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## Introduction

Evidence of the effects of drug use on recidivism (repeat offending) is inconsistent and inadequate for serious young offenders.

Recidivism jeopardises adolescent development and constitutes a large financial and social burden. Reducing this is a core aim of criminal justice policy.

Drug use is highly prevalent among offenders. Many attribute their offending to a need to support their drug use, intoxication and/or withdrawal.

Models of recidivism have typically assessed prevalence, but other parameters also have clinical and policy relevance (e.g. severity and frequency).

Measures of drug use in most young offender studies have been too general to explore specific drug-crime relationships and hypotheses.

Community-supervised young offenders are a large, diverse group who are under-represented in the local literature. Prior findings may not generalise to this group, or sub-groups therein (e.g. females).

## Aims

Summarise a systematic assessment of the prospective effects of different patterns of drug use on different parameters of recidivism among non-incarcerated young offenders.

Using selected findings from the lead author's PhD thesis, illustrate the scale, significance and variation in the effects of drug use on recidivism.

## Methods

### Data and sample

**Baseline data:** demographic, drug use, and other behavioural data were collected for the YPoCOHS<sup>1</sup>

**Sample:** 793 young offenders in community-based juvenile justice supervision across NSW, Australia: Mean 17.0 yrs (range 12-21); 85% female; 19% Indigenous, 28% culturally diverse; 30% rural/regional.

**Recidivism data:** Lifetime court records, with mean 3.8 years (range 2.9-5.1) observation after baseline.

Data were linked and permanently de-identified by BOCSAR. Proven offences committed after baseline were modelled.

### Measures and models

Frequency of past year

- **binge drinking** (males >6 std drinks, females >4)
- **cannabis use**
- **amphetamine use**
- **opioid use** (including illicit use of analgesics).

General, violent, and theft recidivism were assessed

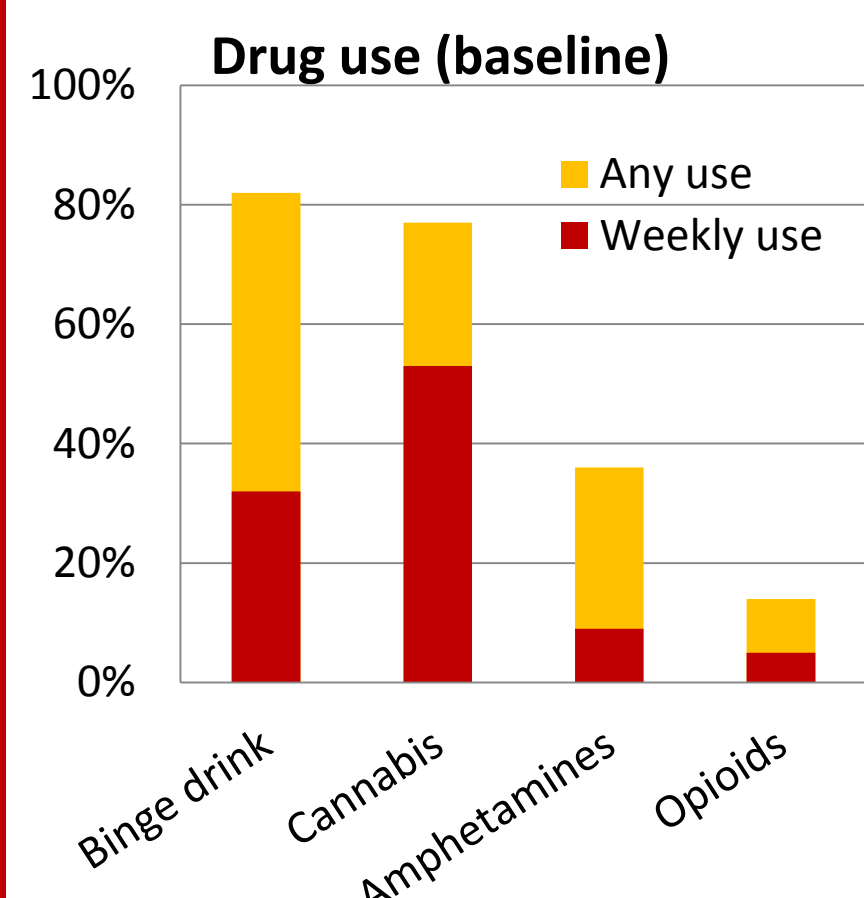
Regression models (units) were built for four parameters:

- **Prevalence:** logistic regression (odds ratio/OR)
- **Timing:** log-logistic; (time ratio/TR)
- **Frequency:** negative binomial (incidence rate ratio/IRR)
- **Severity of violence:** multinomial logistic (OR).

Variation by age, gender and ethnicity was assessed in sub-group specific models.

## Descriptive and bivariate results

Drug use was diverse and nearly ubiquitous.



Participants tended to binge drink and use cannabis, nearly half using weekly or more.

One in ten used opioids or amphetamines weekly.

Very few (<5%) used other drugs weekly.

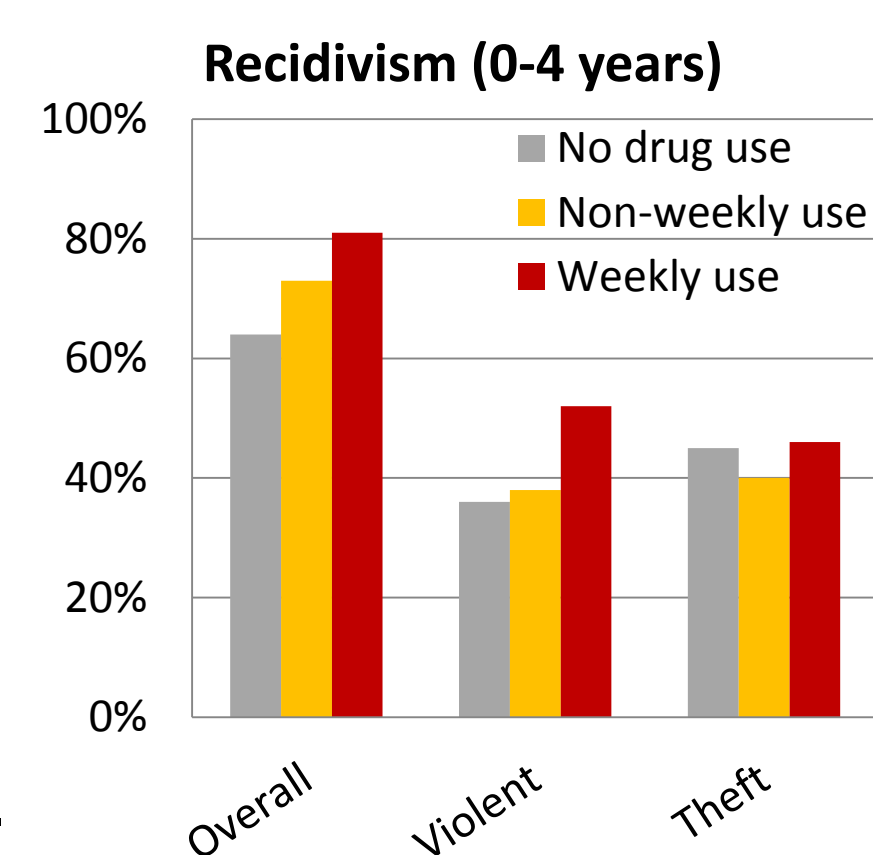
More frequent drug use was associated with poorer physical and mental health. Self harm was most prevalent among frequent binge drinkers.

The overall prevalence of recidivism was 78%.

Most recidivists committed offences other than violence or theft.

Drug use and recidivism tended to show a dose-response correlation.

This relationship varied by offence type, however.



Recidivism was positively associated with prior offending, younger age, low verbal IQ and ethnicity.

## Models of recidivism prevalence

Different patterns of use predicted different types of recidivism.

### General recidivism

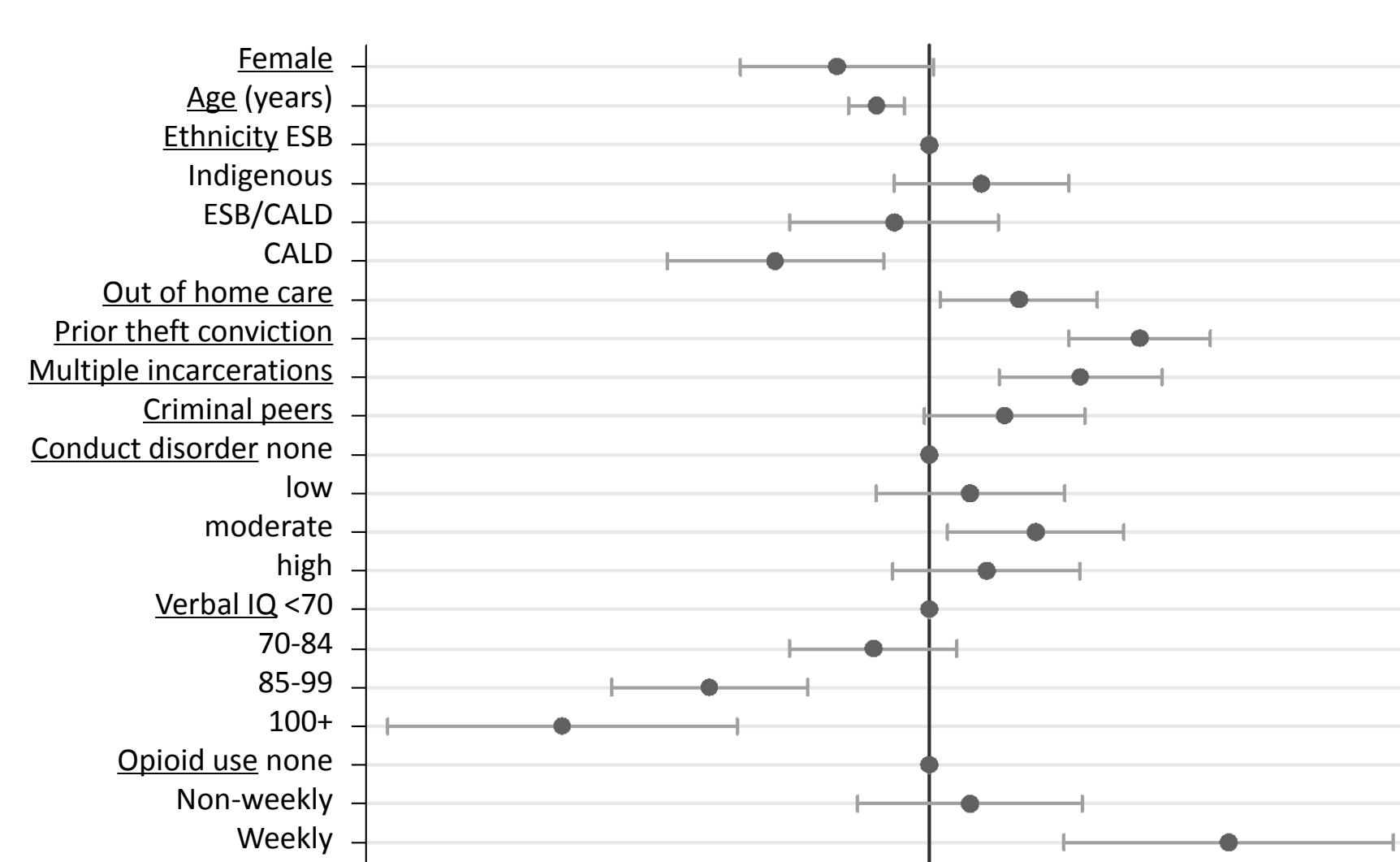
Weekly cannabis users were more likely to recidivate, but no pattern of drug use independently predicted general recidivism.

### Violent recidivism

Weekly drug use increased the odds of violence by 40% (AOR 1.4\*\*), but use of individual drugs did not predict violence.

### Theft recidivism

Opioid use was the strongest predictor of theft. Weekly opioid users were four times more likely to commit theft than non-users.



Adjusted odds ratios (AOR) for theft predictors

### Sub-group specific models

Results also varied demographically. Notably, daily cannabis use predicted violence for youths under 16 (AOR 2.3\*\*\*) but not those over 16 (p=.2).

Weekly opioid use strongly predicted theft among males (AOR 8.0\*\*\*) but not at all for females (p=.4).

## Models of timing, frequency, severity

The effect of drug use on recidivism varied by recidivism parameter.

### Timing of recidivism

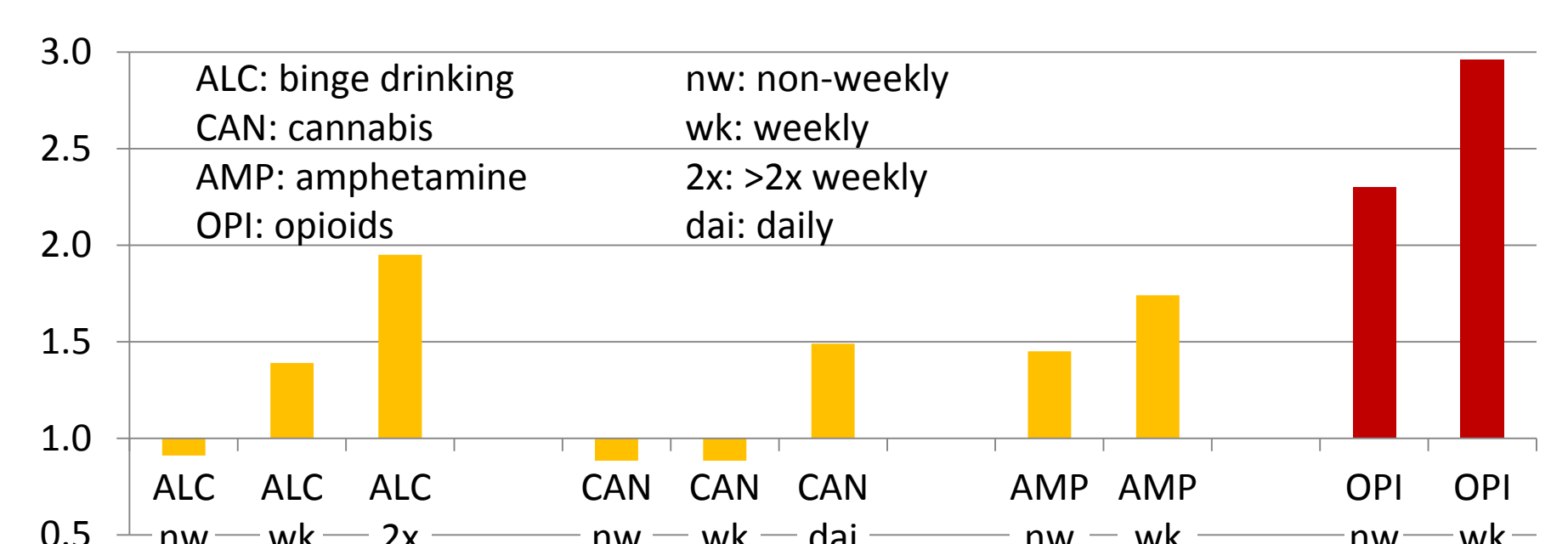
Daily cannabis use predicted shorter time to violence: daily users' median survival duration was 40% shorter than that of non-users (3.1 vs. 5.9 years, ATR 0.6\*; weekly users 4.3, non-weekly 5.3). Weekly opioid use predicted shorter time to theft.

### Frequency of recidivism

Users tended to accrue more convictions. Weekly opioid users accrued twice as many convictions as non-users (AIRR 2.1\*\*\*; theft rates higher still), but occasional amphetamine users accrued fewer convictions than non-users (AIRR 0.7\*\*).

### Severity of recidivism

Severe violence (serious physical harm) was more common among frequent users (see figure), and independently predicted by opioid use (AOR 3.1\*).



Unadjusted odds of severe violence by drug use

Most parameters were more strongly predicted by demographics and criminal history than by drug use.

## Conclusions

While drug use is more common among recidivists, its independent effects on recidivism vary widely. No over-arching relationship exists. Weekly opioid use is rare and affects theft profoundly. Daily cannabis use is common and affects violence somewhat less.

Addressing these users' needs may reduce the burden of recidivism, especially if treatment is demographically tailored. Treating other users may not affect recidivism but still benefit public health.

To properly assess the impact of sentencing and intervention with drug using young offenders, models must assess multiple aspects of recidivism and not merely its prevalence.

Future research could extend these findings by considering the effects of poly-drug use and changes in drug use over time, offender supervision and drug treatment, and mortality.

**Abbreviations.** i: Young People on Community Orders Health Survey. \*p<.05, \*\*p<.01, \*\*\*p<.001. ESB: english-speaking background; CALD: culturally and linguistically diverse.

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