



research reports

Crime Victimization Rates in Australian Cities*

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The National Crime Victims Survey conducted by the Australian Bureau of Statistics in 1975 includes data on the criminal victimisation of 18,694 Australians by ten different types of crime. Unlike earlier Australian victimisation surveys by Wilson and Brown (1973) and Congalton and Najman (1974), which were restricted to specific regions and relatively small samples, the Bureau of Statistics survey provides data on a large, representative,¹ and national sample of Australians.

Until now inter-city comparisons of Australian crime rates have not been possible since:

- (a) Definitions of crime categories between States have not always been comparable.
- (b) Rates for reporting crime to the police vary from State to State, and there are variations both within and between police forces in the diligence with which victims are sought out and their victimisation officially recorded.
- (c) States have not generally recorded crime rates by city.

All of these problems of police statistics are avoided in the present analysis. However, we shall now see that there are problems of other kinds which plague victimisation surveys.

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The Social Construction of Victim Survey Data

The National Crime Victims Survey was conducted by experienced census interviewers who received special training for the task. Data on crime victimisations were collected as an adjunct to a larger social survey. The section on crime was introduced:

As you know, crime is a problem. While we know something about the people who commit crimes, we know very little about the victims. So I am going to ask whether you have been a victim of any of the following crimes within the last 12 months.

This introduction directs our attention to the sociological concern that 'crime' is treated in victim survey data as a 'problem' which is taken for granted, not as problematic. The interviewer then goes on to ask questions about ten types of crime:

Break and enter: Within the last 12 months did anyone break into your home or attempt to break in?

Motor vehicle theft: During the last 12 months did anyone take your motor vehicle without permission even if it was recovered?

Robbery with violence: Within the last 12 months have you been robbed? That is, did anyone use violence or threaten violence to take anything from you?

Theft: In the last 12 months have you had anything else stolen such as something from your car, house or backyard?

Fraud, forgery, false pretences: In the last 12 months have you been the victim of fraud, forgery or false pretences? For example, have you been given a bad cheque, cheated out of money or property or has your signature been forged?

Sex offences: In the last 12 months have you been the victim of any of the following sex offences:

- Peeping?
- Indecent exposure?
- Rape or attempted rape?

Nuisance calls: Within the last 12 months have you received any threats, abuses, or indecent suggestions on the telephone?

Assault: In the last 12 months have you been attacked in any way either with or without a weapon?

After each of these, if the answer were affirmative, the respondent was asked 'How often has this happened?'. Questions on break and enter and vehicle theft were asked only of

the person who was nominated by the household as the owner of the house or motor vehicle. The questions on sex offences were asked only of female respondents. For all other offences every person over 15 years of age in the sampled household was questioned. The interviews generally took place in a group family situation. If after call-backs certain household members could not be found at home, interviewers were permitted to obtain information about the missing members from others in the household. It was left to the discretion of the interviewer to determine whether group or one-to-one interviews were more appropriate.

Interviewers were supplied with a manual incorporating instructions defining the meaning of the terms used in individual questions. The definitions were designed to maximise correspondence with legal definitions. Most interviewers and respondents, however, were not lawyers. If, for example, a female respondent were to report that her husband had raped her, the interviewer might not be aware that this does not, in the law of most Australian jurisdictions, constitute rape. This example also illustrates how even if respondents and interviewers were to be expert lawyers, what might be obtained is a reliable measure which is not valid from certain theoretical standpoints (in this case, feminist theory).

The greatest single problem with the victim survey methodology is therefore that it takes the law for granted as the most obvious foundation for analysis, when most sociologists would prefer categories of analysis which have either theoretical relevance of phenomenological coherence, or both. The reliability problem should not be underestimated. The discrepancy between, for example, lay typifications of what it means to be robbed and the legal definition of robbery (as distinct from theft) might be wide.

Quite apart from the innocent discrepancies between legal and lay conceptions of crime, it is likely that many respondents will have good reasons for wilfully concealing or exaggerating the extent of their victimisation. While there may be many victimisations for which respondents were not prepared to call in the police but which they are prepared to report in an anonymous census interview, there will be others which they are not prepared to report to either.

A further problem is the more straightforward one of poor recall. Events which took place more than a year prior to the interview may be recalled as having taken place 'within the last 12 months'. Other events which did take place within the previous twelve months may be simply forgotten. Not surprisingly then, victim

surveys have been criticised both for undercounting (Maltz, 1975) and for overcounting (Levine, 1976). In addition to the problems of the theoretical inadequacy of legal definitions, lack of understanding of these definitions by either subjects or interviewers, wilful exaggeration or concealment, and forgetting or forward telescoping of events, there is the possibility of the respondent being in error about what actually happened (for example the person who misplaces a wallet and then reports it as stolen).

Victimisation surveys therefore do not give us anything like 'true' crime rates. While their estimates of the numbers of incidents of various types which are taking place in the community are undoubtedly closer to the reality than police statistics, we should be wary of replacing cynicism about police statistics with undue faith in victimisation statistics. A number of call-back studies (Biderman *et al.*, 1967; Ennis, 1967; U.S. Bureau of the Census, 1970a, 1970b; L.E.A.A., 1972) have shown that faulty memory is a problem with crime victim surveys, though Gottfredson and Hindelang (1977) found that memory error tended to be random rather than systematically related to characteristics of the victim (such as age, race, education).

The most thorough check on victim survey data was the San Jose reverse record check (L.E.A.A., 1972). Persons known to have been victims of crime on the basis of police records were interviewed to ascertain whether they would report the victimisation to an interviewer. Twenty-six per cent of known victims of assault, robbery, rape, burglary and larceny failed to report this in the interview. Important as reverse record checks are in furthering our limited knowledge of the adequacy of victimisation data, they miss what is likely to be the most important source of error—victimisations which are reported to neither police nor interviewers.

Sample

Dwellings for inclusion in the stratified multi-stage area sample were selected from all parts of Australia excluding the Northern Territory, rural regions, and locations with a population of less than 500 people. Of 10,500 dwelling sites originally selected, 9,200 contained effective households, of which 8,414 provided data for the survey. These households contained 18,694 persons aged 15 years and over, each of whom supplied some data. The remarkable household response rate of 91.5% is only possible, of course, in a survey conducted by a body which has the experience and authority of the Bureau of Statistics.²

Comparing State Capitals with Small Cities and Towns

Table 1 compares crime victimisation rates for respondents who lived in State capital cities versus respondents from outside the metropolitan areas. Canberra is included in the latter category as are the large cities of Newcastle and Wollongong. Since locations with fewer than 500 inhabitants were excluded from the survey the comparison is not an urban-rural one, but a comparison between State capital cities and other cities and towns most of which are smaller in size.

It can be seen from Table 1 that for all crime categories except fraud, forgery and false pretences the State capitals have higher reported victimisation rates. This is consistent with findings from victim surveys in Finland, Denmark, Sweden, Norway, and England that the risk of becoming a victim of criminal violence is greater for people living in capital cities than for citizens living outside the capital in these countries (Hauge and Wolf, 1974; Sparks, Genn, and Dodd, 1977: 82-83). With the exception of the English data, however, the Australian differences do not seem as great as those from Europe. Similarly, the American National Crime Victim Surveys have consistently shown non-metropolitan areas to have much lower victimisation rates than that country's large cities (Gottfredson, Hindelang and Parisi, 1978: 377).

Which Australian City Has the Highest Victim-Reported Crime Rate?

Comparisons between capital cities in crime rates revealed by the victimisation survey are generally meaningful since over 70% of the 18,694 respondents resided in a State capital. Standard errors with respect to Tasmania are high even though the sampling was such as to obtain an abnormally large number of interviews from Tasmania expressly so that it would be statistically valid to make interstate comparisons.

It might have been expected that Sydney and Melbourne would be the cities with the highest victimisation rates. From Table 2 it is clear that for all but the three sexual offences—peeping, indecent exposure, and rape—Sydney has a higher victim-reported crime rate than Melbourne. The difference with respect to rape is not statistically significant, so that it would be more accurate to say that it is on the two sexual offences of peeping and indecent exposure that Melbourne has a higher crime rate than Sydney.

Contrary to the impression one would gain from the mass media, the contest for the 'crime capital of Australia' is not in fact a two-way comparison between Australia's two largest cities.³ It is Perth which has the highest rate for break and enter, robbery with violence, fraud, forgery, false pretences, and assault. With respect to theft and peeping, even though Perth does not have the highest rate for all capitals, it

Table 1: Victimisation Rates per 100,000 Population 15 Years and Over by Residence in State Capital Cities versus Other Urban Centres

	State Capital Cities	Other Urban Centres	Total Australia
Break and enter	1,933.9	1,369.9	1,768.8
Motor vehicle theft	917.4	369.6	757.0
Robbery with violence	218.1	56.9	170.9
Theft	7,992.6	5,837.0	7,361.6
Fraud, forgery, false pretences	2,374.8	3,090.1	2,584.2
Peeping	1,595.1	1,419.8	1,543.8
Indecent exposure	413.9	87.4	318.3
Rape, attempted rape	113.5	48.4	94.5
Nuisance calls	23,586.8	9,509.3	19,465.6
Assault	2,726.0	1,287.9	2,305.0

Table 2: Victimisation Rates per 100,000 Population 15 Years and Over in Capital Cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart
Break and enter	2,031.1	1,822.0	1,448.5	2,109.9	2,443.5	1,357.2
Motor vehicle theft	1,248.2	681.5	940.3	556.6	891.4	906.8
Robbery with violence	350.1	163.1	—	86.0	372.1	—
Theft	8,276.3	6,293.7	7,061.3	11,741.0	9,350.2	8,516.8
Fraud, forgery, false pretences	2,118.5	1,836.1	3,297.4	3,027.5	3,603.5	1,210.5
Peeping	881.1	2,309.4	248.0	3,066.9	1,990.9	—
Indecent exposure	306.6	535.9	184.8	433.3	567.9	761.9
Rape, attempted rape	89.0	155.7	124.0	173.4	—	—
Nuisance calls	31,498.2	20,295.6	14,298.9	20,743.4	20,332.4	19,466.8
Assault	3,002.9	1,393.9	4,058.3	3,172.6	4,473.2	1,508.2

still has a higher rate than Sydney. For only three of the ten types of crime—vehicle theft, rape, and nuisance calls—does Sydney have a higher rate than Perth. Again it needs to be pointed out that the estimates with respect to rape are statistically unreliable. Even though the national rape rate estimated from the sample is sixteen times higher than the rate normally cited for rapes reported to the police, the numbers of rapes in the survey are small in absolute terms, and statistical significance also becomes more improbable because the sample size is cut in half with respect to rape (only females are eligible). Hence we cannot attach a great deal of meaning to the fact that Table 2 shows no cases of female respondents from Perth reporting that they had been raped during the previous twelve months.

Perth is clearly the least safe Australian city in which to live from our data on these ten types of crime. Separating the remaining cities is more difficult. Overall, Sydney and Adelaide seem to be somewhat less safe than Brisbane and Melbourne, but the differences vary with the type of offence. Motor vehicle theft is generally recognised by criminologists as a highly reliable index crime because of its high reportability, clarity of definition, perceived seriousness and consequently apparently good recall of the event by victims.⁴ Hence, we must take special note of the fact that Sydney has a rate for this offence which is clearly higher than for any other city. Adelaide is distinguished by its markedly high theft rate. It would seem that Hobart is the safest capital city in which to live, having the lowest victimisation figure for five of the ten offences. As pointed out earlier, however, caution is warranted with the Hobart figures.

Conclusion

The finding that Perth is the most dangerous Australian city in which to live with respect to the types of crimes covered in the National Crime Victims Survey could be regarded as either surprising or expected depending on

which previously available data had been used as the basis for a prediction. On the rates for serious crimes recorded by the police, Western Australia as a whole certainly appears from previous research to be a State with a below average crime rate (Biles, 1977a).

On the other hand, Western Australia has more people in prison per head of population than any other State. Western Australia at present has three times the imprisonment rate of Victoria and six times the imprisonment rate of the A.C.T. In 1973-74 Western Australia had an imprisonment rate of 104 per 100,000 of population compared with rates of 52 for Victoria, 63 for South Australia, 67 for New South Wales, 77 for Queensland, and 86 for Tasmania (Biles, 1977b). The most recent figures available, for April 1979 (Biles, 1979), show Western Australia with a rate of 121 per 100,000, with other States ranging between 41 and 77. It would be foolish to assert a causal connection between the high Western Australian imprisonment rate and its high victimisation rate.⁵ Nevertheless, what we can say is that if the citizens of Perth think that they are protected from criminals because they have locked so many of them away in jail, then they are mistaken.

Standard Error

With a sample of the magnitude of the National Crime Victims Survey, problems of statistical inference loom less large than with most social science data. Nevertheless, with less common types of crime, marginals can become quite small. As a matter of policy the Bureau of Statistics will not make available raw data on the number of actual victimisations of each type within the sample. Instead we are provided with estimates weighted from the sample for the number of victimisations nationally. There can be no doubt that the Bureau's weighted national estimate is a superior statistic to the raw figure. The weighting procedure is such that raw figures from different geographical areas will be multiplied by different weights depending on the pro-

Table 3: Approximate Per Cent Standard Error for Survey Estimates of Number of Victimisations in Each Capital City

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart
	%	%	%	%	%	%
Break and enter	17.0	17.4	24.1	19.0	20.3	42.5
Motor vehicle theft	16.1	20.1	22.0	28.7	26.3	39.0
Robbery with violence	27.2	39.6	—	68.1	39.5	—
Theft	9.0	9.8	12.2	8.5	10.6	18.3
Fraud, forgery, false pretences	20.3	21.3	20.4	20.2	21.0	54.8
Peeping	74.7	47.7	149.5	50.2	69.3	—
Indecent exposure	31.6	25.2	48.4	35.2	35.2	46.0
Rape, attempted rape	55.0	44.5	49.8	54.2	—	—
Nuisance calls	17.6	20.1	31.6	22.4	24.8	43.0
Assault	26.0	36.3	28.5	29.7	27.9	74.1

portion of the population of the nation living in that Statistical Area, and the response rate.

While the weighting procedure provides a superior statistic it does create some complexity for the social scientist who might be interested in calculating a conventional test of statistical significance. Tests of significance have not been calculated for each comparison made in this paper. However, Table 3 provides approximate standard errors for survey estimates for each city of the number of victimisations of each type.

It can be seen from Table A that the per cent standard error on the estimated rate for break and enter in Sydney is approximately 17.0%. The survey estimate of the break and enter rate in Sydney is 2,031.1 per 100,000 population. Discounting non-sampling errors, there are therefore about two chances in three that the true break and enter rate in Sydney during 1975 fell between 1,685.8 and 2,376.4, and about nineteen chances in twenty that it fell between 1,340.5 and 2,721.7.

FOOTNOTES

1. As will be pointed out in the section on sampling, the sample is unrepresentative in the sense that it excludes respondents from the Northern Territory (because of Cyclone Tracey) and from rural areas with populations of fewer than 500 people. However, data available on request from the authors or the Australian Bureau of Statistics comparing sample estimates with estimates from other Census sources indicates good representativeness according to number of persons and number of households by State, persons by sex and income, persons by sex and education, persons by sex and labour force status, and persons by sex and marital status.
2. For more complete details on the sampling methodology and the estimating of standard error in the Australian Crime Victims Survey see Australian Bureau of Statistics, 1975 *General Social Survey: Crime Victims*, Ref. No. 4105.0, Australian Bureau of Statistics, Canberra, 1979.
3. Other data from the same survey suggests that even though victimisation rates might not be higher in Sydney and Melbourne than in the other capital cities, fear of crime may well be. Data on how safe people feel walking alone at night suggest a strong positive correlation between fear of crime and the size of Australian cities:
In sum, these Australian results tend to mirror American findings that while very large cities like New York are far from the objectively most dangerous in which to live, the fear of crime is greatest in these very large cities. Perhaps fear of crime is more a function of the volume of crime taking place in the city than of the crime rate per capita. The very largest cities, because of their sheer size, have a more constant flow of sensational crimes to keep the media busy in the business of generating shock and fear (Braithwaite, Biles and Whitrod, 1979, submitted for publication).
4. See, for example, Task Force Report, *Crime and its Impact—An Assessment*, President's Commission on Law Enforcement and the Administration of Justice, Washington, 1967, p. 17. See also Biles, D. and Braithwaite, J., 'Crime Victims and the Police', *Australian Psychologist*, (in press) which showed that 90.1% of motor vehicle thefts were reported to the police. This compares with a reportability rate of 42.1% for all offences in the survey.

5. The reasons for and the meaning of Western Australia's high imprisonment rate is currently the subject of detailed research being conducted by the Western Australian Department of Corrections in consultation with the Australian Institute of Criminology.

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Work Group Behaviour in a New Zealand Factory

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Until the present time no empirical investigation of work group behaviour *per se* has been carried out in New Zealand. The research reported here was intended as an exploratory study, which would permit comparison with classic American and British research, and provide suggestive broad hypothesis for further investigation. For these purposes a participant observer study of a work group was carried out in a New Zealand cheese factory.

The Research Site

The site chosen for the research consisted of the 'water removing' section of the factory, which was part of its processed cheese making operation. The task of the employees working in the section was to remove 16 lb blocks of cheese from a battery of vats, place them on a conveyor, squeeze water and chemicals out of them by rollers, and stack them in a cold room. The section's output was relatively stable. Unloading the vats and cold room stacking was heavy, repetitive work; watching the conveyor and the rollers required steady observation, and occasional bursts of physical activity. The five employees in the section worked within a relatively confined space. They ranged in age from 18 to 25, four of them being between 18 and 22. Four had left school after two years of secondary education; one was a university dropout. All of them were single, except the 25 year old, and had worked in the section for a year or more.

A foreman was formally responsible for the work of the section and three other sections in the processed cheese department. He appeared in the section only once a day, and spent nearly all his time elsewhere. The factory manager showed the flag in most sections of the factory twice a day. Low wages were paid to the workers, and there was no incentive scheme.

Behaviour and Norms

Interaction between the workers was easy, partly because of the low noise level, their proximity, their similarity on demographic variables, and the absence of supervisors. There were strong opportunities to sanction one another's behaviour. The workers operated a system of job rotation by which each member worked two days on each job in the section. The origins of this practice were unknown. They spent much of the day talking to each other about girls, sex, pool and drinking. One of them said that if they did not talk a lot they would 'go insane or quit', another that 'If you were to keep dumb the whole day, by the time you finished . . . you'd really be buggered off'. They interacted very little with other workers in the factory, and were united in a strong dislike of them. The other workers were typically at least ten years older.

The group practised a 'helping' norm, i.e. to help the other worker when he was in trouble with his task. A 'mind your own business' norm circumscribed and limited the helping norm: a worker should not help another unless asked to do so. The group restricted their expenditure of energy on the section's work. They handled five vat loads of cheese each day, even when a larger number awaited their attention. They anticipated work breaks by knocking off work ten minutes before lunch and morning and afternoon 'smokos', walked away from the section together, and sat together in the canteen. They manipulated the time they arrived at work by fiddling with the timeclock, and rested, read and smoked in the cold room. Smoking in work areas of the factory was against the rules. To protect the group from their supervisors they operated an early warning system to let them know when a supervisor approached. Members were posted on rotation as sentries, and sang loudly when a supervisor appeared. The group also observed norms concerning their off-job behaviour. They went frequently to a particular pub at lunch time, and gathered there in the evenings and at weekends. At the pub they drank, talked, and played pool. The group made up the factory's pool team in a local competition. The work group coextended to the leisure group and vice-versa.

Discussion

The norms of the group were functional for protecting it from the worst effects of highly repetitive, boring, monotonous work, most of which had a job cycle time measurable in seconds. They alleviated the effects of the work by creating occasions for talk, for pursuing non-