Crime statistics – context is everything

TONI MAKKAI AUSTRALIAN PARLIAMENTARY LIBRARY PRESENTATION MAY, 2018,CANBERRA

Broad frameworks

Definitional issues abound - legal and social definition

What we collect depends on the 'issue' and why we are interested

- B) citizen concerns (anti social behaviour)
- C) practitioner needs
- D) policy questions
- E) research enquiry

Social environment is constantly evolving and occasionally there is a radical shift

- A) human activity WWII
- B) scientific paradigms
- Social context; theoretical imagination; ability collect empirical evidence

Probabilities not certainty or absolutes

Exceptions to the rule!

What do we want to know?

Usual focus is on victims and offenders, the offence/behaviour itself; the location

Sometimes we're interested in the method -firearms, physical assault, cybercrime

Victims and offenders can be individual(s); organisations; or 'victimless'

Sometimes we want to know about the antecedents of criminal behaviour and criminal pathway

Sometimes we want to understand repeat victimisation

Depending on interest the offending and victims can occur at multiple places

Sometimes we're interested in just the incident

Depending on the question, or interest, we get a very different picture of 'crime'

Primary data sources – many and varied

Investigations dispersed across agencies – state/federal police, ATO, Centrelink, Australian military court,

Civil proceedings – WHS, AAT, Planning/Land and Environment courts...

Some agencies release statistical and research reports — ROGS

State based research – BOCSAR, VIC Sentencing council, TAS sentencing council, QLD CMC/federal – AIC, ALRC, PCC

Chequered history

ABS reports data from police, courts and prisons – limited access

AIHW reports data from juvenile detention and prisoner health records

Self-report – ABS crime victims questions, National Policing study on satisfaction, various targeted studies (academics/ consultants)

Official data sources – victims and offenders

Crime funnel -- data on different 'windows' on the CJS

Criminal activity and victimization – crime victims surveys

First contact with CJS system usually **police** – victim and offender data

Dependent on the quality and accuracy of what is being entered

If matter progresses to the **courts** – offender data only

If guilty verdict requires 'oversight' **corrections** – custodial sentences and non-custodial orders. Offender data only

No automated linkage of records – silos

No routine national ABS data on civil proceedings -- Australian courts have authority to determine both civil and criminal matters

2015/16 -- 66 per cent of lodgments were criminal and 34 per cent were civil (ROGS)

Crime victim surveys

Crime and safety surveys (1999-2005), Family and domestic violence

2016-17 Crime Victimisation Survey – started in 08/09

- Limited focus, relatively large sample on the back of the labour force survey, annual, time series, telephone
- Perception of 'crime' not necessarily the legal definition
- Personal crime versus household crime; no cybercrime or fraud
- No on-going international comparative data

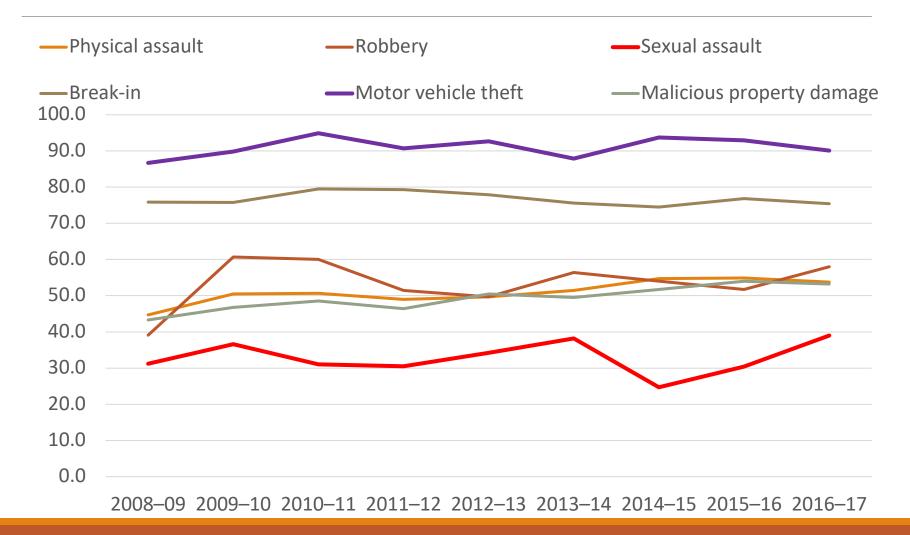
9.2 million persons aged 15 years and over (12months prior to interview in 16/17):

- 2.4% (454,900) experienced at least one physical assault
- 2.6% (495,400) experienced at least one face-to-face threatened assault
- 0.9% (179,900) experienced at least one non face-to-face threatened assault
- 0.4% (72,200) experienced at least one robbery

Of the 18.3 million persons aged 18 years and over, 0.4% (80,200) experienced at least one sexual assault.

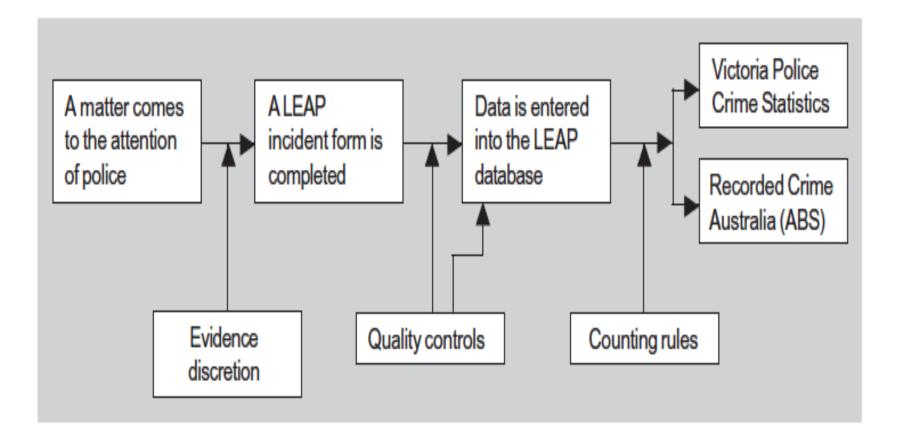
ABS, Crime Victimisation, Australia, 2016-17

Do people report to police? Crime victim surveys



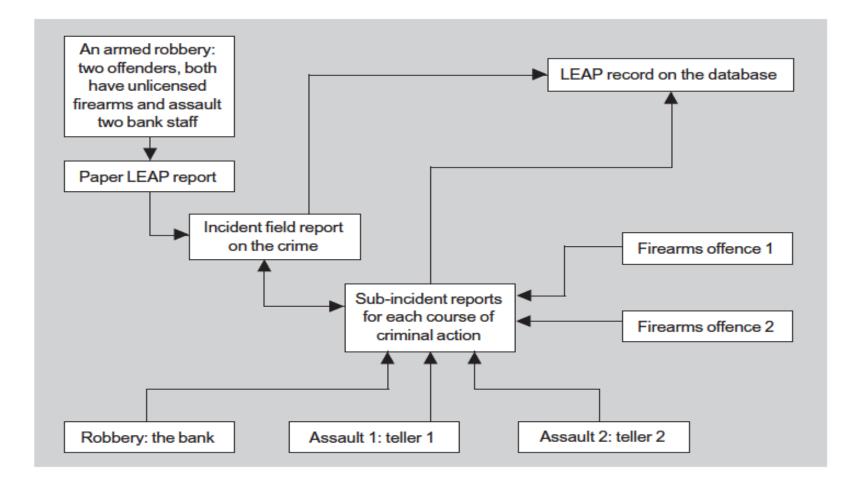
Source: ABS, Crime Victimisation Australia, 2016-2017

Recording and counting crime by police – VicPol example



Source: Carlos Carcach and Toni Makkai, 2002

Incidents and sub-incidents



Carlos Carcach and Toni Makkai, 2002

Counting rules

If a person: is a victim of offence multiple times in same incident, victim counted once

victim of same offence multiple times in different incidents throughout the year, victim counted once for each incident

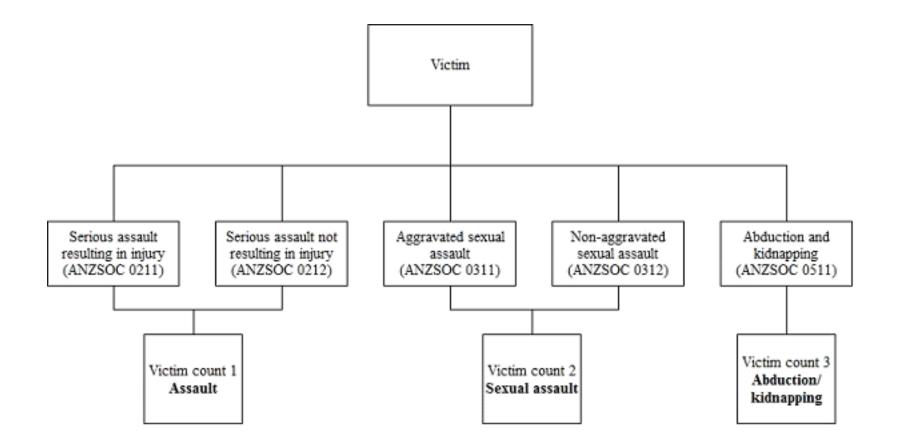
victim of multiple offences, same incident falls in same offence category, victim counted once

victim of multiple offences in different offence categories, victim counted once in each different category — one victim can be presented multiple times under different offence categories

Some examples:

- If a victim is assaulted by several offenders or a victim is repeatedly assaulted by the same offender, but reports the victimisation to police as part of the same incident?
- If a victim reports these offences to police as separate incidents?
- If a bank with several customers present is robbed?
-If personal property is also taken from two customers?
- If five cars are stolen from a car yard?

Visualisation of counting rules



Source: 4510.0 - Recorded Crime - Victims, Australia, 2016

Some other things to consider

Report date may not necessarily be the date when the offence occurred – homicide and sexual assault

Age of victim is age when they became known to police, rather age when they experienced victimisation

Indigenous Status based on self-identification – NA all states

Victimisation rates per 100,000 ABS Est. Resident Pop. (ERP)

Ages/sex standardised -- statistical method adjusts crude rates to account for age/sex differences between study populations

Family and Domestic violence -- variances in availability, legislation, business rules, crime recording systems across jurisdictions

Small cell sizes - privacy

Which offences are published?

Reported by victim, witness or other person, or detected by police -- Australian Federal Police (AFP) national not counted

Covers 12 calendar months, National Crime Recording Standard, Perturbation,

Victim can be a person, premises, organisation or motor vehicle

| Homicide and related offences Assault | |
|---------------------------------------|----------------------|
| Sexual assault | Kidnapping/abduction |
| Robbery | Blackmail/extortion |
| Unlawful entry with intent (UEWI) | Motor vehicle theft |
| Other theft | |

White collar crime? Fraud - 2014-15 Multipurpose Household Survey (MPHS) includes crime victimisation questions.

Cybercrime? – Cyber bullying?

Environmental crime? Illegal logging?

ABS Recorded crime -- offenders

Annual -- Started 2007/08, Australian and New Zealand Standard Offence Classification (ANZSOC)

Aged 10 yrs and older, 413,894. offenders 16/17 (excludes organizations and AFP)

Adjust for population growth – the number of offenders per 100,000 of ABS Estimated Resident Population (ERP)

Key characteristics – sex, age and indigenous status

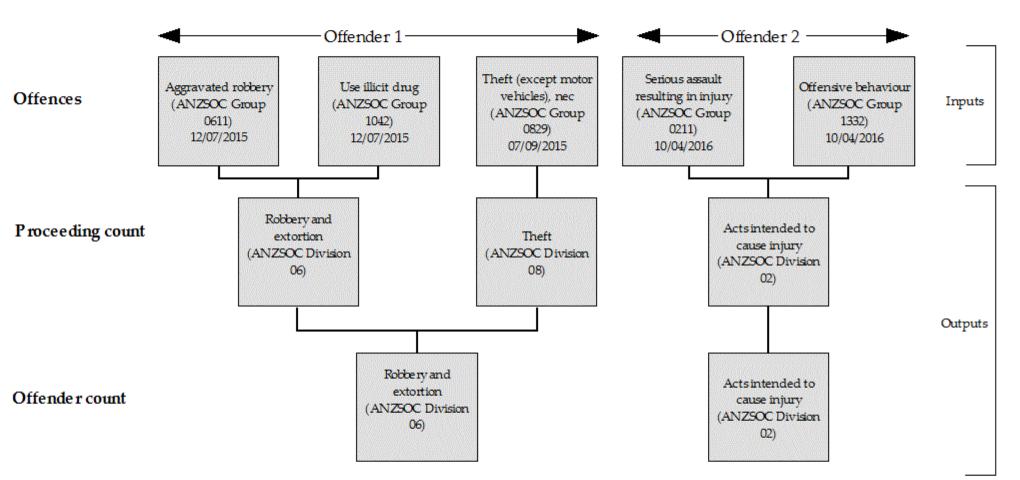
Indigenous status

- ABS assessment, Indigenous Status data for Vic, WA not of sufficient quality and/or do not meet ABS standards for self-identification for national reporting
- Problem of penalty notices hard to collect 'additional' information

Experimental data about Offenders of Family and Domestic Violence (FDV) -- FDV flag as recorded by police – NSW, WA Vic, ACT, NT

What gets counted and how

Offender and proceeding populations



Federal system -- legislative and processing differences across states

Operational changes:

May 2012 NSW Police Force took over policing public transport network.
From 2012–13 no. offenders increased in some ANZSOC categories

Outsourcing functions:

 Victoria infringement notices and on-the-spot fines for public transport fare evasion offences are predominantly issued by third party organisations

Corrections to the data:

NSW revised data are presented for 2014–15

Privacy:

 Random data.....These adjustments have a negligible impact on the underlying pattern of the statistics

Comparability across collections: police data on victims and offenders

- •Data cannot be directly linked
- Counting units -- concept of principal offence not used in Victims collection
- •Victims counted more than once if multiple offences in different ANZSOC divisions; offenders one count but more if offending at different times
- •Victims collection is calendar year, Offenders collection is financial year
- •Police may detect a crime without it being reported by a victim
- •'Victimless' crimes, such as Illicit drug offences or Regulatory offences are excluded from the Victims collection.

Comparability across collections – court data

Number of court action proceedings in Recorded Crime – Offenders are not strictly comparable to the number of court defendants

Not all court actions initiated by police will proceed to a criminal

Defendant may be prosecuted via charges initiated by authorities other than state and territory police

Lags between when the police initiate action and when a criminal court finalises a defendant's case.

Generally, offender counts should be higher than defendant counts

Discretion and policy – the case of assaults in Victoria

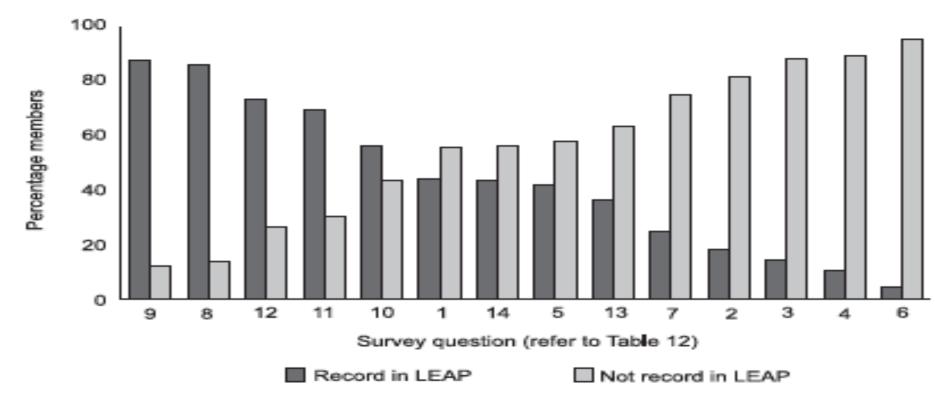
Specific policy for assaults, where

- the assault is minor (and does not involve a family violence incident);
- the parties are known to each other;
- the assault was not witnessed by any other person, including police;
- the assault did not result in serious or visible injury; and
- there is no breach of the peace.

Outcome:

the person is advised to consult a legal practitioner or Registrar of the Magistrates' Court to initiate private proceedings

Would complete a LEAP form recording crime allegation - Victoria



rce: Australian Institute of Criminology 2002, Victoria Police Scenario Study [computer file]

Carlos Carcach and Toni Makkai, 2002

ABS Recorded Crime - Victims

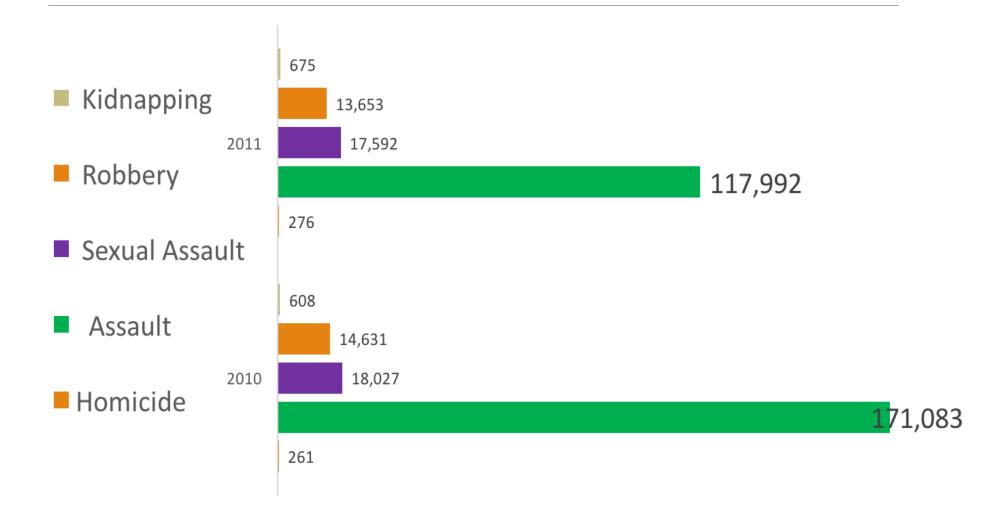
Recorded by police, calendar year

Two series – 1993 – 2009/ Second series from 2010

- Due to changes in police recording practices
- Implementation of revised offence classification
- Completion of the National Crime Recording Standard (NCRS) implementation
- Comparisons should not be made between data in this publication and victims data published prior to 2011
- Assault data Crime and Safety survey self report

DiRCS -- offences of assault and sexual assault excluded 2004, 2005; officially no national data for assaults – patchy data from 2011 no data for Vic/Qld/, data from 2014 for Tas

Not counting assaults 'hurts'



Source: AIC, Australian crime: Facts & figures: 2014

Findings

some problems with the "evidential" model of reporting, when it is not clear that a crime has been committed

Consistency tends to be highest where details about the evidence that a crime has or has not occurred are given in the scenario

Assaults : Victoria – no evidence not recorded; Qld – unless victims in domestic violence agree not recorded

Research in the United Kingdom (Home Office 2000a) and the United States (see Journal of Quantitative Criminology, vol. 15, no. 2, 1999) has addressed the advantages of the prima facie model relative to the evidential model of crime recording:

- removes the effects of the use of discretion on the number of recorded crimes
- enables the development of better sources of information about victims and offenders compared to the evidential model
- represents an advancement over other reporting systems with respect to strategic crime analysis
- encourages consistency in crime recording

VICTORIA POLICE BLUE PAPER: A VISION FOR VICTORIA POLICE IN 2025, May 2014

Law Enforcement Assistance Program (LEAP) record management database does not include intelligence, which is stored on the separate Interpose database and is not available to all operational police during a shift

Around 50 per cent of a police officer's time on each shift is spent in the station, with a significant proportion attributed to administrative tasks associated with information capture and reporting

Victoria Police's contribution to the Australian Crime Commission's secure intelligence sharing system, linking multiple law enforcement agencies, is supported by a manual process, with limitations on the capability to add further analysis

The intelligence databases of each major Commonwealth and state law enforcement agency need to be fully interoperable with each other, so that all relevant intelligence in Australia is available to any agency in real time, regardless of whether it pertains to a joint operation

Corrections data

ABS collections on prisons and community service

Prisoner census 30 June 2017, adults in legal custody (n= 41,202)

- Remand population (n=12,911)
- Federal prisoners are held in state prisons (n=923)

Stock and flow data on prisons – the census is different from the flow – impact of short sentences; average daily rate of imprisonment

- Dec Qrt 2017 41,270 in full-time custody; 69,155 on community based orders
- Most people are on a community based orders can have double counting if on more than one order

Most Serious Offence (MSO)

Rates versus numbers – population increases; comparisons across juridictions

Age standardisation

AIHW: Juveniles and prisoner health

POLICY QUESTION: how much crime is drug related?

Need to understand the question – theory!

3 basic models to explain the link between drugs and crime

1. **Psychopharmacological** -- Individual is intoxicated and intoxication causes antisocial/ criminal behavior

- Requires data on level of intoxication
- Usually applied to violent and disorderly behavior for alcohol and stimulants

2. **Economic-**- drug dependent, 'compelled' to commit crime to support drug habit

- Requires causal link is demonstrated
- Usually property crime for heroin and other illicit, not usually alcohol/cannabis

3. **Systemic** -- Crimes associated 'drug-market' activity -- establish/ maintain an illicit drug market

- Two components:
 - Offending behavior is associated with a drug market (not of relevance here as no causal component)
 - Drug defined crimes can be attributed a fraction of 100 percent

Can you answer the policy question?

No

- No reliable measure of the "causal" nature of the relationship
- No reliable measure of drug use
 - Research has shown that police do not record such information reliably
 - Corrections might have data but not available on the system confidentiality
- Is administrative (ie BIG) data useful?
 - Yes, it shows what agencies are doing, basic characteristics of their 'clients', provides a mechanism for accountability
 - Provides indicators of levels of criminal activity

Where do we go from here? Offender surveys

Three types of measurement of offending

- Offenders
- Offending episodes
- Number of offences within each episode

Drugs – all drugs?

Measuring intoxication - event specific? At time of offending/arrest?

Measuring causation – why? All offending?

Measuring dependency -- all offending?

Self-report-- Reliability, validity, time series

Crime data -- highly political and contested area

Who has data?

Who owns the data?

Who takes responsibility for the data?

Who is accountable for the data?

Who uses the data and for what purpose?

Are the data accurate?

How transparency and open are we as a society?

Overall conclusions

The limitations of police administrative data are well known (see Makkai 2001); however, they remain the most comprehensive source of long- term data on "crime"

- Administrative systems are complex and constantly evolving but not usually on a large scale
- Reliability and validity -- need for openness
- Openness would reduce 'alternate' data sources
- More sophisticated analysis and build a support base
- Usefulness is conditional on the question
- Operational and intelligence is different from academic research

Micro – macro problem – ecological fallacy

Some questions can't be answered by administrative data – big data is not the answer to everything!

Sample biases, probabilities and error

Key References

Various ABS, AIHW publications on their websites / AIC, BOCSAR websites

Report on Government Services (RoGS), equity, effectiveness and efficiency of government services in Australia

ABS - Measuring Victims of Crime: A Guide to Using Administrative and Survey data, June 2011

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Makkai, Toni and Jeromey Temple 2008 'Drugs and Crime: calculating attributable fractions' in David Collins and Helen Lapsley (Eds) Counting the cost: estimates of the social costs of drug abuse in Australia in 2005-2006, National Drug Strategy Monograph, Canberra: Commonwealth Department of Health and Ageing

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Coding – ANZSOC and NOI

Australian and New Zealand Standard Offence Classification (ANZSOC) – 3 level classification with 16 divisions

- Division 10 Illicit drug offences
- Subdivision 101 Import or export illicit drugs
- Group 1011 Import illicit drugs

Classification criteria:

- ✓ Violence: Whether violence is involved
- Acquisition: intent is acquisitive and method
- ✓ Nature of Victim: vulnerability and type of victim-
- Ancillary Offences: an extension of, or in relation to, another offence.
- Seriousness: Seriousness but not ranked by seriousness
- ✓ Intent: negligent or reckless act