

# Cautioning Versus Court and the Problem of Selection Bias

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# The Rationale for Diversion

- Labelling theory proposes that formal methods of dealing with offending by youths are stigmatising and can result in increased offending
- Implication that diversion will result in lower rates of re-offending than appearing before the Children's Court
- But is there any evidence for this?

# The Problem of Selection Bias

- The decision to either caution or charge a young offender is not random
- Youths who are most likely to re-offend are those who are most likely to be charged – selection bias
- As a result directly comparing re-offending of cautioned and charged youths is not valid

# Diversion and Re-offending – Methods of Analysis

- Matched samples – e.g. Farrington & Bennett (1981), Challenger (1981)
- Statistical control of group differences – e.g. Luke & Lind (2002)
- Smith and Paternoster (1990) demonstrated that statistical controls are not sufficient to control for selection bias

# The Propensity Scores Method

- Developed by Rosenbaum and Rubin (1983)
- Used extensively in the health sciences
- Simulates random allocation to treatment groups to allow model-based analyses (i.e. logistic regression) of treatment differences to be undertaken
- Based on the predicted probability or 'propensity' of receiving one treatment compared with another

# Applying this Method to Victorian Data on Police Cautioning

- Sample of young offenders (aged 10-16 years) who had their first contact with police for offending in 2000-01.
- Analysis of sub-sample: those who were cautioned for their first contact with police and who had a second contact for which they were either cautioned or charged (n = 1,612)

# Continued

- Used available variables to calculate predicted probability of being charged:
  - age
  - gender
  - most serious offence type
  - number of offences
  - whether the offences for the first and second contact were the same
  - time between first and second contacts
  - cautioning rate of police division where processed
  - missing person status

# Continued

- Constructed 5 groups on the basis of 'predicted probability' scores
  - Group 1 – predicted probability .03 to .35 and actual charge rate of 24.9%
  - Group 5 – predicted probability .70 to .97 and actual charge rate of 78.7%
- Conduct survival analysis to assess the impact of method of treatment (caution/charge) on re-offending.

# Results

- The 'hazard' of re-offending was 1.32 times greater for youths who were charged than for those who were cautioned
- Thus, youths who were cautioned were less likely to re-offend than those who were charged

# Limitations

- Inability to include all variables related to the decision to caution or charge
- But – this is only a problem if these variables are a) related to re-offending and b) unrelated to available variables
- Not enough is known about the relationship between factors such as parental absence, 'poor' attitude, non-admission, and police decision making and re-offending

# Conclusions

- The propensity scores method provides a useful alternative for criminological studies when random allocation is not possible
- The findings provide support for one underlying rationale of diversion: that diversion is associated with lower rates of re-offending than other methods of dealing with young offenders