y****			Y*
Attacker Known/Related to Victim	Y	Y	Y		Y NP		Y NP		Y	Y
Weapon Used?		Y NP	Y		Y NP		Y NP			Y
Type of Weapon			Y							
Verbal Attack/Abuse						Y				
Type of Verbal Attack/Abuse										
Sexual Harassment										
Nuisance Calls										
Location of Attack	Y	Y			Y NP		Y NP	Y	Y	Y
Offender Affected by Alcohol			Y						Y (vo)	
Impact on Victim		Y injuries	Y injuries	Y injuries			Y injuries		Y (vo)	
Frequency in last 12 months		Y NP	Y	Y	Y	Y	Y	Y		Y
No./Sex/Age of Offender(s)			Y males only						Y/Y/Y	
Time of Attack /Day or Night									Y (vo)	

**** Sexual assault questions asked only of females aged 18 years and over.

	1993 SA	1993 ABS	1993 CAN	1993 AIC	1994 VIC	1994 NAT	1994 NSW	1994 BRI	1994 SA	1995 STATE SURVEYS
CONSUMER FRAUD										
Cheated in terms of Quality or Quantity of Goods & Services				Y						
Frequency in last 12 months				Y						
BRIBERY AND EXTORTION										
REPORTING										
To Police		Y	Y	Y	Y	Y	Y	Y	Y (vo)	Y
Why Not?		Y		Y		Y	Y NP		Y (vo)	Y
Satisfied with Police action				Y					Y (vo)	
Police identified offender(s)									Y (vo)	

Some of the surveys include questions on the following aspects of crime:

Perception of crime/magnitude of crime in area										Y/
Perception of safety										
Satisfaction or otherwise with residential area										
Attitude towards police effectiveness				Y		Y				
Perceived risk		Y								
Type of crimes of most concern										
Methods to reduce crime/increase police effectiveness										
Opinions on sentencing										
Practise crime avoidance behaviour			Y							