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Illicit drug use and offending histories: A study of male incarcerated offenders in Australia

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Abstract Utilizing the self-reported offending and drug use histories of over 2000 incarcerated male prisoners from four Australian jurisdictions, offenders were categorized into different offending typologies based on lifetime criminal behaviour. Eight different crime types were developed and offenders' reported use of four drugs – cannabis, amphetamines, heroin and cocaine – was examined. The analysis found that the type and level of illicit drug use varied across the different types of offenders. Of those who had used drugs, the rates of poly-drug use were high. Furthermore, most drug using offenders, regardless of crime type, were on average more likely to commit minor offending prior to the onset of illicit drug use. The extent to which offenders attributed drug use to their criminal careers also varied. This article highlights that interventions aimed at drug use alone will have only a limited impact on reducing the likelihood of re-offending.

Keywords drug treatment, illicit drug use, offending history

Introduction

During the last three decades most countries, including Australia, have seen significant increases in the availability and use of illicit drugs. Until relatively recently however, international and national efforts to curb these increases have had only marginal effects (Farrell, 1998). In 1985 concern over illicit drugs was of such political importance that the Australian Government established a national strategic framework based on the principles of harm minimization to deal with the problem (Makkai, 1999). Although there have been shifts in policy emphasis including changes in the role of law enforcement and an increase in the role of the nongovernment sector for the provision of treatment, the overall focus has been one of harm reduction. The economic and social costs of drugs and crime to the Australian community are significant. The Australian Institute of Criminology recently released a wideranging study that estimated the cost of crime at Aus\$32 billion annually – \$1960 million of which was attributable to drug offences alone (Mayhew, 2003). In 2002, two papers on the social cost of drugs to the Australian community (Collins and Lapsley, 2002) estimated that between 37 and 52 percent of offenders self-reported a direct causal link between their use of drugs and subsequent criminal activity. Drug use therefore might also account for at least a further one third of the costs of some other forms of criminal activity.

The existence of an association between drug use and crime is widely accepted. Both Australian and international research on illicit drugs and crime has found that:

- 1. Offenders are more likely to report younger age of onset into drug use than either injecting drug users or the general population (Johnson, 2001);
- Offenders are more likely to report criminal activity prior to any involvement in drug use (Dobinson and Ward, 1985; Makkai and Payne, 2003a);
- Some offenders attribute their own offending to drugs (Indermaur, 1995; Makkai, 1999; Makkai and McGregor, 2002; Makkai and Payne, 2003); and
- 4. Offending rates fluctuate according to levels of drug use (see Inciardi, 1979; McGlothlin et al., 1978).

In the Australian context much of the work has focused on heroin and property offending (see Dobinson and Ward, 1985) or amphetamines and violent crime (see Indermaur, 1995). Other studies have focused on the incidence of drug use at the time of offending (see Milner et al., 2004). However, limited empirical work has been conducted on the links between the various illicit drugs and different offending typologies across the lifetime criminal career. This article reports on work that seeks to expand our empirical knowledge on illicit drugs and lifetime offending careers.

Method

Due to the illicit nature of criminal behaviour, random samples of criminal offenders are often difficult to identify. As a result, criminological research has long since relied on identified offender samples such as incarcerated offenders (Indermaur, 1995), offenders that have been detained and apprehended by the police (Taylor et al., 2003), or drug users (Shand et al., 2003). The present study utilizes the self-reported criminal and drug-use histories of 2135 incarcerated male offenders from four Australian states: Queensland, Western Australia, Tasmania and the Northern Territory. Data collection was conducted between December 2000 and June 2001, and was funded by the Australian Government Attorney General's Department under the National Illicit Drug Strategy (NIDS). The overall response rate for the interviewer-administered questionnaire was 73 percent – higher than most other inmate surveys of this type. More detailed information on the methodology of this study can be found in the national results (Makkai and Payne, 2003a).

The data reported on self-reported offending and drug use. There is a long tradition in criminology that relies on self-reported offending rather than official records as clearance rates for many crimes are low, and offenders often report committing many more crimes than are officially recorded on their administrative criminal histories. However, like many studies of this nature, offending estimates are limited to the extent that self-reported information is reliable. Previous studies have found that self-reported offending among prisoners is generally reliable and certainly more useful in criminal career analysis than official criminal records (Peterson et al., 1981).

Similar concerns have been expressed about the reliability of self-reported drug use estimates (Harrison, 1997). Comparison of self-reported drug use and urinalysis testing in other studies of Australian police detainees indicates that offenders with a history of prior imprisonment and poor socio-economic status were those most likely to accurately report their recent drug use (McGregor and Makkai, 2003). Given this work, it is assumed that this sample provides robust estimates of drug use patterns for incarcerated male offenders.

Categorizing offenders

Offender categorization can be undertaken using two forms of data: self-reported offending or Most Serious Offence (MSO) data from the administrative file collated by corrective service departments. In the case of incarcerated offenders with multiple convictions, the MSO generally represents the offence that resulted in the longest prison sentence. Categorization based solely on the most recent and most serious offence can often conceal a systemic pattern of criminal and drug use behaviour that is important to understanding and managing offenders. To help illustrate this we use the example of an offender who was arrested, charaed and convicted on five counts of break and enter, two counts of theft and one count of manslaughter. This offender, by the use of the MSO, would be categorized as a homicide offender even though the act of manslaughter may have accidentally occurred during a spate of property offences. Artificial classifications that do not represent the offender's history of criminal behaviour are most likely to occur where an offender is charged with a one-off offence that is not consistent with their regular offending pattern or, as in the example above, an offender is charged with multiple offences but one of those offences is more serious than the offender's regular offending pattern.

Offenders in this study were specifically asked about 14 different types of offending and whether they had ever committed the offence and then whether they regularly committed the offence (see Table 1). The responses were consistent with international research indicating that offence specialization over the criminal career was limited (Petersilia et al., 1978). Few offenders reported having committed only one offence type in their lifetime (26%). Specialization, where it did occur, tended to be within broader offence categories such as property or drug crime (Makkai and Payne, 2003a). However there was overlap across the offences. For example, 39 percent of regular property offenders reported being regular drug sellers, while 65 percent of those who reported regularly engaging in physical assault reported regularly engaging in robbery.

	Ever	Regular
Property offences		
Break and enter	58	32
Stealing	52	23
Motor vehicle theft	51	20
Trade in stolen goods	48	27
Vandalism	32	8
One of the above	77	48
Violent offences		
Physical assault	61	20
Armed robbery	27	9
Robbery without a weapon	23	7
Sexual offence	14	3
Killing someone	10	_
One of the above	75	26
Drug offences		
Buying illicit drugs	68	57
Selling illicit drugs	46	32
One of the above	70	60
Fraud offences		
Fraud	27	9
Multiple offences		
Three or more offences	74	40

Table 1 Percentage of offenders who reported ever and regularly committing each offence

Source: Australian Institute of Criminology, DUCO Male Survey, 2001

The offence most likely to have been committed on a regular basis was buying illicit drugs. Offenders were commonly engaged in regular break and enter (32%), selling illicit drugs (32%), trading in stolen goods (27%), stealing (23%), motor vehicle theft (20%) and physical assault (20%). Overall 48 percent reported regularly engaging in some form of property offence and 26 percent in regular violent offending. Forty percent reported that they had committed at least three of the offence categories on a regular basis.

Despite the apparent diversity and frequency of offending, offenders were categorized into eight crime types. To do this, a series of discrete counting rules were applied to each offender's self-reported involvement in the 14 crime categories surveyed in this study. The final offender categorization included:

1. Regular property offenders – offenders who reported having committed property offences regularly but not having regularly committed violent crime or fraud. There were 566 offenders in this classification.

- Regular violent offenders offenders who were not regular property or fraud offenders but reported regularly engaging in violent crime. There were 167 offenders.
- 3. Regular multiple offenders offenders who reported committing both property and violent crime regularly but not fraud. There were 311 offenders.
- 4. Regular fraud offenders. There were 180 regular fraud offenders.
- 5. Drug selling offenders who reported selling drugs on a regular basis but were not a regular offender of any property, violent or fraud offences. There were 148 offenders.
- 6. Drug buyers regularly bought illicit drugs but did not regularly engage in any of the other categories of crimes. There were 144 offenders.
- Homicide offenders self-reported ever having committed at least one homicide offence but were not regular offenders of any other forms of crime. There were 113 homicide offenders.
- 8. Non-regular offenders of any of the offences listed in the survey. There were 506 non-regular offenders.

Figure 1 shows that the most common category was the regular property offender (27%), followed by non-regular offenders (24%) who tended to be sentenced for a violent offence, and then regular multiple offenders (15%) who reported regularly committing both property and violent crimes. Regular violent offenders comprised 8 percent of the sample as did regular fraud offenders. The remaining three categories were drug sellers (7%), drug buyers (7%) and homicide offenders (5%).

Table 2 summarizes the key differences across basic demographic characteristics and criminal justice indicators for each of the offending categories. These were:

- Homicide and non-regular offenders are older than the other crime types.
- Non-regular offenders are more likely to have been married.



Source: Australian Institute of Criminology, DUCO Male Survey, 2001

Figure 1 Crime types (% of total sample)

- Overall, homicide offenders and non-regular offenders report less contact with the criminal justice system.
- On average, fraud offenders report the highest number of lifetime charges and convictions, followed by property offenders.
- Regular multiple offenders are the group most likely to have been detained as a juvenile, followed by regular property offenders.

Indigenous Australians are significantly over-represented in the criminal justice system. They comprise one quarter (25%) of the incarcerated male sample in this study, but only two percent of total Australian population (ABS, 2002). By offender type, they are over represented among the regular violent (34%) and non-regular offender categories (33%) and under-represented among the regular fraud (11%) and regular drug seller (9%) categories. In addition, Indigenous offenders are more likely to have been incarcerated as a juvenile (42% compared with 26% for non-Indigenous offenders). Further exploration of the differences between Indigenous and non-Indigenous offenders can be found in the full report (Makkai and Payne, 2003a).

The process of offender categorization employed in this study has illustrated one important, but often forgotten fact – criminal offenders are not homogeneous. The reasons why offenders engage in criminal activity vary significantly from one offender to the next and offender categorisation based on the systematic assessment of lifetime offending histories is likely to produce the most accurate tool for understanding offenders at an aggregate level. At the very least, the significant offending and demographic differences between the offender types in this study have obvious implications for policy and interventions that fail to take such diversity into account. Chiaken and Chiaken (1984: 195) highlight this:

Faced with high crime rates, fiscal limitations, and conservative political movement, public officials increasingly long for a simple, encompassing policy that would permit them to deal quickly and effectively with criminals. Unfortunately, an important truth has almost disappeared during these developments: There are many kinds of criminal, and to fix on any single punitive solution to the problem of crime is simplistic, unjust and inefficient.

Examining drug use

The lifetime prevalence of illicit drug use including recent and regular use for four main drug types – cannabis, amphetamine, heroin and cocaine – is shown in Table 3. Overall lifetime prevalence is high with 81 percent reporting that they had used cannabis, 58 percent had used amphetamines, 45 percent heroin and 32 percent cocaine. Sixty percent said they had used two or more of these drugs. Regular drug sellers and regular multiple offenders report the highest rates of lifetime prevalence across all four drug types and were the two offender groups most likely to report poly drug use. Homicide offenders and non-regular offenders report the lowest levels of lifetime use of illicit drugs.

	Regular property offenders	Regular violent offenders	Regular multiple offenders	Regular fraud offenders	Regular drug sellers	Regular drug buyers	Regular homicide offenders	Non- regular offenders	Total sample
	(n = 567)	(n = 167)	(n = 311)	(n = 180)	(n = 148)	(n = 144)	(n = 113)	(n = 506)	(n = 2135)
Age									
mean age (years)*	29	35	28	31	32	30	38	39	33
Indigenous status									
% ATSI*	24	34	32	11	9	22	19	33	25
Marital status									
% never married*	66	52	65	59	57	66	62	43	58
Criminal justice history									
% detained as juvenile	* 44	13	57	29	17	24	12	14	30
% previously detained									
as an adult*	77	62	77	73	52	58	34	48	63
mean lifetime charges'	* 67	14	56	93	11	8	5	4	37
mean lifetime convictions*	54	11	45	76	9	7	4	4	30

Table 2 Demographic indicators by offender type (%)

* Statistically significant at p < 0.01

Source: Australian Institute of Criminology, DUCO Male Survey, 2001

Offenders were asked to indicate whether they had used illicit drugs in the six months prior to the offence that led to the current period of incarceration. Regular multiple offenders were the group most likely to report recent use for each of the four drugs and 67 percent reported the recent use of multiple drugs. This was similar to regular drug sellers (64%) and regular property offenders (63%) but significantly larger than reported by regular violent offenders (25%). There are other noticeable differences between the crime types:

- Homicide offenders and non-regular offenders report much lower levels of recent use and very low levels of use of heroin or cocaine prior to incarceration.
- Fraud offenders look very similar to regular multiple offenders in terms of recent drug use.
- Excluding cannabis, more offenders report using amphetamines than either heroin or cocaine in the six months prior to incarceration.

The final panel of data in Table 3 focuses on the proportion of offenders reporting at least weekly use of each drug type in the six months prior to their current imprisonment (frequent recent use). Because each offender category reported significantly different rates of recent use, the estimates of weekly use have been calculated only for those offenders that reported using in the six months prior to incarceration. Regular fraud offenders were those most likely to report weekly use of amphetamines and heroin. While the overall number of regular violent offenders reporting recent use of cocaine was small (n = 18), 50 percent reported that this use was either weekly or more often. Similarly, although few homicide offenders reported recent use of cocaine (n = 9), half of them reported using on a weekly basis. This compares to only 28 percent of both regular property and regular multiple offenders.

	Property offenders (n = 567)	Violent offenders (n = 167)	Multiple offenders (n = 311)	Fraud offenders (n = 180)	Drug sellers (n = 148)	Drug buyers (n = 144)	Homicide offenders (n = 113)	Non- regular offenders (n = 506)	Total sample (n = 2135)
Ever used									
Cannabis	93	68	97	92	97	99	73	48	81
Amphetamine	77	40	80	82	82	74	35	14	58
Heroin	62	24	71	66	67	47	20	6	45
Cocaine	39	24	50	58	60	26	19	4	32
Multiple drugs	79	40	83	84	91	79	38	14	60
Recent use ^a									
Cannabis	78	51	82	72	80	76	50	25	62
Amphetamine	59	26	60	62	54	53	17	7	42
Heroin	38	12	48	48	35	26	4	2	27
Cocaine	19	11	29	33	28	9	8	1	16
Multiple drugs	63	25	67	66	64	53	16	6	44
Weekly use ^b									
Cannabis	84	75	86	81	88	81	66	46	79
Amphetamine	67	64	72	78	63	61	63	29	67
Heroin	70	70	75	78	75	66	75	56	72
Cocaine	28	50	28	28	24	39	56	20	30

Table 3 Drug use indicators by offender type (%)

^a Recent use is defined as use in the six months prior to the arrest which led to the current period of incarceration ^b Estimates for weekly use are reported only for offenders who had used at least once in the six months prior to incarceration

Source: Australian Institute of Criminology, DUCO Male Survey, 2001

There is little doubt that the majority of offenders use or have used illicit drugs. However, like the lifetime offending and demographic profiles, the prevalence rates for recent and frequent use are significantly different when compared between offender types. Policies and programmes targeted at drug use should be cognisant of the drug use profiles of different offender types.

Moreover, these data also show that amongst offenders who had recently used drugs, multiple drug use is also common. The most prevalent combination was cannabis and amphetamines. There are currently no pharmacotherapy treatments – such as methadone – for either of these two drugs. The practical management of offenders with addictions to either or both of these drug types will be challenging.

Illicit drug use and offending careers

Both Australian and international research have consistently reported a relationship between the use of drugs and criminal offending – however the nature of that relationship remains highly contested. At the very least, most agree that drug abuse exacerbates a pre-existing criminal lifestyle, resulting in more frequent and in some cases more serious offending. Table 4 illustrates the lifetime offending and drug use pathways for each of the crime types. In the interests of comparing the pathways across offender types, the samples are restricted to only those offenders reporting lifetime prevalence of any drug – this allows us to track offenders through a broad spectrum of offending and drug use behaviours without the cross contamination of the data for offenders who had never used illicit drugs. Non-regular offenders and homicide offenders are excluded, as they did not self-report any regular offending. In terms of when offenders first began offending, regular multiple offenders reported the lowest mean age for any offence (11 years), followed by regular property offenders (12 years) and regular fraud offenders (13 years). These results are consistent with the crime types most likely to report a history of juvenile detention (see Table 1).

Table 4 also reports the ages of first and regular offending for each offender category. The mean age of first offence (any) is calculated across all offence types examined in the survey, and the mean age of first offence (within crime type) is the age at which the offender first engaged in an offence that is consistent with their final categorization. The disparity between the two indicates that first engagement in offending is not necessarily indicative of a final criminal career path. Many of the offenders in this sample engaged in minor property offending prior to progressing to other more regular forms of criminal activity. This is again consistent with the general lack of offenders reported their first offence at 14 years but their first violent offence at 18 years. Similarly, regular drug sellers reported their first offence at 20 years.

In terms of regular offending, there is a delay for all crime types between when an offender first commits an offence and when they engage in that crime on a regular basis. For example, regular violent offenders report their first offence at age 14 years, then their first violence offence at 18 years and then regular violent offending at 20 years. The average progression from first to regular offending varies according to the crime type:

- The shortest average time between the first offence (any) and the first offence (within crime type) is for regular property offenders (1 year).
- With the exception of regular multiple offenders, regular property offenders were the crime type that reported the youngest mean age of regular offending (16 years).
- Regular multiple offenders reported the youngest average age of first offence (11 years) and regular offending than any of the other crime types. They are regular property offenders by the age of 14 years and regular violent offenders by 17 years.
- The largest gap between first committing any crime and first committing that crime type is for fraud offenders (8 years). However, the progression from first committing fraud to regularly committing fraud is 1 year.

Through various self-reported drug use measures the Drug Use Careers of Offenders (DUCO) study allows us to determine at what stage in the criminal career experimentation with illicit drugs first occurs. As such, the age of first illicit drug use has been included in Table 4 for each offender type. Overall, incarcerated male offenders consistently reported cannabis as the drug most likely to be used first, followed by amphetamines, heroin and finally cocaine (see Makkai and Payne, 2003b). Although all offenders, with the exception of regular drug sellers, commenced offending at least one or two years prior to first experimenting with any illicit drug, significant differences were found by offender type:

	Regular property offenders (n = 330)	Regular violent offenders (n = 118)	Regular multiple offenders (n = 304)	Regular fraud offenders (n = 168)	Regular drug sellers (n = 146)	Regular drug buyers (n = 144)
Offending						
First offence – any	12	14	11	13	15	14
First offence – within crime type	13	18	11/15°	21	20	17
Regular offending – within crime type	16	20	14/17ª	22	22	19
First drug use	14	17	14	15	15	16

Table 4	Lifetime	offending	pathways	s by	offender t	ype	mean	age)
							•	U /

^a Denotes property offence/violent offence.

Note: Estimates are for offenders with a lifetime history of drug use

Source: Australian Institute of Criminology, DUCO Male Survey, 2001

- Both regular property offenders and regular drug buyers reported, on average, that illicit drug experimentation first occurred after the commencement of offending, but two years prior to regular offending;
- Regular violent offenders reported the oldest mean age of first drug use at 17 years. This occurred three years after the first offence (any), but before the commencement of any violent offending (18 years). The delay between first drug use and regular violent offending was a further three years;
- Regular multiple offenders did not commence drug use (14 years) until after first engaging in minor criminal activity (11 years), but on average it occurred concurrently with regular property offending (14 years);
- For fraud offenders their average age of drug use (15 years) occurred prior to their first engaging in this form of property offending (20 years), but after their first offence at 13 years;
- Regular drug sellers reported that their average age of first use (15 years) was concurrent with their first offence (15 years) and well before their first drug selling offence (20 years) this was the only offender group reporting illicit drug use at the same time as first offending.

The criminal and drug use careers of incarcerated offenders show that primary interventions are required in early childhood as offenders, on average, begin minor offending in the early teenage years. Such interventions would clearly focus on much broader strategies to assist young families and communities. Although at first glance this may appear to be outside the remit of many correctional agencies, those correctional agencies wishing to break the intergenerational transmission of crime could provide support and interventions to the families of offenders.

However, the data indicate that the likelihood of progressing onto regular offending is on average a matter of a few years. This suggests that agencies that

deal with juvenile offenders need to be acutely aware of the potential criminal career track for these individuals. There is only a short window for intervention; however, targeting at this early phase of the offending career may have significant effects in reducing the likelihood of a young offender becoming a career criminal.

Do offenders explain their own criminal careers in terms of illicit drug use?

Criminological theory has posited three explanations for the correlation observed between drugs and crime – drugs lead to crime, crime leads to drug use, or the two co-exist and are caused by any combination of the same factors. Underlying the first explanation is the key issue of causality and how that causal pattern works. Much of the literature refers to two primary links between heroin and property crime, and stimulants and violent crime. Underlying the causal theory for heroin and property crime is that heroin dependency is so overwhelming that 'addicts' are compelled to offend in order to raise money for their addiction. Thus there is an economic rationale that underpins offending and if the person were not dependent the offending behaviour would disappear. A second causal theory is that the drugs affect the chemical composition of the brain, resulting in behaviour that is abnormal. This is usually ascribed to explain the causal link between psycho-stimulants and violent behaviour.

The Drug Use Careers of Offenders study attempted to answer this question by asking offenders to explain, in their own words, the effect of alcohol or drug use on their lifetime criminal activities. Their responses were recorded verbatim and later recoded into a quantitative schema illustrating the proportion of lifetime crime that was associated with drugs or alcohol (see Table 5). Again, as in the previous

	Property offenders (n = 330)	Violent offenders (n = 83)	Multiple offenders (n = 195)	Fraud offenders (n = 100)	Drug sellers (n = 89)	Drug buyers (n = 96)	Homicide offenders (n = 66)	Non- regular offenders (n = 189)
Quantified effect of								
illicit drugs on crim	eα							
0%	28	43	26	34	40	41	50	62
25%	7	8	9	3	6	6	12	7
50%	5	1	3	3	2	5	3	2
75%	34	31	41	32	24	19	18	12
100%	26	16	21	28	27	29	17	17
(Total)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Table 5 Lifetime offending attributions by offender type (%)

^a Exact question wording was: 'In your own words, what has been the effect of your personal alcohol and drug use history on your criminal activities?'

Note: Estimates are for offenders with a lifetime history of drug use.

Source: Australian Institute of Criminology, DUCO Male Survey, 2001

table, the baseline data has only been provided for offenders reporting any lifetime drug use – of cannabis, amphetamine, heroin or cocaine – and those whose attribution could be quantified. There are clear differences in the type of attribution between crime types. Drug using homicide offenders and non-regular offenders are the two crime types least likely to attribute their offending to the effects of illicit drugs, while drug using property offenders, multiple offenders and fraud offenders are most likely to attribute most (75 to 100% of their offending to their personal use of illicit drugs. Not only do different offender types report different drug use prevalence rates, the self-perceived impact of that drug use also varies.

Managing the problem of drugs and crime

In Australia, there have been four main policy responses to the problem of drugs and crime. These include:

- Primary prevention programmes involving early intervention and education;
- Law enforcement aimed at disrupting the supply of illicit drugs to local drug markets;
- Drug treatment programmes pharmacological treatment including methadone maintenance and buprenorphine maintenance; and
- Diversion community corrections orders including coerced drug treatment.

Each of these initiatives makes a valuable contribution to addressing the problem of drugs and crime. The first two, primary prevention and law enforcement, aim at reducing the number of people using illicit drugs, either by reducing the initial uptake of drugs or by reducing the frequency of use. Drug treatment programmes and diversion programmes are aimed at reducing the levels of drug use amongst the identified drug using population, including offenders.

The present study has illustrated three important considerations for policy and practice. Firstly, lifetime prevalence, regular use and lifetime drug attributions vary significantly between offenders of different crime types. Drug treatment and diversion programmes, to be successful, should be cognisant of these differences. Programmes should be designed to include accurate and detailed offender assessment, including the assessment of the lifetime offending and drug use profile – not just the most recent criminal offences. This should be coupled with a detailed assessment of other important social and environmental factors that contribute to the offending cycle. Furthermore, these data suggest that one complicating factor in drug treatment for offenders is that many drug users report the regular use of more than one drug type – most commonly cannabis and amphetamines. Thus treatment programmes focused on only one drug will not adequately address problematic drug abuse and associated behaviours. Moreover, treatment options for cannabis and amphetamines are extremely limited, with no pharmacotherapies currently available on the market.

Secondly, most offenders, with the exception of regular drug sellers, first engaged in offending before the experimentation and subsequent use of illicit drugs. This supports the notion that offenders most often embark on a criminal career before their subsequent involvement in drug use. Illicit drug use is therefore not directly linked to the onset of the criminal career, but to the escalation of offending. Drug treatment and diversion programmes are secondary prevention strategies that on their own will not reduce the supply of new offenders. Programmes that address the multiplicity of other social and environmental factors, in addition to offenders' drug use, are likely to be the most successful. Recent Australian evaluations of the newly developed Drug Court programs have illustrated the benefits of such an approach (Lind et al., 2002; Makkai and Veraar, 2003). These initiatives combine coerced drug abstinence and treatment with various life skills, education and counselling programmes. The results to date indicate that offenders who completed the drug court programmes were less likely to re-offend, but where they did, both the time to re-offending and the frequency of offending was significantly reduced (Makkai and Veraar, 2003).

Finally, to reduce the supply of new offenders, primary prevention strategies are required. These data indicate that interventions need to occur at an early age. Not only had all offenders in this study commenced offending and drug use as a juvenile, but the window of opportunity between first offence and first drug use was limited – approximately two years. Given that most offenders start with minor offending first, early intervention programmes that target drug use may have limited effect on curbing other criminal behaviours. Such interventions must refocus and target the mix factors that predate both offending and drug use. Also, given that crime is becoming intergenerational across families, corrective service agencies that provide post-release interventions should consider specific interventions that target the children of offenders with the aim of breaking the intergenerational transmission of crime.

Discussion

The present study contributes to the growing body of research into drugs and crime, concluding that:

- The majority of offenders have used illicit drugs and were using drugs in the six months prior to their most recent arrest;
- Among offenders who had used illicit drugs, experimentation did not begin until after the commencement of minor offending; and
- Regular offending did not commence until after illicit drug use.

In addition to this, the Drug Use Careers of Offenders study has allowed for more detailed analysis of drug use and offending patterns by developing a crime type that captures the most common offending pattern. There are noticeable differences in drug use between different crime types. Offenders that did not report any regular offending – homicide offenders and non-regular offenders – were less

likely to have used and recently used any drug. Among the regular offenders, regular violent offenders were:

- Less likely to have used and recently used illicit drugs although where they did report use in the six months prior to arrest, the frequency of use was not dissimilar for amphetamines and heroin, and higher for cocaine;
- Delayed in both the onset of offending and regular offending by no less than two years and drug use by average of three years;
- Less likely to attribute drugs or alcohol as a contributing factor in their lifetime offending behaviour; and
- Less likely to have accessed any treatment, particularly detoxification and outpatient counselling services.

Regular multiple offenders self-reported regularly engaging in both violent and property offences. They are of particular interest to criminal justice agencies in that they often report the highest frequency of offending than any other offender type, and the range of offences committed is much more diverse. These offenders:

- Commenced offending and regular offending at the youngest age;
- Were more likely to have been detained as a juvenile; and
- Reported significantly higher lifetime prevalence and recent use of heroin and cocaine.

The differences illustrated between offender types have implications for the management of offenders by the criminal justice system. Firstly, while overall rates of illicit drug use are high among the incarcerated male population, significant variation is evident between offender categories. This has obvious consequences for interventions that fail to take such diversity into account. Secondly, despite the final criminal career path, experimentation with illicit drugs invariably occurred after the commencement of minor offending but before regular offending. These data suggest that drug use may be a factor that contributes to the escalation of offending behaviour but does not totally account for all offending. The implications for policy are therefore threefold:

- Policy instruments and programmes requiring mandatory drug treatment may reduce the frequency of offending, but are in fact unlikely to eliminate offending. This is particularly important where programme and policy evaluation rely on criminal recidivism as a tool to measure programme success;
- Policies that attempt to intervene in the cycle of drug use and offending at a point prior to first illicit drug use must do so at an early age; and
- Criminal justice policy and programmes need to effectively target the different offender types and drug use profiles as a platform for more effective programme implementation and evaluation.

Note

This article does not necessarily reflect the opinion of the Australian Institute of Criminology or the Australian government.

References

- Australian Bureau of Statistics (ABS) (2002) 'Census of Population and Housing 2001: Selected Social and Housing Characteristics', cat. no. 2017. Canberra: Australian Bureau of Statistics.
- Chaiken, M.R. & J.M. Chaiken (1984) 'Offender Types and Public Policy', Crime and Delinquency 30: 195–226.
- Dobinson, I. & P. Ward (1985) Drugs and Crime: A Survey of NSW Prison Property Offenders. Sydney: NSW Bureau of Crime Statistics and Research.
- **Collins, D.J. & H.M. Lapsley** (2002) 'Counting the Cost: Estimates of the Social Costs of Drug Abuse in Australia in 1998–9', National Drug Strategy Monograph Series, No. 49. Canberra: Commonwealth Department of Health and Ageing.
- Farrell, G. (1998) 'Routine Activities and Drug Trafficking: The Case of the Netherlands', International Journal of Drug Policy 9 (1): 21–32.
- Harrison, L. (1997) 'The Validity of Self-reported Drug Use in Survey Research: An Overview and Critique of Research Methods', in L. Harrison & A. Hughes (eds), The Validity of Self-reported Drug Use: Improving the Accuracy of Survey Estimates, pp. 17–36. US Department of Health and Human Services, National Institutes of Health, NIDA Research Monograph 167.
- Indermaur, D. (1995) 'Violent Property Crime in Western Australia', Australian Studies in Criminology. Annandale: Federation Press.
- Inciardi, J.A. (1979) 'Heroin Use and Street Crime', Crime and Delinquency 25: 334–346.
- Johnson, D. (2001) 'Age of Illicit Drug Initiation', Trends and Issues in Crime and Criminal Justice, No. 201. Canberra: Australian Institute of Criminology.
- Lind, B., D. Weatherburn, S. Chen, M. Shanahan, E. Lamcsar, M. Haas &
 R. Lourenco (2002) New South Wales Drug Court Evaluation: Cost-Effectiveness.
 Sydney: New South Wales Bureau of Crime Statistics and Research.
- Makkai, T. (1999) 'Harm Reduction in Australia: Politics, Policy and Public Opinion', in J. Inciardi & L. Harrison (eds), Harm Reduction and Drug Control: Concepts and Policies, pp. 171–192. Thousand Oaks, CA: Sage.
- Makkai, T. & K. McGregor (2002) 'Drugs and Crime: Calculating Attributable Fractions Using the DUMA Project', in D. Collins & H. Lapsley, Counting the Cost: Estimates of the Social Costs of Drug Abuse in Australia 1998–99. National Drug Strategy Monograph Series, No. 49.
- Makkai, T. & J. Payne (2003) 'Drugs and Crime: A Study of Incarcerated Male Offenders', Research and Public Policy Series, No. 52. Canberra: Australian Institute of Criminology.
- Makkai, T. & J. Payne (2003b) 'Key Findings of the Drug Use Careers of Offenders Study', Trends and Issues in Crime and Criminal Justice, No. 52. Canberra: Australian Institute of Criminology.
- Makkai, T. & K. Veraar (2003) 'Final Report on the South East Queensland Drug Court', Technical and Background Paper Series, No. 6. Canberra: Australian Institute of Criminology.

- Milner, L., J. Mouzos & T. Makkai (2004) 'Drug Use Monitoring in Australia (DUMA)', 2003 Annual Report on Drug Use Among Police Detainees. Research and Public Policy Series, No. 58. Canberra: Australian Institute of Criminology.
- Mayhew, P. (2003) 'Counting the Costs of Crime in Australia', Trends & Issues in Crime and Criminal Justice, No. 247. Canberra: Australian Institute of Criminology.
- McGlothlin, W.H., M.D. Anglin & B.D. Wilson (1978) 'Narcotic Addiction and Crime, Criminology 16: 293–315.
- McGregor, K. & T. Makkai (2003) 'Self-reported Drug Use: How Prevalent is Under-reporting?', Trends & Issues in Crime and Criminal Justice, No. 260. Canberra: Australian Institute of Criminology.
- Petersilia, J., P. Greenwood, J. Chaiken & M. Peterson (1978) The RAND Habitual Offender Project: A Summary of Research Findings to Date, P-5957. Santa Monica, CA: The RAND Corporation.
- Peterson, M., H.B. Braiker & S.M. Polich (1981) Who Commits Crime: A Survey of Prison Inmates. Santa Monica, CA: The Rand Corporation.
- Shand, F., L. Topp, S. Darke, T. Makkai & P. Griffiths (2003) 'The Monitoring of Drug Trends in Australia', Drug and Alcohol Review 22: 61–72.
- Taylor, B., H. Brownstein, C. Parry, A. Pluddemann, T. Makkai, T. Bennett & K. Holloway (2003) 'Monitoring the Use of Illicit Drugs in Four Countries through the International Arrestee Drug Abuse Monitoring (I-ADAM) Program', in Criminal Justice: An International Journal of Policy and Practice 3 (3): 269–286.

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