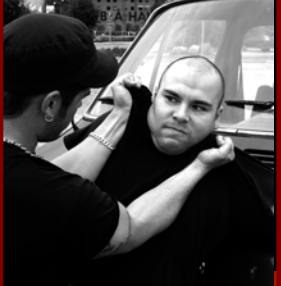


Drinking patterns and violent behaviour amongst young people: A longitudinal analysis of the Offending Crime and Justice survey

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Outline

- The research question
- Offending Crime and Justice Survey
- Review longitudinal analysis
- Case for a multi-level approach
- Longitudinal models in my study

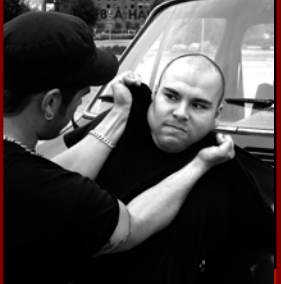




Is the development of particular alcohol consumption patterns and/or attitudes held towards alcohol consumption associated with the development of violent behaviour amongst young people?

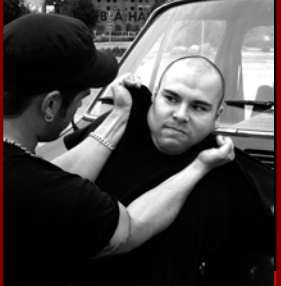
Key concepts

- Criminal careers and behavioural trajectories
 - Change over time
- Changing alcohol consumption patterns, expectancies and norms over the life course

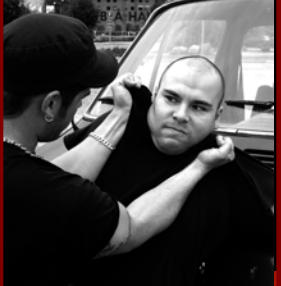
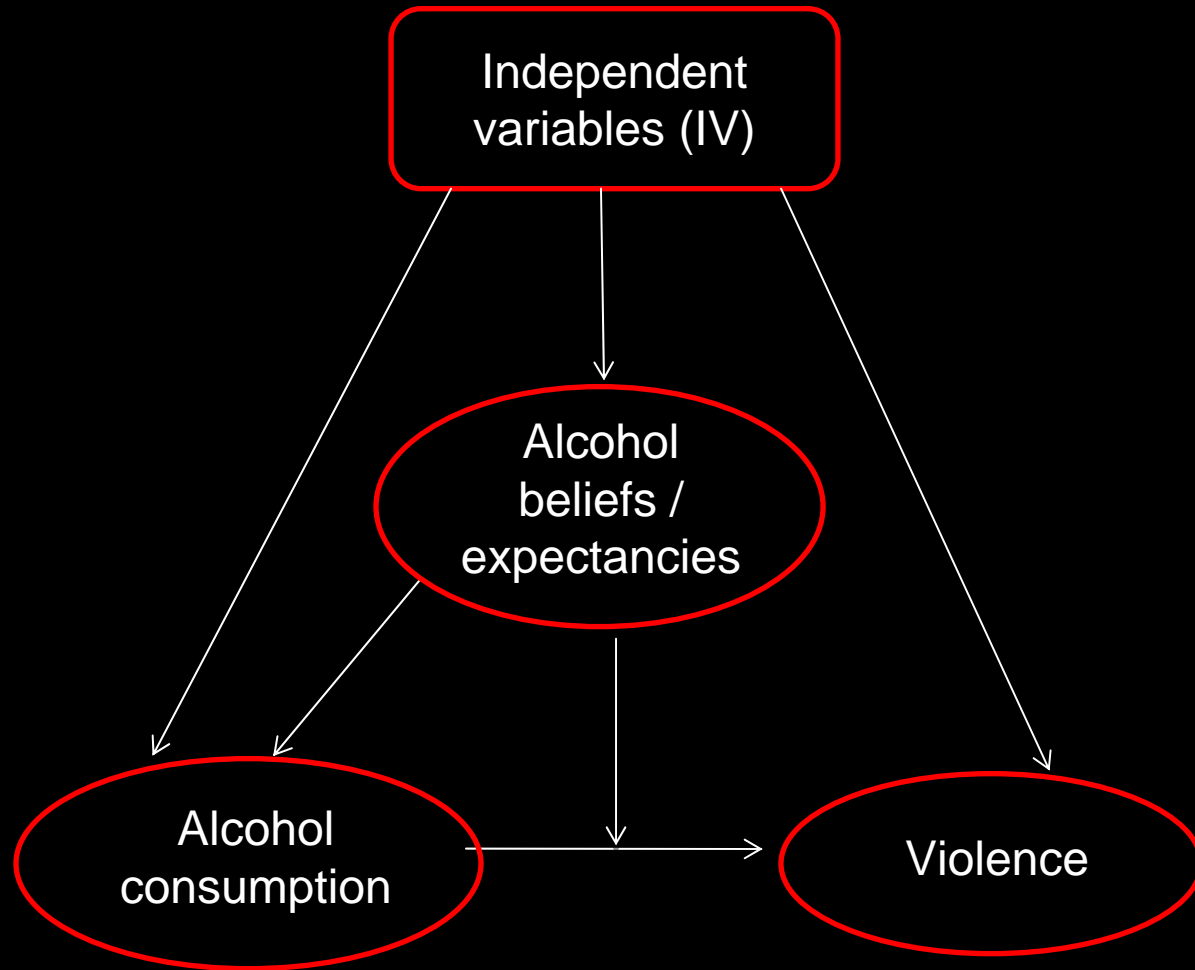


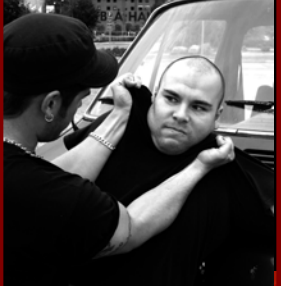
Existing research

- Frequent coexistence of alcohol in violent offending
- Minimal detail on how alcohol is implicated
- Focus on the role of drinking patterns and expectancies in mediating / moderating alcohol consumption and behavioural outcomes



Cross sectional model





Independent variables

Age
Gender
Ethnicity
Marital status
Employment status
Educational attainment
Other offending behaviour
Other drug use
Involvement in the CJS
Previous violent victimisation

Alcohol consumption variables

Whether drink
Frequency of drinking
Frequency of drunkenness
Frequency of binge drinking
Age at which first drank
Age at which first drunk
Who drink with
Where drink
Measure of dependency score

Alcohol beliefs / expectancy variables

Drinking makes me feel relaxed

When I drink I often say things I regret

Drinking helps me forget my problems

Drinking makes me friendly and outgoing

I drink to get drunk (younger respondents only)

Offending Crime and Justice Survey

- 10 -25 year olds
- Measures offending incl. violence
- Many alcohol consumption questions



Rotated panel design

Panel respondents

Fresh
Sample

Fresh
Sample

Fresh
Sample

Fresh
Sample

2003

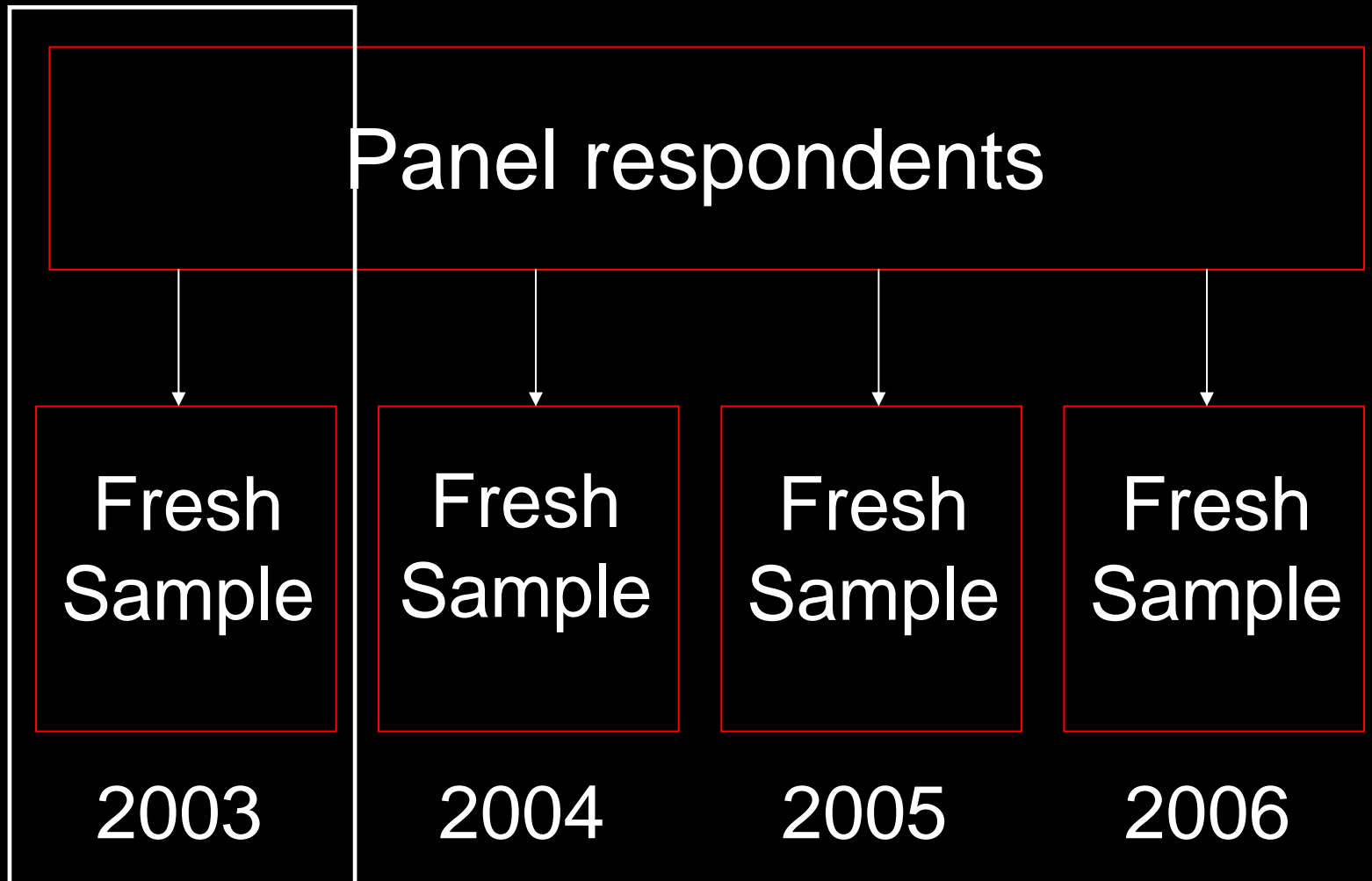
2004

2005

2006



Rotated panel design



Rotated panel design

Panel respondents

Fresh
Sample

Fresh
Sample

Fresh
Sample

Fresh
Sample

2003

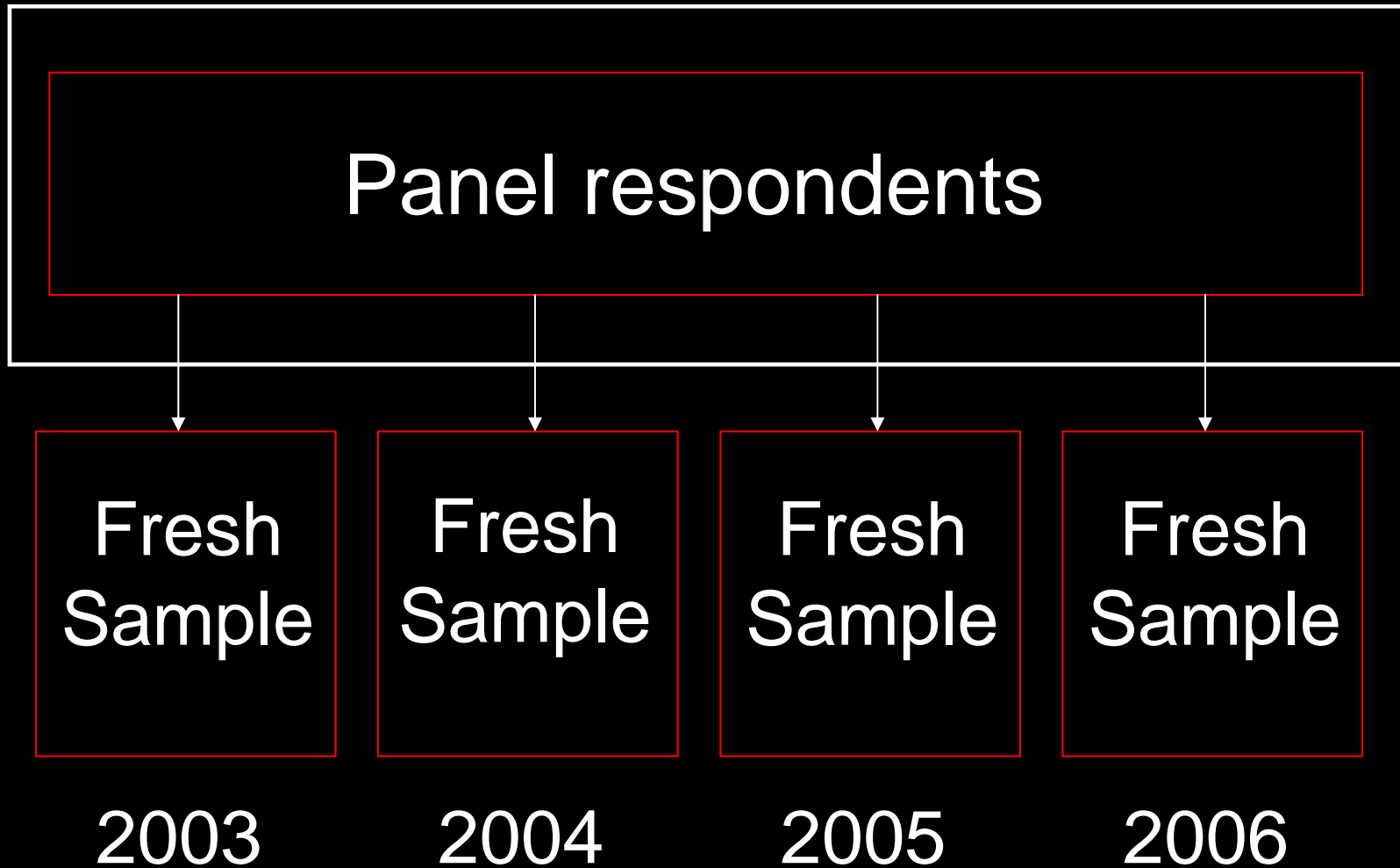
2004

2005

2006

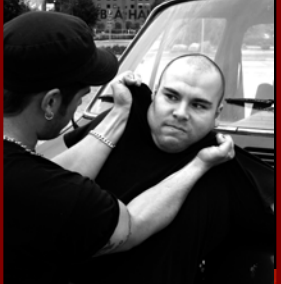
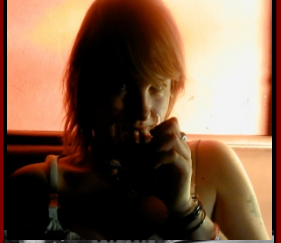


Rotated panel design



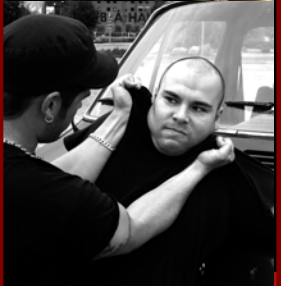
Existing longitudinal analysis

- Hales et al., (2009) Longitudinal analysis of the Offending Crime and Justice Survey 2003-2006.
- Cohort analysis, onset, prevalence
- **Transitions and multivariate analyses**
 - Logistic regression
 - Multinomial logit regression
 - Random-effects modelling



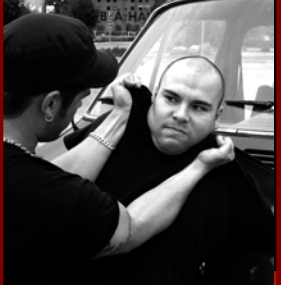
Descriptive techniques

- Latent class analysis
 - Analysis limited to those who responded to all 4 sweeps (ca 2500)
- Transitions analysis
 - Looked at short term changes from one year to next (ca 11,500 paired transitions)



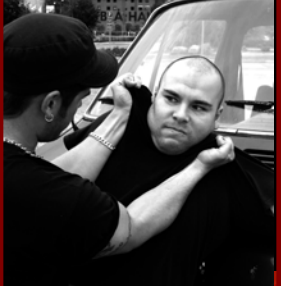
Multivariate techniques (1)

- Transitions analysis results as basis
 - Logistic regression models
 - Multinomial regression models

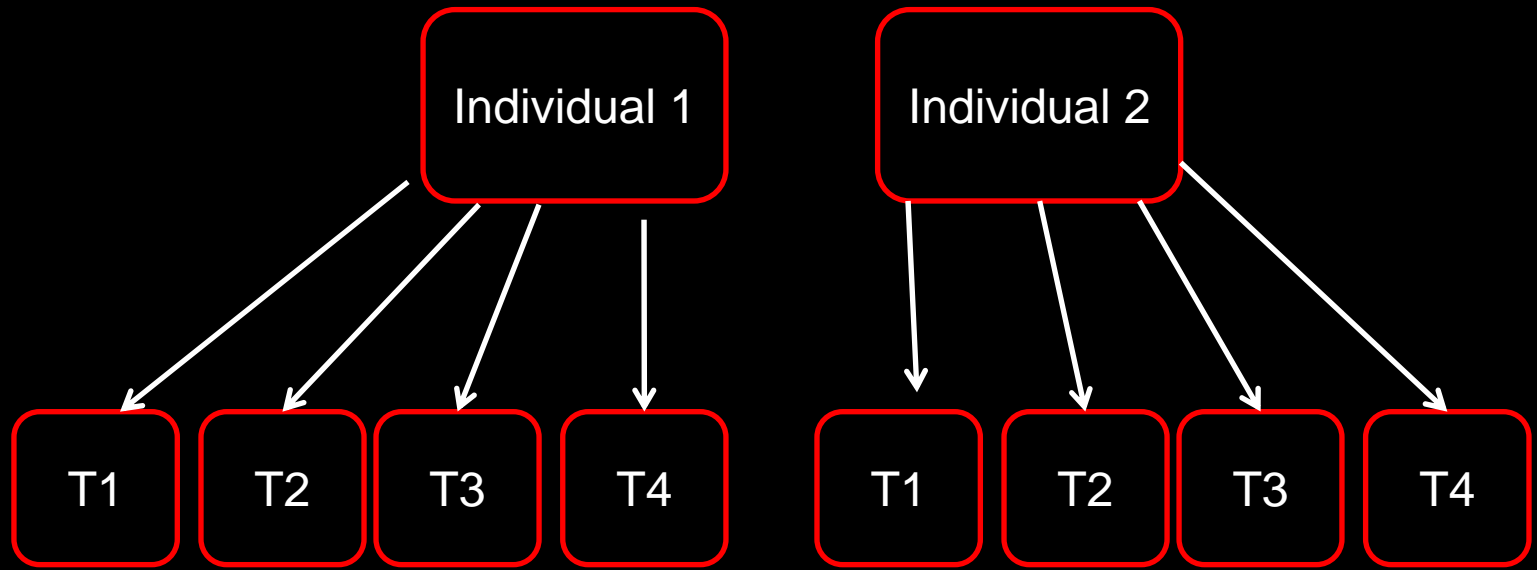


Multivariate techniques (2)

- Random effects model
 - Models extended to allow for variation *within* and *between* individuals
 - More explanatory power

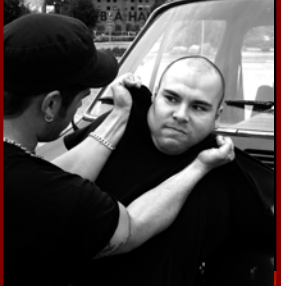


Multi-level framework



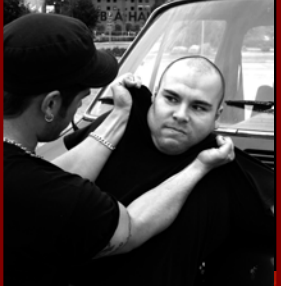
The case for multi-level framework

- Multi-level modeling (MLM) for repeated measures
 - Allows for observations over time in an individual to be correlated
 - Effective use of available and missing data
 - Enables us to look at within and between individual change



Building on this work...

- Changes and differences *between* individuals
- Changes *within* individuals – individual development and trajectories
- **Latent constructs**: alcohol consumption, expectancies



Conclusions

- Limited number of crime surveys with longitudinal design
- Increased power of causal analyses and establishing aetiology
- Clustering of observations in longitudinal design should be accounted for fully in analysis – i.e. using multi-level framework
- Missing data can be dealt with effectively



Thank you for listening

- Questions?
- Feedback?
- Suggestions?

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