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Women, drug use and
crime: findings from the
Drug Use Monitoring in
Australia program

Wendy Loxley
Kerryn Adams

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Foreword

Although it is well-established that men offend more than women do, there has been little in-depth research conducted to date in Australia that examines the unique characteristics of women offenders. The Australian Institute of Criminology's Drug Use Monitoring in Australia (DUMA) program produces information about male and female police detainees across Australia that has enabled analysis of how women differ from men in terms of alcohol and other drug use and offending and of how different categories of women—women in the general community, Indigenous women, those in contact with police, women in prison—compare, in relation to their self-reported involvement in crime and their use of and dependency on alcohol and other drugs.

Based on analysis of DUMA data in seven urban sites over a six-year period, this report highlights differences between a sample of more than 15,000 men and a sample of nearly 3,000 women interviewed while in police watch-houses and stations. Female police detainees were more socially and occupationally disadvantaged, and just under half of the women were responsible for the care of dependent children. Indigenous women were even further disadvantaged as, compared with the non-Indigenous female detainees, they were likely to be younger, had less education, and were less likely to be employed and more likely to be caring for children and living in public housing.

Compared with male detainees, the females were less likely to have used alcohol heavily in the previous year or to be dependent on alcohol. They had higher rates of illicit drug use (except for cannabis and ecstasy); were more likely to have injected them; and had high rates of dependency

on illicit drugs. In the year preceding their participation in the study, more than half of the female detainees had used amphetamine/methylamphetamine; a quarter, heroin; and 16 percent, benzodiazepines. Many believed they had been dependent, in that period, on these drugs, with a fifth stating they were dependent on cannabis; just under a fifth, on an amphetamine/methylamphetamine; and 15 percent, on heroin. Only women prisoners had higher rates of self-perceived dependency.

Female detainees were more likely than male ones to attribute their crime to illicit drug use, and many women had become regular users of illicit drugs prior to their first arrest, which occurred on average at the age of 21. In general it seems that the association between drug use and criminal activity is stronger in women than in men. The use of illicit drugs was associated, particularly in female detainees, with property offending. Alcohol use is more likely to be associated with violent crime than with other crimes, and regular and dependent alcohol use increased women's likelihood of being involved in violent offending, although not to the same extent as it did men's. Indigenous female detainees appear more likely to have high levels of alcohol use and of violent offending than do non-Indigenous female detainees.

The report underlines how important it is to develop drug-demand and harm-reduction interventions for women through the criminal justice system. Even though females constitute the minority of offenders, this study shows that most have poor socioeconomic status, many have dependent children and many have complex and multiple needs related to problematic drug use and mental-health issues.

The results suggest that early intervention that addresses drug use by women when they first have contact with the criminal justice system will reduce the likelihood of their becoming long-term and persistent property offenders and of their being imprisoned in future years. Quite specific strategies and prevention initiatives need to be developed for Indigenous women who have contact with the criminal justice system. We also need research that is more fine-grained in exploring differences among women and girls' drug and offending patterns and their take-up of and positive response to crime-prevention and drug-specific interventions such as treatment and education.

Judy Putt

General manager, Research

Australian Institute of Criminology

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Executive summary

It is generally recognised that men and women have distinct pathways into crime and have different motivations for committing it. Much of this research highlights the prominent role of drug use in females' offending: a more central involvement than is found in men. Research with female offenders consistently points towards their psychosocial disadvantage. Many female prisoners in the United Kingdom, the United States and Australia have grown up in state care or difficult family circumstances; have lived in poverty; have had limited education and training opportunities; have experienced physical and/or sexual abuse as adults or children; are sole parents and rely on government benefits as a source of income; or have a history of drug abuse.

Though understanding of women's offending has improved, most of these more recent studies have been conducted internationally, and there have been few in-depth, large-scale projects that monitor and examine crime and drug use by women in Australia. Past Australian research on the relationship between drug use and offending has largely examined small-scale samples of incarcerated male offenders within specific jurisdictions.

Using data from the Drug Use Monitoring in Australia (DUMA) program and Drug Use Careers of Offenders (DUCO) study, the present report seeks to investigate the relationship between drug use and crime, illuminating gender differences among three different samples: police detainees (DUMA), prisoners (DUCO) and the Australian population (through the National Drug Strategy Household Survey and census data). It compares female and male police detainees, but, mindful that patterns of drug use may differ between incarcerated offenders and detained suspects, it also compares female police detainees with female prisoners. Differences in drug use and offending patterns by Indigenous

and non-Indigenous female police detainees are also examined.

This report addresses three major research questions:

1. Are the factors associated with women's drug use and/or criminal behaviour similar to those associated with men's?
2. To what extent are women in police detention similar to or different from women in prison?
3. To what extent are Indigenous women in DUMA similar to or different from non-Indigenous women in DUMA?

Results

The results of this investigation relate to data collected between the second quarter of 2002 and the end of 2006, from police stations and watch-houses at the DUMA sites of Bankstown, Parramatta, Southport, Brisbane, East Perth, Adelaide and Elizabeth. In this period, 17,858 detainees provided information about their offending and drug-using behaviour: 2,813 (15.8%) females and 15,045 (84.2%) males.

Socio-demographic characteristics of female detainees

Female police detainees were more socially and occupationally disadvantaged than male detainees and considerably more socially and occupationally disadvantaged than women in the general community. Just under half of the female detainees were responsible for the care of dependent children. The average age of male and female detainees was the same (30 years).

Current and recent offending

Female detainees were more likely than male detainees to have a property offence as their most serious offence (MSO) and less likely than women prisoners in DUCO to have a violent offence. It is not surprising that female prisoners were more likely to have a more serious offence than female police detainees given that serious offences are more likely to result in imprisonment (ABS 2007b).

Few police detainees admitted to deriving income from illegal sources, but, of those who did, women were more likely to admit to deriving income from sex work and shoplifting than men and less likely than men to admit to deriving income from drug crime.

Female police detainees were slightly less likely than men to have been arrested in the previous year. These previous arrests were generally for offences similar to the current offence and, again, men were more likely to have a violent MSO than women. Women were also slightly less likely than men to have been incarcerated during the previous year. Few female or male detainees had been imprisoned for drug offences.

Alcohol and other drug use and dependence

Women and men in DUMA had different rates of alcohol and other drug (AOD) use, with women favouring drugs such as amphetamine/methylamphetamine, heroin, benzodiazepines, street methadone and morphine and more likely than men to have injected them in the previous year. Male police detainees were more likely to consume alcohol and use drugs such as cannabis and ecstasy than were female police detainees. Up to 60 percent of women who had tried alcohol and/or illicit drugs progressed from lifetime use (ever trying alcohol and/or illicit drugs) to recent use (in the past year). All illicit drugs other than cannabis were more likely to have been used recently by female prisoners in DUCO than by female police detainees.

There is no similarity between rates of illicit drug use in the general community and in DUMA, although alcohol rates are not dissimilar. Illicit drug use is very much a minority behaviour in the general community; although more than 40 percent of women in DUMA

had used illicit drugs at least once, and almost 60 percent of women reported using cannabis and amphetamine/methylamphetamine recently, fewer than 10 percent of women in the general community had. In DUMA, between 2002 and 2006, women decreased heroin use only, whereas cannabis and heroin use by women in the general community decreased considerably over a similar period.

High rates of AOD dependence were found among female police detainees, particularly upon illicit drugs. These rates are much higher than those found in the general community, but not as high as those found among the women prisoners in DUCO.

Alcohol and crime

The following summarises the findings about female police detainees' alcohol consumption:

- Women were less likely than men to have used alcohol heavily in the previous 12 months or to be dependent on alcohol.
- Women and men initiated regular use of alcohol at much the same age, and regular use of alcohol pre-dated average age of first arrest in both women and men.
- Regular and dependent alcohol use increased the likelihood of women being involved in violent offending, although not to the same extent as men.
- Indigenous female detainees were more likely to have used alcohol and/or cannabis and less likely to have used other illicit drugs than non-Indigenous women in the previous 12 months.

It seems clear, therefore, that alcohol is associated with violent offending in women, as it is in men, but perhaps not to the same extent. In particular, Indigenous female detainees appear to be more likely to consume alcohol and to display higher levels of violent offending than non-Indigenous women. Alcohol dependence does not appear to be associated with property offending in Indigenous women, although illicit drug dependence is, as it is in non-Indigenous women.

Drug use and crime

Associations between drug use and crime were different for women and men in DUMA. As noted above, women tended to use some drugs more

frequently than men did, and these were often injectable drugs such as amphetamine/methylamphetamine or heroin. Women's regular drug use and their entry into apprehended crime also tended to occur later in their lives than men's. Many women were already involved in regular illicit drug use by the time they came to the attention of police. Men, on the other hand, were more likely to be using alcohol and cannabis on a regular basis but not yet other illicit drugs by the time they were first apprehended for crime.

The women in this study were more likely than the men to attribute their crime to their illicit drug use. Female police detainees were also more likely than men to be using illicit drugs before the most recent arrest and before offences committed in the previous 12 months. Dependence on illicit drugs was positively associated with women's drug-related activity at the time of arrest.

Women's MSOs were most likely to be property offences, and men's MSOs were more likely to be violent offences. The use of alcohol, generally associated with violent offences, and of illicit drugs, generally associated with property offences, mediated this for all detainees: women who were dependent on alcohol were unique in being more likely to be charged with violent offences than with other offence types. These findings are not dissimilar to those comparing women and men in the DUCO studies.

The association between drug use and criminal activity may be stronger in women than in men. Results from the DUMA data show that the average age of first arrest for women is significantly greater than the average age of first arrest for men and that many women had become regular users of illicit drugs prior to their first arrest. Furthermore, use of alcohol was associated, particularly in male detainees, with violent offending, and use of illicit drugs was associated, particularly in female detainees, with property offending.

Lest these relationships should be thought to be simple, however, it is important to note that some research demonstrates significant complexity and variation in the ways in which women engage in both criminal activity and illicit drug use.

Indigenous women

Although female police detainees in DUMA demonstrated significant social disadvantage compared with both women in the general community and male detainees, Indigenous women suffered even further disadvantage. They were younger, had less education, were more likely to be caring for children and to be living in public housing, and were less likely to be employed than non-Indigenous women.

Other differences between the Indigenous and non-Indigenous women in the study include the nature of the detainable offence and AOD use. Indigenous women were more likely to have been charged with violent or disorderly offences or breaches of good order and were more likely to have been imprisoned in the previous 12 months.

The profile of alcohol and drug use by Indigenous women detainees was very different from that of non-Indigenous ones. Indigenous women were the more likely to have used alcohol or cannabis, while non-Indigenous women were more likely to have used illicit drugs such as heroin and cocaine. Importantly, Indigenous women were the more likely to be dependent on alcohol or combined alcohol and illicit drug use. Forty percent were dependent on alcohol.

A higher percentage of Indigenous than of non-Indigenous women had been drinking alcohol just prior to the most recent arrest, and relationships between alcohol dependence and violent crime in both Indigenous and non-Indigenous women were demonstrated. The effect was stronger in Indigenous women.

These findings are similar to those of the DUCO women's study: Indigenous women were more likely than non-Indigenous women to be involved in violent offending and less likely to be involved in drug crime. They were more likely than others to have used alcohol and to be alcohol-dependent.

Drug and alcohol treatment

Female police detainees were significantly more likely than male ones to report both current and prior involvement in a drug or alcohol treatment program. Indigenous women were less likely to report being in a treatment program than non-Indigenous women

were. Both women and men were most likely to report that heroin was the main substance for which they were currently seeking treatment. In support of this, the most common type of current treatment program entered by those in both groups was methadone maintenance.

Male detainees were the more likely to have entered a treatment program because of a drug court requirement, perhaps reflecting stricter eligibility criteria for entering such programs. Women detainees were more likely than were men to report having been turned away from a treatment program in the past 12 months due to a lack of places.

Mental health issues

DUMA police detainees registered much higher levels of psychological distress than the general population. Female detainees were also significantly more likely than male detainees to register high levels of psychological distress, and this was particularly the case for Indigenous women.

Mental health problems were more often related to drug use than to contact with the criminal justice system, with police detainees dependent concurrently on drugs and alcohol registering the highest levels of psychological distress.

Conclusion

Findings were discussed in relation to the three major research questions under investigation, and some of the implications for research and practice were considered. The trajectories towards drug use and/or criminal behaviour appear to be different among female police detainees in DUMA from those of men. In support of past research, female police detainees were the more likely to be using illicit drugs on a regular basis prior to their first involvement with the criminal justice system, while the opposite pattern was found for male police detainees (many were using alcohol and cannabis on a regular basis but not yet other harder illicit substances). Therefore, it appears that the explanatory model most applicable to women among the DUMA sample is that drug use leads to crime, while for males, it is more likely that crime leads to drug use or that the two occur in a similar period.

Given the marked gender differences, it is unlikely that a literature based predominantly on male criminal behaviour would be able to reflect the realities of women's drug use and criminal behaviour. Further research into the relationship between female drug use and criminal offending is needed, but at the very least it can be said that some drug-using women would profit from services to help them to deal with their drug use before they become deeply enmeshed in the criminal justice system.

Comparison of women police detainees in DUMA with women prisoners in DUCO suggests that some detainees may be at an early stage of criminal careers that culminate in imprisonment. As other research studies have done, this report suggests the important role that programs delivered in prison can play in addressing prisoners' social disadvantage and drug use. It may be possible to offer similar programs to women detained by police or at risk of involvement in the criminal justice system. Recognising the need for women to have access to employment and adequate housing, educational success or attainment, occupational training, and other programs designed to reduce social disadvantage is of critical importance.

Indigenous women were the most socially disadvantaged of all classes of DUMA police detainees. They used alcohol heavily; were the most likely to be involved in violent crime; and were the most likely to be involved in relatively minor disorderly offences or offences against good order, some of which may have been related to alcohol use. The reduction of inter-generational social disadvantage and the engagement of alcohol- and drug-dependence offenders in drug treatment programs are therefore particularly relevant to this group of detainees; but it is important that such targeted approaches be culturally appropriate and sensitive to the needs of Indigenous women.

It is important that there be further research in this area, to provide policymakers, practitioners and the public with a better understanding of the differences between men and women drug users and offenders. In particular, further research could explore whether there are any significant differences in the profiles of women who use different types of drugs or who are involved in different types of offending in terms of the relationship between their drug use and offending behaviour.



Introduction

Traditionally, the relationship between gender and crime has been a neglected area within the discipline of criminology. There has been a tendency for studies either to examine crime in relation to men, to aggregate findings across gender, or to briefly discuss female criminality in terms of women representing a different or 'special' category of offender (Brown 1986). This neglect appears to have transpired because female offenders comprise a much smaller sub-group of offenders than males and therefore do not seem to warrant as much discussion, or because there are limited data for such an analysis (Willis & Rushforth 2003). It has also been suggested that the neglect of female criminality within the discipline of criminology occurred because the predominantly non-violent offences committed by women did not pose as significant a problem to society in terms of threat, social control, and recidivism as those committed by men (Smart 1977). The rise of the women's movement in the 1970s, however, meant that feminists identified this neglect and began to examine female patterns of crime (Smart 1977).

While understanding of women's offending has improved, most of the recent studies have been conducted internationally, and there have been few in-depth, large-scale projects that monitor and examine crime and drug use by women in Australia.

Past Australian research on the relationship between drug use and offending has largely examined small samples of incarcerated male offenders within specific jurisdictions.

A recent study addressing this issue is the Drug Use Careers of Offenders (DUCO) study, funded by the National Illicit Drugs Strategy and managed by the Australian Institute of Criminology (AIC). This cross-sectional study, consisting of three components, has examined drug use and crime among prisoners in various Australian jurisdictions, commencing with male prisoners, proceeding to female prisoners and concluding with juvenile offenders. Four hundred and seven incarcerated women in prisons in South Australia, Western Australia, Victoria, Queensland, Tasmania, and the Northern Territory were interviewed during 2003 as part of the DUCO study (Johnson 2004).

Another major initiative managed by the AIC is the Drug Use Monitoring in Australia (DUMA) program. This research involves interviewing police detainees in watch-houses and police stations in most Australian jurisdictions every three months. It has been running since 1999 and has accumulated an impressive database, including administrative information about police detainees, results from voluntary urine samples tested for evidence of use

of a variety of illicit substances, and responses to a detailed questionnaire. The majority of the police detainees are men, but detained women and juveniles are also included (Makkai 1999).

The present report presents information about detained women who participated in the DUMA program, collated from self-report data and administrative information about the offences for which they were detained. One important question underlying the analyses is whether the trajectories of women towards drug use and/or criminal behaviour are similar to those of men. Much criminal justice literature is developed from a male perspective, and it is important to establish whether the processes that lead women to crime are similar to or different from those leading men. Some literature suggests that although women are less likely than men to be drug users and/or criminals, the role of drugs in women's involvement with the criminal justice system differs from their role in men's (Johnson 2004). This report will therefore compare female and male police detainees from DUMA.

Mindful that patterns of drug use may differ between incarcerated offenders and those who engage in criminal behaviour but are not incarcerated (Harrison 1992), the report also compares women police detainees from DUMA with women prisoners from DUCO. If women police detainees are sufficiently similar to the women prisoners, it may suggest that they are in early phases of criminal careers that, left without any intervention, may lead to incarceration. On the other hand, it is possible that women who are detained by police for allegedly committing an offence are different from those who have been found (or have pleaded) guilty and been imprisoned. The implications for research and practice may vary between these two extremes.

The third major question underlying this report is the extent to which Indigenous women in DUMA are similar to their non-Indigenous counterparts. A report comparing Indigenous and non-Indigenous male police detainees from DUMA found that male Indigenous detainees reported higher levels of use of and dependency on alcohol and cannabis than non-Indigenous ones and were therefore more likely to attribute their offending to alcohol than to illegal drugs (Putt, Payne & Milner 2005). Indigenous men were younger on average, reported lower levels

of education, and were less likely to have been employed than non-Indigenous men. The study concluded that the criminal justice system provided a unique window for developing and implementing specific Indigenous interventions at the local level. The present paper undertakes a similar comparison of Indigenous and non-Indigenous women police detainees from DUMA, with a view to establishing which, if any, interventions to reduce offending by Indigenous women would be appropriate.

Women, drugs and crime

Early explanations of female criminality centred upon biological determinism. In *The female offender* (1895), Lombroso and Ferrero were among the first to contend that it was the different biological nature of women that protected them against criminality. They claimed that women as a group were not disposed to criminality as were men and that it was the 'natural passivity' of women that protected them against resorting to criminality. In addition, they noted that while female offenders were rare, those who did turn to crime were born that way (Lombroso & Ferrero 1895).

About 70 years later, Pollak (1961) used a similar theory to explain criminality among women. Pollak suggested that women were irrational and passive relative to men and that women were better placed to commit crime because of their inherently devious and manipulative nature. He also argued that female criminals tended to be hidden because the types of criminal offences perpetrated by women were less visible, predominantly taking place in the private, domestic sphere. Furthermore, his 'chivalry hypothesis', which gained widespread acceptance at the time, suggested that women were treated more leniently than men by criminal justice officials because of the reluctance of men in power to view women as criminals.

These early theories on female criminality have largely been dismissed as 'sexist', 'outdated' and 'inaccurate' (Chesney-Lind 1997; Smart 1977; Tyler 1997). Researchers now recognise that men and women tend to have distinctive pathways into crime and have different motivations for committing crime. Much of this research particularly highlights the prominent role of drug use in females' offending.

Compared with men, female offenders have been portrayed as 'doubly deviant' because their offending and drug use transgress both the law and social norms regarding appropriate femininity (Broom 1994). Such norms expect women to conform to standards of the 'good woman' by adopting the appropriate feminine characteristics, such as being passive, respectable and subordinate to men, being a good housewife and mother, and avoiding heavy use of alcohol and of drugs (Ettorre 1992; Maher 1995). Nonetheless, stereotypes of female offenders and drug users abound in the research literature. Female offenders have been depicted as evil, mad, cunning, passive sexual deviants, un-maternal and dependent on men (Denton 2001; Ettorre 1992; Sargent 1992). In contrast, male offenders have been portrayed as resourceful, naturally aggressive, rational, and choosing to pursue an alternative career in criminality in response to limited legitimate opportunities (Hutton 2005; Maher & Daly 1996; White & Habibis 2005).

Goldstein's tripartite framework (1985), which describes the relationship between drug use and offending behaviour, outlines three ways in which drug use and crime can interact. First, drug use can lead to crime as a result of the pharmacological properties of drugs, the need to make money to obtain drugs, or the systemic violence associated with the drug economy. Second, crime can lead to drug use when individuals who commit crime are exposed to social situations in which drugs are used and drug use is encouraged. Third, drug use and crime are not causally related but both result from other factors such as poverty, sexual and physical abuse, and lack of educational and employment opportunities.

Studies of female prisoners in the United Kingdom (Carlen 1988), the United States (Chesney-Lind 1997) and Australia (Johnson 2004) have consistently found that women prisoners share a number of common characteristics. The majority have grown up in state care or difficult family circumstances and have lived in poverty; few have completed their high school education or had the opportunity to undergo training to pursue legitimate employment opportunities; many have experienced physical and/or sexual abuse as adults or children; some come from situations of homelessness or

inadequate housing; many are sole parents and, due to unemployment, rely on government benefits as a source of income; and many have a history of drug abuse.

Much research with female offenders points towards their prior victimisation. Some researchers suggest that in order to understand women's involvement in the criminal justice system as offenders, one must also recognise their status as victims (White & Habibis 2005). One study found that negative family experience, including childhood exposure to drug and/or alcohol use by family members and friends, was one of the main factors associated with women's offending and drug use (Johnson 2006a). It has also been found that a significant proportion of female offenders have a history of both physical and sexual abuse as adults or children and that women are more likely than men to suffer from mental health problems such as depression and low self-esteem (Johnson 2006b). Women's roles within society as mothers and carers compound these problems, and some suggest that they turn to drug use and offending as a way to cope with the daily demands of their domestic lifestyle (Taylor 1993). It is also suggested that for some women, drug use provides an opportunity to escape the daily rituals associated with domesticity by providing a 'lifestyle which has meaning, structure, and purpose' in the public sphere (Taylor 1993: 157).

Women's drug use and crime are typically considered within the context of domesticity, sexuality, and pathology (Denton 2001; Hatty 1993). Women are seen as resorting to drug use and particular types of crime in response to their gender role and social circumstances (Sargent 1992; White & Habibis 2005). The salient factor for female criminal and drug involvement may be the influence of a male spouse or sexual partner (Holloway & Bennett 2007). More-recent studies of female drug users involved in crime have begun to challenge these stereotypes, however, particularly in terms of women's choices leading to involvement in drug use and crime (Denton 2001; Maher 1995). Some women involved in drug use and offending may have chosen this lifestyle rather than having been forced into it by a male spouse/partner or by circumstance (Denton 2001; Hutton 2005; Maher 1995).

It is well established that there is a relationship between women's drug and alcohol use and crime (Willis & Rushforth 2003), and drug use appears to be more central to women's involvement in crime than it is to men's (Fagan 1994; Holloway & Bennett 2007; Johnson 2004; White & Gorman 2000). The link between drug use and crime may, however, be more complex than its usual portrayal. Female offenders who use drugs do not comprise a homogeneous group, and a number of factors need to be taken into account to explain their involvement in offending and drug use, including socio-demographic characteristics and labour market forces (Maher et al. 2002; Maher & Daly 1996). It is not inevitable that drug users will become involved in crime, as many sustain their drug use through legal means. It is the availability of opportunities for income-generation and the ability to adapt to changing social and economic environments that are important in understanding women's involvement in crime (Maher et al. 2002).

A large number of studies of female offending have focused on women's sexuality and involvement in prostitution and drug use. Generally, women have been found to be more likely than men to resort to prostitution to fund their drug habits (Hser, Anglin & Chou 1992). In a major ethnographic study of users of heroin and crack cocaine in several New York neighbourhoods in the late 1980s and early 1990s, Maher and colleagues (1996; 1992) found that there was a strong link between women's offending, particularly prostitution, and drug use.

Some other researchers, however, have questioned some common findings regarding the relationship between drug use and criminal activity in Australian women. Early literature had suggested that women were only motivated to commit crime to pay for their drugs; that is, that offending only occurred to pay for drugs or act as a safety net against the need to resort to prostitution to raise money for drugs. Denton & O'Malley (2001) point out that it is important to take into account which women

are included in the research study. They suggest that among their sample of more-successful female drug dealers, many engage in crime not driven by their need for drugs or as a way to protect against involvement in prostitution, but rather for a variety of other reasons, including the desire for excitement and status. There had also been an assumption that drug dealing and distribution networks were 'a man's world' and that women involved in this world were abnormal or somehow different from other women. An ethnographic study of female drug dealers in Melbourne in the 1990s, however, found that women were able to break into the drug economy and could become successful in their own right without the need to resort to aggression or rely on a male for support (Denton & O'Malley 2001).

Denton and O'Malley (2001) found that some successful female drug dealers committed property crime for a range of reasons, including the generation of income integral to the business of drug dealing. Most of these women were involved in the drug scene before becoming involved in frequent or serious criminal activity, but many had also participated in property crime in a more minor way prior to entering the drug economy. Thus, no simple assumptions about the sequencing of drugs and crime could be made, and the nexus between property and drug offending was said to be 'complex and variable'.

Given these various findings in the Australian and international research literature on the relationship between drug use and crime by women, the aim of this study is to explore the relationship further in a large group of female police detainees from across Australia. It is hoped that the study can further illuminate the relationship between drug use and criminal behaviour in men and women by comparing the patterns of the two sexes and by providing additional information on some of the key factors contributing to their involvement in the drug scene and initiation into crime.



Methodology

The results reported below relate to administrative and self-report data collected for DUMA from the second quarter of 2002 to the end of 2006 (19 quarters). This period was selected because three of the seven DUMA sites only came on-stream at the beginning of 2002 and full data collection was established by the beginning of the second quarter of that year. Data have been collected from sites in New South Wales (Bankstown and Parramatta Police Stations), Queensland (Southport and Brisbane Watchhouses), Western Australia (East Perth Watchhouse), and South Australia (Adelaide Watchhouse and Elizabeth Police Station).

There are two parts to the information collected: a questionnaire administered by an interviewer independent of the police and a urine sample that is tested for seven different classes of drugs. Information collected from the questionnaire includes basic demographic data, drug use history, drug market information, treatment history, and information on prior contact with the criminal justice system. Both the information supplied by the police detainee in the questionnaire and the urine sample are completely voluntary and confidential, and neither can be linked back to the detainee.

Clinical assessments of alcohol and drug dependency among the police detainees and prisoners participating in the DUMA and DUCO

studies are not based on DSM-IV dependency criteria. Instead, at the beginning of 2004, the DUMA questionnaire introduced a scale based on a series of questions about problems associated with drug and alcohol use. Because of the later introduction of the scale, data based on these questions are not available for the full sample of police detainees described in this paper.

Detainees who answered 'yes' to any three of the following six questions, which were asked separately for drug and alcohol use, were classified as dependent:

In the past 12 months...

- Have you spent more time drinking alcohol / using illegal drugs than you intended?
- Have you neglected some of your usual responsibilities because of using alcohol or illegal drugs?
- Have you wanted to cut down on your alcohol consumption or drug use?
- Has anyone objected to your use of alcohol or illegal drugs?
- Have you frequently found yourself thinking about drinking alcohol or using illegal drugs?
- Have you used alcohol or illegal drugs to relieve feelings such as unhappiness, anger or boredom?

This six-item scale is a refined subset of a range of screening items for use in determining the prevalence of alcohol and drug involvement (Hoffman et al. 2003). The scale is referred to by the acronym 'UNCOPE'. Analysis undertaken on responses provided by women prisoners participating in DUCO revealed a high level of internal consistency between the items (Johnson 2004).

Perceptions of dependence on individual drug classes were also assessed. The full sample were asked whether in the previous 12 months they had felt they 'needed or were dependent on' different drug classes. Because this method did not directly assess the level of dependence or need, and detainees could have felt dependent on other drug classes not mentioned here, this variable has been characterised as 'perceived dependence'.

In the DUMA interview, police detainees are asked to provide details on their alcohol and other drug (AOD) use in terms of lifetime use of individual drug classes, use in the past 12 months, and use in the past 48 hours. Use in the past 12 months has been selected as the major measure for this report, as other measures such as dependence and injecting behaviour also relate to the previous 12 months. Throughout the report, lifetime drug use is defined

as ever reporting use of alcohol or illicit drugs in one's lifetime. Recent alcohol use is defined, in women, as consuming three or more drinks in a single day in the past 12 months; in men, five or more drinks in a single day in the past 12 months. Recent illicit drug use is defined as use of drugs on at least one occasion in the past 12 months. It is acknowledged that in some instances, police detainees may have only used a drug on one or two occasions in the past 12 months and that therefore their drug use would not be defined as regular. Questions about use of inhalants were not asked until 2004–05 and have been omitted from these analyses.

Almost all detainees were charged with a variety of offences during their current detention. The Australian Bureau of Statistics' (ABS) Australian Standard Offence Classification scheme (ASOC) (1997) is used by the Australian Institute of Criminology to assign charges to eight categories, which are, in decreasing order of seriousness: violent, property, drug, drink driving, traffic or disorder offences, breaches and other. In this scheme, police detainees are assigned to the most serious of the current charges' categories. Thus, if the person has been charged with a violent offence and a property offence, the violent offence will take precedence.

Results

This paper refers to adults only. In this period, there were 17,861 police detainees who provided information about their offending and drug-using behaviour, of whom 2,813 (15.8%) were females and 15,045 (84.2%) were males. Three police detainees did not specify their gender, leaving 17,858 detainees in most analyses. The proportions of female detainees interviewed at each of the sites in the five-year period were similar, ranging from 13.3 percent in Southport to 17.9 percent in East Perth.

Socio-demographic characteristics

It is well-established that women in criminal justice populations are generally socially disadvantaged (Willis & Rushforth 2003). Johnson (2004) noted that women prisoners in DUCO were younger than the general adult female population, were more likely to be single, had lower education levels than Australian women generally and were relatively impoverished. A profile of women in Western Australian prisons in 2002 found that often they had not received a basic education, with only 40 percent having completed schooling up to year nine (Community and Juvenile Justice Division 2002).

In the following section, female police detainees from DUMA are compared with male police detainees on a variety of socio-demographic characteristics to discern any sex differences in relation to the level of disadvantage. Female police detainees are then briefly compared with women in the general community.

Table 1 shows that female police detainees were significantly more likely than male detainees to:

- have dependent children living at home,
- be living in public housing,
- be full-time homemakers,
- acquire income from family and friends, or
- acquire income from welfare

and less likely to:

- be single,
- have completed schooling to year 10 or beyond,
- be working or seeking work, or
- derive an income from employment.

Just over half of the women were single, and nearly a quarter were in de facto relationships. Few were married, but nearly 16 percent were divorced or separated, and approximately two percent were widowed. More than half (53%) did not have the care of dependent children; those who did had an average of 2.1 children (median 2, mode 1, range

Table 1 Selected demographic and income characteristics of police detainees, by gender (percent)

	Women	Men	Combined	(Number)
Mean age (years)	30.1	30.2	30.2	17,858
No more than year 10 schooling*	46.9	49.1	48.8	17,847
Single*	52.3	57.2	56.4	17,855
Dependent children in home*	46.5	30.0	32.6	17,848
Last month domicile				17,847
Living in house / flat	88.1	87.6	87.7	
Living in other accommodation	11.9	12.4	12.3	
Public housing*	33.8	22.6	24.4	16,351
Employment*				17,851
Working full-time	8.6	29.5	26.3	
Working part-time	9.5	11.9	11.6	
Unemployed and seeking work	24.8	31.0	30.1	
Not in work force	57.1	27.5	32.1	
Non-criminal sources of income				
Income from family/friends*	30.8	27.9	28.3	17,170
Income from welfare**	84.6	61.2	64.9	17,174
Income from full-time job**	9.3	31.1	27.7	17,168
Income from part-time job**	14.5	23.0	21.7	17,170

*p < .05

**p < .001

Source: AIC DUMA collection 2002–2006 [computer file]

1–15). By comparison, only 30 percent of men were responsible for the care of children, but those men with children in their care were responsible on average for a similar number.

Demographic data about women in the general community are available from the 2006 Census (ABS 2007a). Data on employment patterns are only available at present from the 2001 Census (ABS 2006a). Table 2 presents a comparison of female police detainees with the 2006 Census figures for women in the general community. It should be noted that the two samples (female police detainees and women in the general population) are likely to differ in age distribution and not be directly comparable, as women in the general population are usually older than women in the DUMA sample. This may have had some effect on the results below.

Female police detainees were far more likely than women in the general community to have had less than 11 years of education and to be living in public housing but less likely to have dependent children

Table 2 Demographic characteristics of female police detainees and of the general female population (percent)

	Female police detainees ^a	Women in general population
No more than Year 10 schooling	47	23 ^b
Living in public housing	34	4 ^b
Dependent children in home	47	54 ^b
Employment		
Working full-time	9	25 ^c
Working part-time	10	23 ^c
Unemployed and seeking work	25	4 ^c
Not in work force	57	47 ^c

a: Source: AIC DUMA collection 2002–2006 [computer file]

b: Source: 2006 Census (ABS 2007a)

c: Source: 2001 Census (ABS 2006a)

at home. Comparisons with the 2001 Census show that female police detainees were less likely than women in the general community to be working full time or part time and more likely than they were to be unemployed and seeking work or not to be in the work force.

Summary

Female police detainees were more socially and occupationally disadvantaged than male detainees and considerably more socially and occupationally disadvantaged than women in the general community. This is consistent with the literature, which shows that women in criminal justice populations tend to be socially disadvantaged.

Current and recent offending

International and Australian research has consistently found that female offenders are more likely than male ones to be involved in offences such as shoplifting, fraud, and receiving stolen goods. For example, Holloway and Bennett's (2007) analysis of arrestees in the UK found that women were significantly more likely than men to have been arrested for shoplifting, theft from a person, or fraud and prostitution offences, while vehicle theft, burglary, and drug-supply offences were the most common offence types for male arrestees. Australian women are also more likely to become involved in non-violent property offending and drug dealing and far less likely to be involved in violent offending than men are (Maher et al. 2002).

The variation between male and female offending patterns largely relates to men's greater propensity to be involved in violent crime. Some researchers proposed that the increased liberation of women in modern society would lead women to commit more crime, in particular, violent crime (Adler 1975). This became better known as the 'emancipation thesis'. It was suggested that there would be a convergence of male and female patterns of offending in response to the increased equality and emancipation of women in society. Many researchers dismissed this idea, but some recent research has begun to show changing patterns in women's offending. There

have been a number of studies that have found an increasing number of women imprisoned for violent offences. Some researchers argue that it is not increased opportunities available to women that have led to their increased involvement in crime but a number of other factors, such as increasing drug use; poverty; and changes in types of offences committed such as credit card fraud (White & Habibis 2005) and an increase in the number of women arrested for drug use.

Although an increasing number of studies in recent years have focused on women's drug use and criminal behaviour, it is important to look at drug use and offending patterns in different populations of women (Johnson 2004). For example, it is pertinent to ask whether differentiation from men applies to female police detainees as it does to female prisoners. Whether female police detainees are less likely than male detainees to be involved in violent crime, or to have different criminal histories, is considered in the following section.

The present report makes comparisons also between women police detainees in DUMA and women prisoners in DUCO. Of women prisoners in the DUCO study, similar proportions (one in three) had been imprisoned for violent as for property offences, with 14 percent imprisoned for drug offences and fewer for other offence categories. Women prisoners reported property offences as their most common previous offence type (73%), with drug offences a close second (69%) (Johnson 2004).

Police detainees from DUMA were detained for a variety of offences. The percentage of men and of women detained for each category of most serious offence (MSO) can be seen in Table 3, in order of decreasing seriousness. Charges are assigned to one of eight categories, based on the ASOC scheme, and the charge falling into the most serious charge category is the MSO (see Methodology section).

The two most prevalent MSO categories for both male and female police detainees were property and violent offences. Women were more than twice as likely to be charged with a property offence as with a violent offence; men were slightly more likely to be charged with a property offence than with a violent offence. The third-most prevalent category for both women and men, with similar proportions of each, was breaches of legal orders (e.g. breach of bail and

Table 3 Most serious detainable offence, by gender** (percent)

Most serious offence	Women	Men	Combined
Violent	17.5	25.9	24.6
Property	40.3	26.7	28.9
Drugs	6.9	6.2	6.3
Drink-driving	2.7	4.8	4.5
Traffic	8.5	10.2	9.9
Disorder	6.2	6.2	6.2
Breaches	13.0	15.8	15.4
Other	5.1	4.1	4.3
Total	100	100	100

n = 17,689 (14,895 males and 2,794 females)

** p < .001

Note: total percentages deviate from 100 due to rounding error

Source: AIC DUMA collection 2002–2006 [computer file]

other justice orders). Women were less likely (11%) than men (15%) to have been charged with road (drink-driving or traffic) offences. Similar proportions of men and women had a drug offence as their MSO.

Police detainees were asked about income from various criminal activities. Table 4 shows that female detainees were significantly more likely to derive income from sex work and shoplifting than were male detainees and less likely to derive income from drug crime. It should be noted, however, that fewer than 13 percent of detainees of either gender admitted to obtaining income from any of these sources.

Just over half (57%) of all detainees had been arrested in the previous year. The average number of times that detainees reported having been arrested was 3.7 (median 2, mode 1). Slightly fewer women (55%) than men (57%) had been arrested, but there were no significant differences between female detainees' average number of arrests and males'. The MSOs of arrests in the previous 12 months are shown in Table 5.

As with the current charge (Table 3), property and violent offences were the two most prevalent categories, although women were almost three times as likely to have been charged with property offences as with violent offences. Men were slightly more likely to have been charged with property offences than with violent offences. Traffic offences

Table 4 Derivation of income from various criminal activities, by gender (percent)

	Women	Men	Combined	(Number)
Income from sex work**	6.4	0.7	1.6	17,163
Income from shoplifting**	12.7	6.7	7.7	17,154
Income from drug crime* ^a	9.7	11.1	10.9	17,144
Income from other crime	10.2	10.8	10.7	17,133

*p < .05

** p < .001

a: Includes income from drug dealing, manufacturing and transportation

Source: AIC DUMA collection 2002–2006 [computer file]

Table 5 Most serious offence arrested for in the previous 12 months, by gender** (percent)

Most serious offence	Women	Men	Combined
Violent	15.6	26.1	24.5
Property	44.3	29.3	31.6
Drugs	8.8	8.1	8.2
Drink-driving	2.6	4.7	4.4
Traffic	11.3	13.3	13.0
Disorder	7.5	7.6	7.6
Breaches	5.9	7.3	7.1
Other	4.0	3.5	3.6
Total	100	100	100

n = 9,479 (8,042 males and 1,437 females)

**p < .001

Note: total percentages deviate from 100 due to rounding error

Source: AIC DUMA collection 2002–2006 [computer file]

were the third-most prevalent category for both women and men, but men were more likely to have been charged with a traffic offence than women were. Fewer than 10 percent of the women and men had MSOs in other offence categories.

Sixteen percent of women and 19 percent of men reported that they had been in prison during the previous 12 months. The nature of the self-reported offences that had occasioned imprisonment can be seen in Table 6. Generally, detainees were far more likely to have been imprisoned for non-drug offences than for drug offences.

Table 6 Prison during the previous 12 months for all offences, by gender** (percent)

	Women	Men	Combined
No imprisonment	84.2	81.2	81.7
Drug offence only	1.8	2.4	2.3
Non-drug offence only	12.0	14.6	14.2
Prison for drug and non-drug offences	2.1	1.8	1.9
Total	100	100	100

n = 17,106 (14,437 males and 2,669 females)

**p < .001

Note: total percentages deviate from 100 due to rounding error

Source: AIC DUMA collection 2002–2006 [computer file]

Summary

Female police detainees were more likely than male detainees to have a property offence as their most serious offence and less likely than women prisoners in the DUCO study to have a violent offence. The first is consistent with the literature, which shows men to be more involved in violent crime than are women. It is not surprising that female prisoners' most serious offences were likely to be more serious than female police detainees', given that serious offences are more likely to result in imprisonment (ABS 2007b).

Few police detainees admitted to deriving income from illegal sources, but, among those who did, women were more likely than men to admit to deriving income from sex work and shoplifting and less likely than men to admit to deriving income from drug crime. This is consistent with other Australian research (Denton & O'Malley 2001).

Female police detainees were slightly less likely than men to report having been arrested in the previous year, although there were no significant differences between men and women detainees in terms of the number of times arrested. These previous arrests were for similar offences as the current offence, and again men were more likely to have a violent MSO than women were. Women were also slightly less likely than men to report having been incarcerated during the previous year. Few female or male detainees had been imprisoned for drug offences.

Alcohol and other drug use and dependence

Police detainees who participate in the DUMA program are asked to provide a urine sample, which is then tested for evidence of recent use of different illicit drug classes. This section commences with an outline of gender differences in positive urine tests, aggregated across years and sites (Table 7).

To all illicit drugs other than cannabis, cocaine, and MDMA (ecstasy), female police detainees were significantly more likely than male detainees to test positive. Men were more likely to test positive for cannabis, and there were few differences between the sexes in positive results for cocaine or MDMA. Differences in recent alcohol and other drug (AOD) use were also found between female and male police detainees in London. Bennett (2000) found that women were more likely than men to test positive for opiates and cocaine and that men were more likely than women to test positive for cannabis and alcohol.

Based on all police detainees who answered the DUMA questionnaire, Table 8 shows gender differences in self-reported AOD use in the previous 12 months. Approximately 90 percent of detainees had used at least one drug (including alcohol) in the previous 12 months, in on average 2.8 different

Table 7 Positive urine results, by gender (percent)

	Women	Men	Combined
Cannabis**	53.1	57.2	56.6
Morphine & other opiates**	26.1	15.8	17.4
Heroin**a	19.2	12.0	13.1
Methadone**	13.5	5.1	6.4
Cocaine	1.0	1.0	1.0
Amphetamines**	44.7	29.2	31.6
Methylamphetamines**b	39.2	26.3	28.3
Benzodiazepines**	35.4	21.0	23.2
MDMA (ecstasy)	1.4	2.0	1.9

n = 14,507 (12,269 males and 2,238 females)

** .000 (Exact)

a: Heroin users form a subset of opiate users

b: Methylamphetamine users form a subset of amphetamine users

Source: AIC DUMA collection 2002–2006 [computer file]

Table 8 Detainees' prevalence of AOD use in previous 12 months, by gender (percent)

	Women	Men	Combined
Cannabis	60.8	66.1	65.3
Alcohol ^a	58.7	67.6	66.2
Amphetamine/methylamphetamine	55.2	46.4	47.8
Heroin	25.3	17.9	19.0
MDMA (ecstasy)	18.0	21.0	20.5
Benzodiazepines	16.4	12.3	12.9
Cocaine	11.0	10.4	10.5
Morphine or other opiates ^b	15.3	10.6	11.3
Street methadone	6.9	4.9	5.2
Hallucinogens	3.1	5.4	5.0
No drug/alcohol used	10.1	9.5	9.6

n = 17,858 (15,045 males and 2,813 females)

a: Three or more drinks in any single day for women; five or more drinks in any single day for men

b: Excluding heroin

Note: Multiple responses preclude tests of significance

Source: AIC DUMA collection 2002–2006 [computer file]

drug classes. Table 8 shows that approximately 10 percent of both women and men reported no AOD use in the previous 12 months. Likelihood of having used amphetamine/methylamphetamine, heroin, morphine or other opiates, benzodiazepines, cocaine, or street methadone in the past 12 months was greater in female than in male detainees. Males were more likely to have used cannabis, alcohol, ecstasy or hallucinogens.

Among police detainees who had used an illicit drug in the previous year, three quarters (76%) had used more than one illicit drug in the previous 12 months and averaged use of 2.5 different illicit drugs. Women were slightly more likely (78%) than men (76%) to have used illicit drugs in the previous 12 months. Table 9 shows the prevalence of illicit drug use in illicit drug users only.

Table 9 shows the rank ordering of drug classes in illicit drug use in the previous 12 months by detainees who self-reported having used at least one illicit drug in the past year. Over all, the rank ordering of drug classes was similar among male and female police detainees. In both groups, cannabis was the most prevalent illicit drug class

Table 9 Illicit drugs used by detainees who reported use of drugs in the previous 12 months, by gender (percent)

	Women	Men	Combined
Cannabis	78.3	86.9	85.5
Amphetamine/methylamphetamine	71.1	60.9	62.5
Heroin	32.5	23.5	24.9
MDMA (ecstasy)	23.2	27.5	26.8
Benzodiazepines	21.1	16.2	17.0
Morphine or other opiate ^a	19.7	13.9	14.9
Cocaine	14.2	13.7	13.7
Street methadone	8.8	6.5	6.9
Hallucinogens	4.0	7.0	6.5

n = 13,636 (11,452 males and 2,184 females)

a: Excluding heroin

Note: Multiple responses preclude tests of significance

Source: AIC DUMA collection 2002–2006 [computer file]

used. A higher proportion of males than of females reported use of cannabis in the previous 12 months, but by females this was more closely followed by use of an amphetamine/methylamphetamine than by males. Approximately half as many women had used heroin as had used an amphetamine/methylamphetamine. In general, amphetamine/methylamphetamines, opiates, and benzodiazepines were used by a higher proportion of women than of men.

In the year preceding detention, fewer than five percent of detainees had injected cocaine, street methadone, benzodiazepines, ecstasy, or hallucinogens. Table 10 is concerned with only those drugs that were injected by more than five percent of police detainees. It shows that female detainees were more likely than male detainees to have injected opiates and amphetamine/methylamphetamine.

Although fewer than half of all detainees who had used illicit drugs in the preceding 12 months reported injecting heroin, other opiates, or amphetamine/methylamphetamine, this amounted to 88 percent, 72 percent, and 73 percent respectively of detainees who reported using those drug classes within the preceding 12 months. In other words, almost all heroin users and almost three-quarters of amphetamine/methylamphetamine

Table 10 Injection of heroin, other opiates, and amphetamine/methylamphetamine in previous 12 months, by gender (percent)

	Women	Men	Combined	(Number)
Injected heroin*	23.8	15.5	16.8	17,849
Injected morphine or other opiates*	10.1	7.2	7.7	17,847
Injected amphetamine/methylamphetamine*	45.5	32.7	34.7	17,834

*p = .000 Fisher's

Source: AIC DUMA collection 2002–2006 [computer file]

users and morphine or other opiate users had injected these substances in the preceding 12 months, and women were particularly likely to have done so.

Comparison between AOD use by female police detainees and by women in the general community

Results from the 2004 National Drug Strategy Household Survey (NDSHS) show that, in the previous 12 months, 84 percent of the population aged 14 years or over had consumed at least one full serve of alcohol and 15 percent had used at least one illicit drug at least once. The most common six illicit drugs used in the previous 12 months were marijuana/cannabis (11%), ecstasy (3%), amphetamine/methylamphetamine (3%), painkillers/analgesics for non-medical purposes (3%), tranquillisers/sleeping pills (1%) and cocaine (1%) (AIHW 2007a).

In 2004, women in the general community were less likely than men to have used alcohol or illicit drugs. Alcohol was the drug used by the most women (80%) in the previous 12 months, followed by cannabis (8%), amphetamine/methylamphetamine (3%), ecstasy (2%), cocaine (1%), and heroin (0.3%).

Table 11 compares AOD use by women police detainees participating in DUMA in 2004 with AOD use by women in the general community as outlined in the 2004 NDSHS and shows that female police detainees were far more likely than women in the general community, both recently and in their lifetime, to have used a drug from any specific illicit drug class. Only alcohol rates for lifetime use were similar between the two groups. Recent alcohol use is measured differently in DUMA and could not be compared with results from the NDSHS.

Previous research has found that illicit drug use in the community generally decreased after 1998. Recent use of cannabis by women decreased from almost 15 percent in 1998 to 10 percent in 2001

Table 11 Lifetime and recent use of alcohol and other drugs by women in DUMA 2004 and by women in NDSHS 2004^a (percent)

	Lifetime		Previous 12 months	
	DUMA 2004	NDSHS 2004	DUMA 2004	NDSHS 2004
Cannabis	88.2	29.9	59.6	8.3
Alcohol	97.6	88.4	n.a.	80.2
Amphetamine/methylamphetamine	76.4	7.3	56.8	2.5
Heroin	50.1	1.0	23.6	0.1
MDMA (ecstasy)	46.0	6.0	18.3	2.4
Cocaine	42.1	3.7	8.2	0.8
No illicit drug			21.4	87.5
Injected			53.2	0.3

a: AIHW 2005

Source: AIC DUMA collection 2004 [computer file]

and eight percent in 2004. The proportions of people using other types of illicit drugs have remained stable or decreased since 1998, with the exception of ecstasy, which reached three percent in 2004, the highest incidence of recent use of this substance in the 13-year period (AIHW 2007a). Recent heroin use by women decreased from 0.5 percent in 1998 to 0.2 percent in 2001 and 0.1 percent in 2004, and amphetamine/methylamphetamine remained essentially stable at 2.5 percent, 2.7 percent, and 2.5 percent through the same three surveys.

Trends in use of cannabis, heroin, and amphetamine/methylamphetamine by female police detainees in DUMA are shown in Figure 1. It shows that recent heroin use reduced between 2002 and 2006, and, as seen by the linear trend lines, that recent cannabis and recent amphetamine/methylamphetamine use were essentially stable.

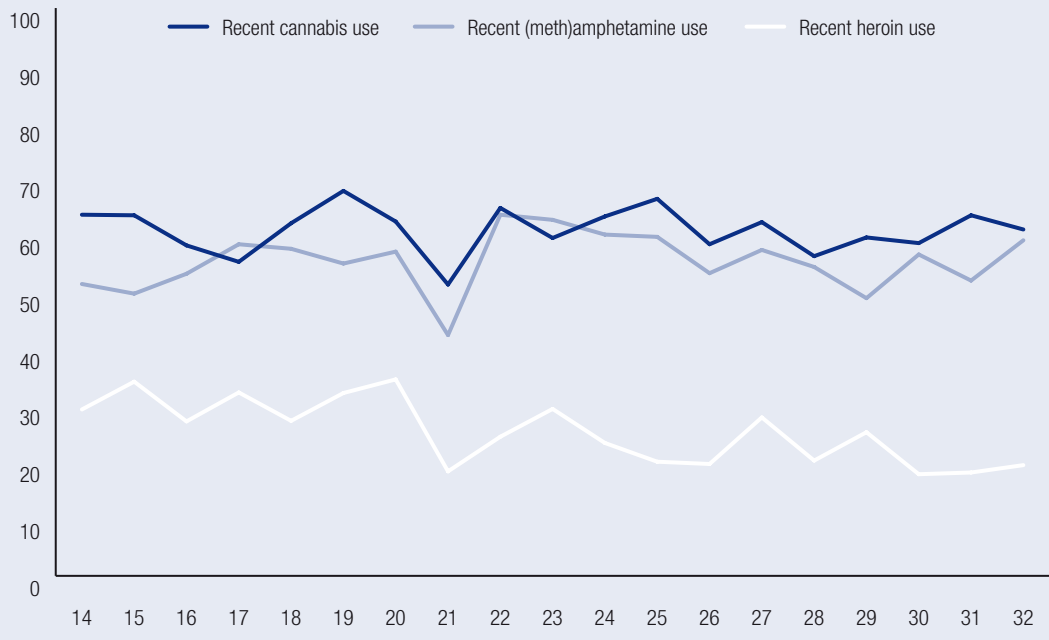
Escalation of lifetime AOD use to regular use

Escalation is defined as the percentage of lifetime users of a drug who progress to regular use

(Johnson 2004). Table 12 calculates escalation from AOD use to regular use for male and female police detainees. It shows that amphetamine/methylamphetamine, heroin, benzodiazepines, street methadone, and morphine were used by higher percentages of female detainees than of male detainees and that a greater proportion of the female users of each drug than of male users escalated from lifetime use to regular use. Men were more likely than women to escalate from lifetime use of cannabis, alcohol, ecstasy, cocaine or hallucinogens to regular use.

Rates of female police detainees' escalation to regular use can be compared with results found among the women prisoners in DUCO for cannabis (61% vs 51%), amphetamines/methylamphetamines (59% vs 61%), heroin (47% vs 59%), benzodiazepines (38% vs 48%), and cocaine (10% vs 14%) (Johnson 2004). This indicates that, compared with female police detainees, women prisoners using any illicit drug except cannabis were more likely to escalate during their lifetime to regular use.

Figure 1 Trends in recent use by female police detainees of cannabis, amphetamine/methylamphetamine, and heroin at quarters from commencement of Duma, 2002–06 (percent)



Source: AIC DUMA collection 2002–2006 [computer file]

Table 12 Escalation to regular alcohol and other drug use, by gender (percent)

	Women			Men		
	Lifetime use	Regular use	Escalation	Lifetime use	Regular use	Escalation
Cannabis	87.4	52.9	60.5	87.1	59.4	68.1
Alcohol	97.3	58.0	59.6	98.0	66.9	68.3
Amphetamine/ methylamphetamine	73.7	43.8	59.4	66.8	34.1	51.0
Heroin	48.5	22.7	46.8	38.2	14.9	39.0
Benzodiazepines	31.0	11.8	38.1	25.7	7.2	28.0
Street methadone	18.6	3.2	17.2	13.8	2.2	15.9
Morphine or other opiates ^a	32.9	5.5	16.7	25.2	4.1	16.3
MDMA (ecstasy)	43.1	4.5	10.4	45.4	6.3	13.9
Cocaine	41.9	4.2	10.0	38.0	4.3	11.3
Hallucinogens	41.7	0.9	2.2	45.7	1.7	3.7

a: Excluding heroin

Source: AIC DUMA collection 2002–06 [computer file]

Dependence

In 1997, the ABS conducted the National Survey of Mental Health and Wellbeing of Adults, using a representative sample of approximately 10,600 Australians aged 18 years or over (ABS 1998). The survey sought to elicit information on the prevalence of a range of different mental health disorders, including substance-use disorders such as alcohol and drug dependence. A modified version of the Composite International Diagnostic Interview (CIDI) was used to assess the presence of different disorders. It was reported that, in the general population, males were more than twice as likely as females to have experienced a substance-use disorder in the previous 12 months (11 percent, compared with 5 percent). Substance-use disorders included harmful use of and dependence on either alcohol or other drugs.

Female prisoners participating in the DUCO study were assessed for AOD dependence on the UNCOPE six-item scale described earlier as in use in DUMA. Johnson (2004) reports that most regular offenders were also regular drug users: 55 percent were dependent on an (illicit) drug; 27 percent were alcohol-dependent; and 14 percent were dependent on both alcohol and illicit drugs. Table 13 shows prevalence of dependence on alcohol and/or illicit drugs in DUMA police detainees, as measured in the dependence scale between 2004 and 2006.

The proportion of women police detainees who were dependent on alcohol and/or illicit drugs was lower than of female prisoners, but women in the DUMA sample were slightly more likely to be dependent on alcohol and/or illicit drugs than men were. A greater proportion of women (41%) were dependent on illicit drugs than of men (31%). Men were more likely than women to be dependent on alcohol.

Perceived dependence on cannabis, amphetamine/methylamphetamine, heroin, benzodiazepines, and ecstasy was also assessed. Table 14 shows that women were most likely to feel they were or had been dependent on cannabis in the past 12 months

Table 13 Dependence on alcohol / illicit drugs during the previous 12 months, by gender** (percent)

	Women	Men	Combined
No dependence	37.9	40.5	40.1
Dependence on alcohol only	9.1	12.1	11.7
Dependence on illicit drugs only	40.5	30.8	32.3
Dependence on alcohol and illicit drugs	12.5	16.6	16.0

n = 11,367 (9,586 males and 1,781 females)

**p < .001

Source: AIC DUMA collection 2004–2006 [computer file]

and slightly less likely that they were or had been dependent on amphetamine/methylamphetamine. Fewer female detainees perceived dependence on heroin and benzodiazepines. Women were significantly more likely to perceive themselves to be dependent on amphetamine/methylamphetamine, heroin, or benzodiazepines than men and less likely to feel dependent on cannabis. Very few women or men perceived dependence on ecstasy.

Female police detainees' self-perceived dependence on drugs differed from measured dependence as assessed using the UNCOPE scale, according to drug type. For example, of those female detainees who were deemed dependent on any illicit drug

Table 14 Perceived dependence in the last 12 months on individual drug classes, by gender (percent)

	Women	Men	Combined
Perceived dependence on cannabis*	19.6	22.0	21.7
Perceived dependence on amphetamine/methylamphetamine**	18.1	12.5	13.4
Perceived dependence on heroin**	14.9	9.0	9.9
Perceived dependence on benzodiazepines**	6.1	2.9	3.4
Perceived dependence on MDMA (ecstasy)	0.4	0.6	0.5

n = 17,858 (15,045 males and 2,813 females)

*p < .05

**p < .001

Source: AIC DUMA collection 2002–2006 [computer file]

according to the UNCOPE scale, 35 percent self-perceived dependence on an amphetamine/methylamphetamine in the past 12 months, 27 percent on cannabis, and 25 percent on heroin. Of those female detainees who were classified as alcohol-dependent according to the UNCOPE measure, 54 percent self-perceived dependence on alcohol in the preceding year.

There is of course little similarity between the level of AOD dependence experienced by women police detainees in DUMA and by those in the general community, because high rates of AOD use lead to high rates of dependence. On the other hand,

dependence rates in DUCO, measured in the same way as in DUMA, demonstrate that women prisoners experienced even higher rates of AOD dependence than did women who were detained by police but not yet sentenced.

Summary

Women and men police detainees in DUMA had different rates of AOD use, with women favouring injectable drugs such as amphetamines/methylamphetamines, opiates, cocaine, and benzodiazepines, any of which female police detainees were also more likely than male ones to have injected. Up to 60 percent of women who had tried alcohol and/or illicit drugs progressed from lifetime to regular use.

There is no similarity between rates of illicit drug use by those in the general community and by police detainees in DUMA, although alcohol rates are not dissimilar. Whereas illicit drug use is very much the behaviour of a minority in the general community, at least 40 percent of female police detainees had used illicit drugs at least once. Compared with fewer than 10 percent of women in the general community, almost 60 percent of female detainees had used cannabis or an amphetamine/methylamphetamine recently. Heroin is the only drug whose use by female police detainees decreased between 2002 and 2006, whereas cannabis and heroin use by women in the general community decreased considerably over a similar period.

High rates of AOD dependence were found in female police detainees, particularly in relation to illicit drugs. These rates are much higher than those found in the general community but not as high as those found among women prisoners in the DUCO study.

Alcohol

In the DUCO study on female prisoners, Johnson (2004) specifically examined the issue of alcohol and crime. She found that alcohol problems were related to criminal offending in fewer women than was illicit drug use. The less prominent role played by alcohol in the criminal offending of women was an important difference between female and male prisoners.

Nevertheless, she found, as has been found in DUMA, that alcohol played a significant role in the criminal careers of Indigenous women.

The following summarises the findings about alcohol and female police detainees:

- Women were less likely than men to have used alcohol heavily in the last 12 months or to be dependent on alcohol.
- Women and men initiated regular use of alcohol at much the same age, and regular use of alcohol pre-dated average age of first arrest in both women and men.
- Regular and dependent alcohol use increased the likelihood of women being involved in violent offending, although not to the same extent as men.
- Indigenous women were more likely to have used alcohol or cannabis and less likely to have used other illicit drugs than non-Indigenous women in the previous 12 months.
- Almost 40 percent of Indigenous women were dependent on alcohol (either alone or in combination with illicit drugs); Indigenous women were almost twice as likely as non-Indigenous women to be dependent on alcohol only and almost three times as likely to be dependent on alcohol and illicit drugs concurrently.

It seems clear, therefore, that alcohol is associated with violent offending in women as it is in men, although perhaps not to the same extent. In particular, Indigenous women appear to be more likely to consume alcohol and to display higher levels of violent offending than non-Indigenous women. Alcohol dependence appears not to be associated with property offending in Indigenous women, as it is in non-Indigenous women, though illicit drug dependence is. The role of alcohol in offending for Indigenous women will also be discussed in the 'Indigenous women' section.

Relationship between drug use and crime

As noted above, there is a strong relationship between women's alcohol and other drug use and their criminal behaviour. In a survey of adult female prisoners in WA, for example, 67 percent of the

women reported a connection between their drug and alcohol use and offending behaviour; 41 percent reported that they were under the influence of drugs and/or alcohol at the time of the offence; 21 percent stated that they committed the offence to get money to buy drugs; and 16 percent were selling or trafficking drugs at the time of the offence (Community and Juvenile Justice Division 2002).

In the two adult DUCO studies (one on males, the other on females), the proportion of crime that could be attributed to intoxication and/or dependence on drug and alcohol use was estimated. Almost a quarter (24%) of all current offences committed by men were causally attributable to drug or alcohol dependence: 18 percent to dependence on illicit drugs, three percent to dependence on alcohol, three percent to dependence on concurrent alcohol and illicit drug use. The women's study used somewhat different methods to estimate that 39 percent of women's offending could be attributed to drug or alcohol dependence: 30 percent to dependence on illicit drugs, eight percent to dependence on alcohol, one percent to dependence on concurrent alcohol and illicit drugs. Due to differences in methodology, it is not possible to compare dependence estimates for men and women (Johnson 2004).

Attributions of the offence to intoxication at the time were also measured in DUCO: 29 percent of men and 35 percent of women prisoners attributed their offending to intoxication. When the two measures were put together, the overall estimates were similar between women and men. Forty-one percent of women attributed their offending to AOD dependence or intoxication or both. Female prisoners attributed their offending to intoxication, to dependence, and to both more commonly than did male prisoners. The women whose main offence was burglary, robbery, or theft were those most likely to attribute their offending to their AOD use (Johnson 2004).

The sequencing of crime and drug use may also vary with gender. In much of the literature, criminal activity has been found to precede drug use, but as drug use increases, so does involvement in offences such as property crime (Makkai & Payne 2003). Unfortunately, most of this research has focussed on men (Johnson 2004). In DUCO, most male prisoners began offending prior to drug use, but female

prisoners were more likely to begin their offending careers later than men and, in contrast to men, their drug use typically preceded their offending (Johnson 2004; Mouzos et al. 2007). Women may also become more quickly entrenched in offending and drug use than do men. The DUCO study found that women's early initiation into drug use led to later problems in life, including offending careers that were more regular and persistent and problems with drug dependency (Johnson 2004).

In the section that follows, male and female police detainees from DUMA are compared in order to establish whether relationships between drug use and criminal activity vary systematically by gender. The section opens with a consideration of the temporal sequencing of drug use and crime in women and men by comparing the average age of first regular use of AOD to the age of first arrest. Table 15 gives the average age at which police detainees first had three or more drinks on the same day (or five if the detainee was male), and/or used individual drug classes on three or more days in a week.

The average age of first regular use of most drugs by both women and men was greater than 20 years. Alcohol, cannabis and hallucinogens were the exceptions to this, with alcohol the first drug to be used at around age 16 years by both women and men, followed by cannabis at ages 16–17 and then hallucinogens up to a year later. Women were significantly older than men, by up to 9 months, when they first became regular users of alcohol, cannabis or amphetamine/methylamphetamine. There were no significant gender differences in the average age of first regular use of other drugs.

Almost all police detainees (94%) had been arrested at least once prior to the current arrest, and the average age of first arrest of the full sample was 19 years (median 17, mode 18). Women were, on average, almost three years older than men when first arrested (21.2 vs 18.6 years, $p < .001$). By that age, many of those who were going to had become, or were close to becoming, regular users of most drugs. Men, on the other hand, were first arrested at average age 18.6 years; by that time, those who were going to had become regular users of alcohol or cannabis but not yet of other drugs.

Table 15 Mean age in years of first regular use^a of selected drug classes, by gender

	Women		Men	
	Number	Mean age at first regular use	Number	Mean age at first regular use
Alcohol*	1,631	16.0	10,053	15.7
Cannabis**	1,488	16.9	8,940	16.0
Amphetamine/methylamphetamine*	1,233	21.4	5,123	20.8
Heroin	639	20.0	2,239	20.3
Benzodiazepines	331	20.1	1,082	20.5
Morphine or other opiates ^b	155	23.4	612	23.7
MDMA (ecstasy)	127	19.9	946	20.7
Cocaine	118	20.8	653	21.3
Street methadone	89	23.2	332	24.7
Hallucinogens	24	17.6	259	17.3

n = 17,858 (15,045 males and 2,813 females)

a: Regular use is defined as use of drugs on three or more days a week; and, for alcohol, consuming three or more drinks in a single day (women) or five or more drinks in a single day (men)

b: Excluding heroin

*p < .05

**p < .001

Source: AIC DUMA collection 2002–2006 [computer file]

In summary, women were more likely than men to become regular users of opiates, stimulants and benzodiazepines (Table 12), and in women regular use of these drugs tended to precede or to be contiguous with first arrest. Because not all women who were arrested were regular users of alcohol (58%) or illicit drugs (70%), it is possible to conclude that around 70 percent of female police detainees were using illicit drugs regularly, or were close to doing so, before they were arrested for the first time. The same is not true of men, who tended to be arrested for the first time before having serious involvement with illicit drugs.

There are several lines of enquiry available in DUMA by which to examine more closely the relationship between drug use and crime. Detainees were asked what proportion of their crimes (whether apprehended or not) in the previous 12 months had been drug related (not including alcohol). 'Drug-related crime' is defined as committing a crime to make money to buy drugs (excluding alcohol) or committing crime while under the influence of drugs, not including alcohol. Almost 30 percent of women and 24 percent of men said that more than half of their crimes had been drug-related.

Detainees who had been arrested in the previous 12 months for a drug offence were asked which drugs were implicated. Both women and men were more likely to have been involved in cannabis-related offences than in offences related to other drugs, but amphetamine/methylamphetamine was a close second, particularly for women. Women were almost twice as likely as men to have been arrested for a heroin offence. Fewer than five percent of women or men were involved in offences related to any other drug class.

The relationship between the nature of the current offence(s) and AOD use is of particular interest. In reporting on women prisoners in the DUCO study, Johnson (2004) distinguished between alcohol dependence and dependence on other drugs, claiming that they were related to different offence categories. This has been investigated using the DUMA data on women and men as shown in Figure 2 and Figure 3. These figures show that women generally had higher rates than men of property offending, particularly among those with illicit-drug dependence. Women and men with alcohol

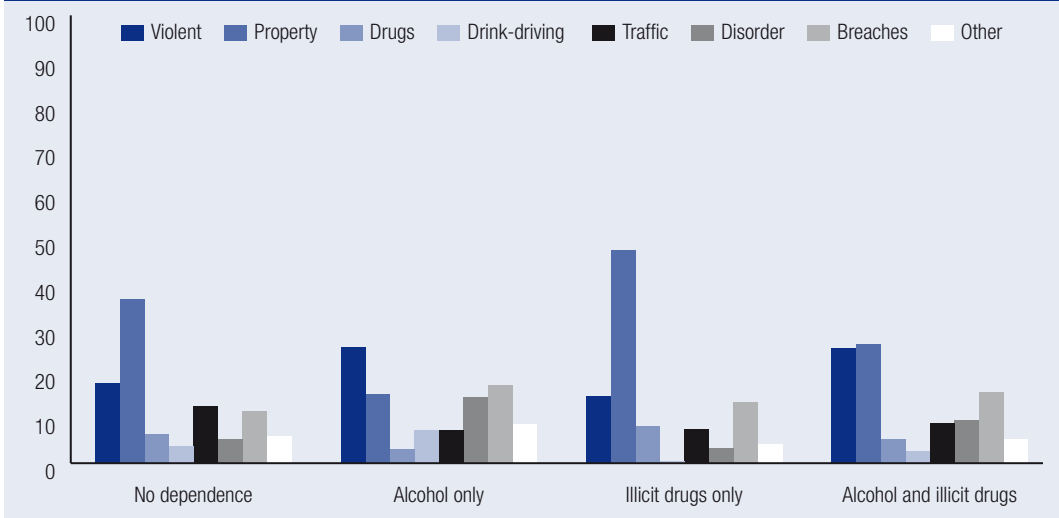
dependence had similar rates of violent offending, but women dependent only on alcohol had higher rates of property and disorderly offending than similarly dependent men. Of those dependent on illicit drugs only, women were much more likely than men to have a property offence as their most serious offence.

In general, women police detainees were less likely to be charged with violent offences than with property offences unless they were dependent on alcohol and not on illicit drugs. Male police detainees were more likely to be charged with violent offences than with property offences unless they were dependent on illicit drugs and not on alcohol.

Associations between the MSO and regular use of AODs were also assessed, and similar effects were found. These results suggest that the common observations that women are more involved in property offences than men are and that men are more involved in violent offences than women are were sustained. This was so even when regular use of alcohol or illicit drugs was taken into consideration: women who used alcohol regularly had committed more violent offences than women who did not regularly use it, but remained less likely to have a violent offence than men who used alcohol regularly. Women who used illicit drugs regularly had more property offences than those who did not regularly use illicit drugs. Regular alcohol use thus tended to increase women's probability of committing violent offences, and regular illicit drug use exacerbated their propensity to commit property offences.

DUMA detainees were also asked about their involvement in selling, manufacturing or transporting drugs. Forty percent of male and 36 percent of female adult detainees reported they had ever been involved in selling, manufacturing or transporting illegal drugs. Ten percent of women were buying or selling illicit drugs at the time of their most recent arrest. The drugs most sought were amphetamine/methylamphetamine (44%), heroin (34%), cannabis (19%) and ecstasy (4%). Dependence was strongly associated with this behaviour: 17 percent of women who were dependent on illicit drugs or on alcohol, compared with fewer than three percent of women not dependent on illicit drugs or alcohol, were buying or selling illicit drugs at the time of arrest.

Figure 2 Most serious offence—women (percent of those with that dependence)**

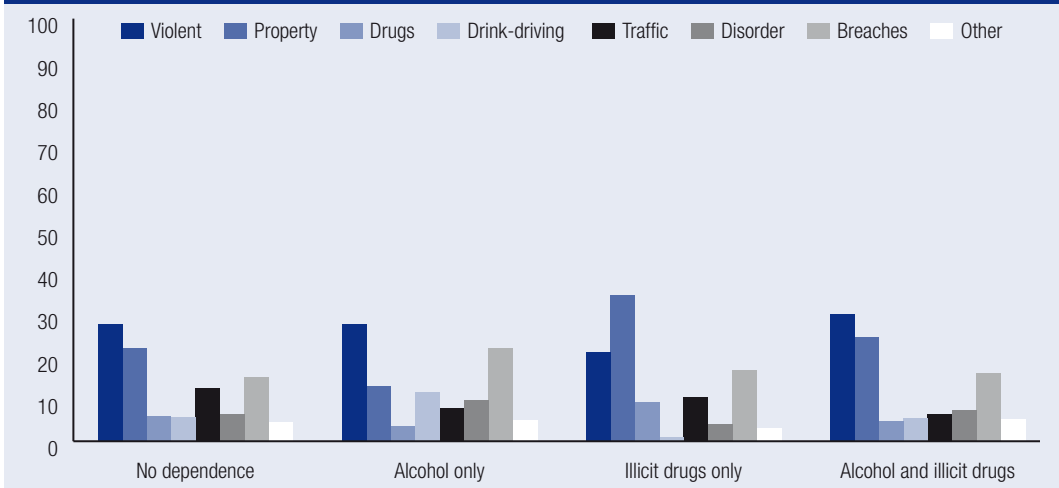


n = 1,763

**p < .001

Source: AIC DUMA collection 2004–2006 [computer file]

Figure 3 Most serious offence—men (percent of those with that dependence)**



n = 9,455

**p < .001

Source: AIC DUMA collection 2004–2006 [computer file]

Prior to 2006, police detainees participating in DUMA were asked whether they had been drinking or using illicit drugs just before they were arrested on the current occasion. Twenty-one percent of women had been drinking and 47 percent had been using drugs at the time of the current arrest. Though similar proportions of men and women were using

AOD prior to the arrest, women were more likely to be using illicit drugs than men were, and men were more likely to be drinking alcohol than were women.

In 2006, detainees were asked whether they had been drinking or using drugs just prior to each offence for which they were charged in the previous

12 months. In relation to their most serious offence from the previous 12 months, women and men were most likely to have been drinking prior to being charged for drink-driving (100% of charged women, and 98% of charged men). Both women and men were also likely to report drinking alcohol prior to being charged with a disorder offence (83% of charged women and 70% of charged men). In the previous 12 months, women were more likely than men to have been using drugs before being charged with property offences (69%), and men were almost equally as likely as women to have been using drugs before being charged with property (63%) or drug (67%) offences.

Summary

Associations between drug use and crime were different between women and men in DUMA. As has been noted in the previous section, women tended to use some drugs more frequently than did men, and these were often injectable drugs such as amphetamine/methylamphetamine or heroin. Women's regular drug use and their entry into apprehended crime also tended to occur later in their lives than men's. Many women were already involved in regular illicit drug use by the time they came to the attention of police. Men, on the other hand, were more likely to be using alcohol and cannabis on a regular basis but not yet other illicit drugs by the time they started being apprehended for crime.

The women in this study were more likely than the men to attribute their crime to their illicit drug use. They were also more likely to be using illicit drugs before the most recent arrest and to have been using illicit drugs before committing property offences in the previous 12 months. Dependence on illicit drugs was closely associated with women's drug-related activity at the time of arrest.

Women's MSOs were most likely to be property offences. There was little difference between the proportions of men with a violent MSO and of men with a property MSO. The use of alcohol, generally associated with violent offences, and of illicit drugs, generally associated with property offences, mediated this for all police detainees: women who were dependent on alcohol were, uniquely, more likely to be charged with violent offences than with

other offence types. These findings are not dissimilar to those comparing women and men prisoners in the DUCO studies.

The association between drug use and criminal activity may be stronger in women than in men. Results from the DUMA data show that the average age of first arrest of women is significantly older than the average age of first arrest of men and that many women had become regular users of illicit drugs prior to their first arrest. Furthermore, use of alcohol was associated, particularly in male detainees, with violent offending, and use of illicit drugs was associated, particularly in female detainees, with property offending.

Lest these relationships should be thought to be simple, however, it is important to note that research such as that conducted by Denton and O'Malley (2001) demonstrates significant complexity and variation in the ways in which women engage in both criminal activity and illicit drug use. These researchers maintained that it was important to recognise the multidimensional nature of women's lives, in which it was entirely possible that neither drug use nor criminal activity constituted the major elements of daily existence. Women's children; the extension of their lives into their families; their previous experiences in their families of origin; their poverty, ethnicity, and sexual orientation: all impinge on the way in which drug use and criminal activity meet a variety of different needs (Johnson 2004). Denton and O'Malley (2001) found that some of these needs were related to excitement, fun and self-esteem and that being involved in property crime might meet some of those needs. In this view, women who commit crimes and use illicit drugs may not necessarily be dysfunctional or 'doubly deviant'.

Indigenous women

The over-representation of Indigenous Australians both as offenders and as victims in the criminal justice system is well recognised (Gardiner & Takagaki 2002; Johnson 2004; Makkai & Payne 2003; Payne 1993; White & Habibis 2005). While there is a significant body of literature on Indigenous men and the criminal justice system (Putt, Payne & Milner 2005), research on Indigenous women's

involvement with the criminal justice system is largely non-existent. This is so despite Indigenous women within the criminal justice system's being doubly disadvantaged due to their race and gender (Gardiner & Takagaki 2002).

Imprisonment rates of Australian women have increased at a more rapid rate than those of men, but there has been an even greater increase in the imprisonment rate of Indigenous women relative to non-Indigenous women (Aboriginal and Torres Strait Islander Social Justice Commissioner 2002). Since the Royal Commission into Aboriginal Deaths in Custody in 1991, there has been a rise in the number of Indigenous people in custody and an even sharper rise in the number of incarcerated Indigenous women, such that this group is now incarcerated at a rate higher than any other group in Australia (Aboriginal and Torres Strait Islander Social Justice Commissioner 2002). Furthermore, more than six percent of the Indigenous female population made an appearance before the NSW courts in 2001, compared with approximately 0.7 percent of the entire female population (Weatherburn, Lind & Hua 2003).

Indigenous female prisoners tend to be younger than non-Indigenous female prisoners, and they are more likely to be mothers (Aboriginal and Torres Strait Islander Social Justice Commissioner 2002). In WA prisons, Indigenous women were found to be the most severely disadvantaged group, with lower levels of education, less likelihood of having ever been employed, and more-common dependence on welfare as a source of income (Community and Juvenile Justice Division 2002). Greater social disadvantage is found among Indigenous prisoners all over the country (Community and Juvenile Justice Division 2002).

Reasons for the increase in the incarceration rates of Indigenous women are uncertain. Some Indigenous-specific reasons include racism, alienation, poverty and higher levels of alcoholism (Payne 1993). The literature also points to increases in recidivism, violent crime, associations between drug (particularly alcohol) use and crime (including public drunkenness, where this is still a crime), and use of illicit drugs. Indeed, a number of studies show that the majority of Indigenous women in custody attribute their offences to their AOD use (Community and Juvenile Justice Division 2002). Other possible factors

include fine defaulting, often related to financial disadvantage; over-policing; shorter but more frequent sentences; and fewer non-custodial sentencing options:

Although the offence may be relatively minor, such as swearing in public or drinking alcohol in public, the full impact of the intervention may well result in imprisonment in a maximum security prison, particularly if fines imposed by the court for minor offences are not paid.

(Community and Juvenile Justice Division 2002: 146)

It is also important to recognise that not only do Indigenous women have contact with the criminal justice system through their own offending but many also have contact through the offending behaviour of their male partners, sons, and other family members. Generally speaking, Indigenous women have a greater propensity to become involved in the criminal justice system as an offender and/or a victim than do Indigenous men, ultimately resulting in Indigenous women being more disadvantaged than Indigenous men (Payne 1993).

There are significant differences between Indigenous and non-Indigenous women's patterns of offending. Indigenous women are more likely to be arrested for crimes against the person than are non-Indigenous women; non-Indigenous women are more likely to be arrested for property offences (Mackay & Smallacombe 1996). In a study of Indigenous and non-Indigenous women processed by Victoria Police between 1993 and 1997, Indigenous women were found to be significantly more likely than non-Indigenous women to be processed for crimes against the person or for summary offences such as offensive language, offensive behaviour, or resisting arrest. Indigenous women were 10 times as likely as non-Indigenous women to be processed for a crime against the person in this period. Furthermore, Indigenous women were more likely to be arrested, while it was more common for non-Indigenous women to receive a caution than was the case for Indigenous women (Gardiner & Takagaki 2002).

Other reports have also found that a greater proportion of Indigenous than of non-Indigenous imprisoned women had been imprisoned for minor offences (Community and Juvenile Justice Division 2002). In WA, 20 percent of offences for which

Indigenous women were jailed related to public disorder, although such offences constituted fewer than four percent of the offences for which non-Indigenous women were jailed (Community and Juvenile Justice Division 2002). Indigenous women in WA were most frequently imprisoned for violent and property offences, while non-Indigenous women were most frequently imprisoned for drug offences. Half of the Indigenous women's sentences, compared with only 30 percent of non-Indigenous women's sentences, related to breaches of release orders (Community and Juvenile Justice Division 2002). In Queensland, similarly, most incarcerated Indigenous women were sentenced for violent crimes. Fewer than two percent were imprisoned for drug offences (Aboriginal and Torres Strait Islander Social Justice Commissioner 2002).

The 2004 National Drug Strategy Household Survey shows that Indigenous Australians were more likely than other Australians to consume alcohol at risky or high-risk levels for harm in both the short and the long term and almost twice as likely as other Australians to be recent users of illicit drugs. Indigenous Australians were also more likely to be users of illicit drugs other than cannabis than were non-Indigenous Australians (AIHW 2005).

The National Aboriginal and Torres Strait Islander Health Survey of 2004–05 presents a more detailed picture (ABS 2006b). Indigenous women aged 18 to 34 were more likely than non-Indigenous women of the same age to drink at high-risk levels. Older Indigenous women were more likely than non-Indigenous older women to abstain from consuming alcohol, but those who drank it were more likely to do so in risky quantities. In terms of use of other substances in the previous 12 months, Indigenous women were most likely to have used, of all substance types, cannabis and/or analgesics and sedatives for non-medical use and least likely to have used amphetamine/methylamphetamine.

The National Alcohol Indicators Project (Chikritzhs et al. 2007) presents a bleak picture of trends in alcohol-attributable deaths among Indigenous Australians. Over the five-year period from 2000 to 2004, an estimated 1,145 Indigenous Australians died from alcohol-attributable injury and disease. Mortality rates varied widely between and within jurisdictions, and in central Northern Territory and northern Western Australia in 2004 were more than

double the national rate. Alcoholic liver cirrhosis (27%), haemorrhagic stroke (16%) and fatal injury caused by assault (10%) were the most common causes of alcohol-attributable deaths of Indigenous women.

Indigenous and non-Indigenous prisoners were compared in the DUCO women's study (Johnson 2004). Differences were found in the type of offence that preceded incarceration. The most prevalent major type of offence by Indigenous women was a violent offence and by non-Indigenous women was a property offence. Indigenous women were twice as likely as non-Indigenous women to be sentenced for offences against the administration of justice such as breach of probation. Non-Indigenous women were nine times as likely as Indigenous women to be sentenced for drug offences.

The criminal histories of Indigenous female prisoners in the DUCO women's study also showed a greater frequency of violent offending but lower rates of involvement in drug crimes (Johnson 2004). Patterns of previous drug use varied as well: Indigenous women were more likely to have been involved in cannabis use but less likely to have used other illicit drugs. Twice as many Indigenous women had only used alcohol. Indigenous women were more likely than non-Indigenous women to be alcohol-dependent and to be dependent on both alcohol and illicit drugs, and non-Indigenous women were more likely than Indigenous women to be dependent on illicit drugs or not dependent at all.

A higher percentage of Indigenous than of non-Indigenous female prisoners attributed their criminal activity to the use of alcohol or illicit drugs. Indigenous women were almost as likely to attribute their offending to illicit drugs as to alcohol; non-Indigenous women were more likely than Indigenous women to attribute their offending to illicit drug use.

The present analysis compares Indigenous with non-Indigenous female police detainees in DUMA and then examines how Indigenous female detainees in DUMA compare with Indigenous female prisoners in DUCO. In the full DUMA sample, 2,453 detainees (14.4%) were Indigenous: 22.3 percent of women and 12.9 percent of men. There appears to have been no systematic variation over time in the proportion of Indigenous women recruited to DUMA in the period reported here. The proportion of

Indigenous respondents did, however, vary among sites, lower in NSW (6%) and Queensland (10%) and higher in South Australia (15%) and Western Australia (29%). This section of the report relates to women only. Over all, there were a total of 2,813 female police detainees, comprising 592 Indigenous women and 2,068 non-Indigenous women (please note that there were 153 women whose Indigenous status was not recorded; these women have been excluded from the analysis below).

Table 16 highlights that, relative to non-Indigenous women, Indigenous women police detainees were:

- younger
- less likely to have had more than a Year 10 education
- less likely to be single
- less likely to be employed
- more likely to have dependent children
- more likely to be living in public housing
- more likely to be seeking work
- more likely to be full-time homemakers.

The current MSO categories for Indigenous and non-Indigenous female police detainees are shown in Figure 4. It shows that female detainees' most prevalent MSO was a property offence, but that Indigenous female detainees were more likely than non-Indigenous ones to have been charged with violent, disorderly, or breach offences and less likely than the non-Indigenous women to have been charged with property, drugs, drink-driving, or traffic offences.

A total of 1,444 female police detainees (55%) had been arrested in the previous year, with an average of 3.9 previous arrests (median = 2, mode = 1). A higher percentage of Indigenous (67%) than non-Indigenous (52%) women had been arrested, but there was no significant difference in the average number of times Indigenous and non-Indigenous female detainees had been arrested.

Table 17 shows the proportions of MSOs in the previous 12 months, broken down by Indigenous status. A breakdown of the proportion of female police detainees according to their current MSOs and Indigenous status provided a similar picture to

Table 16 Selected socio-demographic characteristics, by Indigenous status—women (percent)

	Indigenous	Non-Indigenous	Combined	(Number)
Mean age (years)**	28.7	30.4	30.1	2,659
No more than year 10 schooling**	57.8	42.9	46.2	2,655
Single*	56.1	51.3	52.3	2,658
Dependent children in home**	49.7	46.2	47.0	2,656
Last month domicile				2,658
Living in house / flat	86.7	89.1	88.5	
Living in other accommodation	13.3	10.9	11.5	
Public housing**a	65.3	24.9	33.6	2,431
Employment**				2,658
Working full time	2.5	10.3	8.6	
Working part time	3.2	11.5	9.6	
Unemployed and seeking work	31.3	22.9	24.8	
Full-time homemaker	30.2	25.0	26.1	

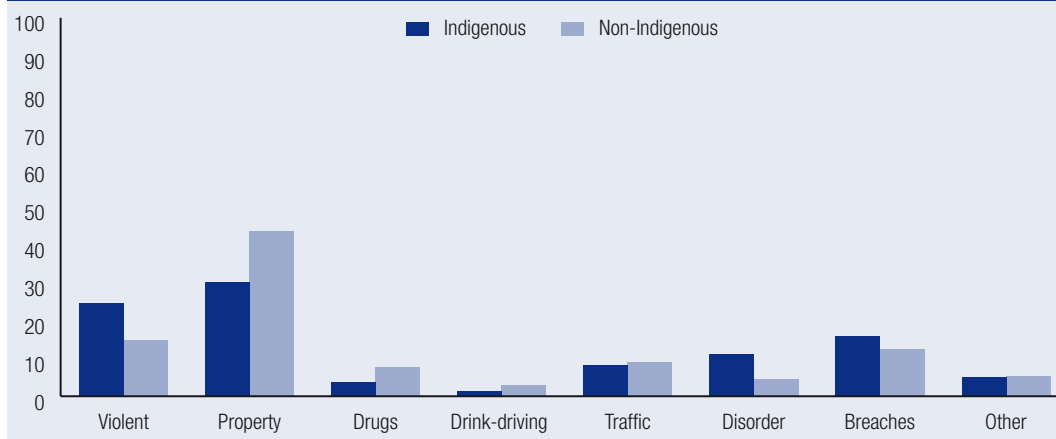
*p < .05

**p < .001

a: 225 police detainees who reported living in shelter or emergency housing, prison, a halfway house, a drug- or alcohol-treatment program, a hospital or psychiatric hospital, or on the street were not asked this question

Source: AIC DUMA collection 2002–2006 [computer file]

Figure 4 Most serious offence, by Indigenous status—women** (percent)



n = 2,643

**p < .001

Source: AIC DUMA collection 2002–2006 [computer file]

MSOs in the previous 12 months and therefore has not been included here. Indigenous female detainees were almost twice as likely as non-Indigenous detainees to have been arrested for violent offences and three times as likely to have been arrested for disorderly offences. Non-Indigenous female detainees were more likely than Indigenous ones to have been arrested for property offences and twice as likely to have been arrested for drug offences.

Sixteen percent of female police detainees had been in prison during the previous 12 months, but Indigenous women (26%) were twice as likely as non-Indigenous women (13%) to have been imprisoned. Most prior imprisonment of female detainees had been for offences other than illicit-drug offences.

Current AOD use and dependence

Significantly more Indigenous than non-Indigenous female detainees (94% vs 89%, $p < .001$) had used AODs during the previous 12 months. Table 18 shows that Indigenous women detainees were more likely to have used alcohol, cannabis, or amphetamine/methylamphetamine and less likely to have used other illicit drugs than were non-Indigenous women.

Just over three-quarters (77%) of female detainees had used at least one illicit drug type in the previous

Table 17 Most serious offence arrested for in previous 12 months, by Indigenous status—women (percent)

Most Serious Offence	Indigenous	Non-Indigenous	Combined
Violent	22.1	13.0	15.4
Property	36.7	47.0	44.3
Drugs	4.7	10.3	8.8
Drink-driving	2.6	2.7	2.7
Traffic	10.0	11.9	11.4
Disorder	14.4	5.1	7.6
Breaches	5.0	6.2	5.9
Other	4.5	3.8	4.0

n = 1,427 (1,046 non-Indigenous women and 381 Indigenous women)

Source: AIC DUMA collection 2002–2006 [computer file]

12 months. There was no significant difference between Indigenous and non-Indigenous women in the overall use of illicit drugs, but Indigenous women were more likely than others to have used cannabis or amphetamine/methylamphetamine and less likely than others to have used any other illicit drug.

Approximately three-quarters of Indigenous female detainees were found to be dependent on AOD, compared with 60 percent of non-Indigenous ones. Table 19 provides details of the nature of AOD

Table 18 Drugs used in previous 12 months, by Indigenous status—women (percent)^a

	Indigenous	Non-Indigenous	Combined
Alcohol ^b	71.8	55.5	59.1
Cannabis	69.3	57.9	60.4
Amphetamine/methylamphetamine	56.6	54.3	54.8
Heroin	20.8	25.6	24.6
Morphine or other opiates ^c	14.0	15.1	14.9
Benzodiazepines	15.9	16.3	16.2
MDMA (ecstasy)	9.5	20.8	18.2
Cocaine	6.9	11.9	10.8
Street methadone	6.4	6.7	6.6
Hallucinogens	1.5	3.6	3.1

n = 2,660 (2,068 non-Indigenous women and 592 Indigenous women)

a: Multiple responses preclude tests of significance

b: Three or more drinks in a single day for women

c: Excluding heroin

Source: AIC DUMA collection 2002–2006 [computer file]

Table 19 Dependence on alcohol / illicit drugs during the previous 12 months, by Indigenous status—women^a (percent)

	Indigenous	Non-Indigenous	Combined
No dependence	23.5	40.0	36.2
Dependence on alcohol only	14.5	8.0	9.5
Dependence on illicit drugs only	36.2	42.9	41.4
Dependence on alcohol and illicit drugs	25.9	9.1	12.9

n = 1,661 (1,282 non-Indigenous women and 379 Indigenous women)

a: Dependence scale introduced in 2004

Source: AIC DUMA collection 2004–2006 [computer file]

dependence of Indigenous and non-Indigenous women. Approximately 40 percent of Indigenous women were dependent on alcohol, either alone or concurrently with illicit drugs. Non-Indigenous women were less likely than Indigenous women to be dependent on alcohol but more likely to be dependent on illicit drugs.

Perceived dependence on individual drugs was assessed for Indigenous and non-Indigenous female detainees (see Table 20). Indigenous women were significantly more likely than non-Indigenous women to perceive themselves to be, or to have recently been, dependent on cannabis and less likely to feel dependent on heroin. Other differences in perceived dependencies were not significant.

Relationship between drug use and criminal activity in the previous 12 months

There were no significant differences between Indigenous and non-Indigenous women in the proportion of crimes said to be drug-related, with some 70 percent of women saying that few or none of their previous crimes were drug-related. ‘Drug-related crime’ is defined as committing a crime to make money to buy drugs (excluding alcohol) or committing crime while under the influence of drugs, not including alcohol. In the 24 hours before the current arrest, 10 percent of all female detainees had been trying to buy or sell illegal drugs. There were no

Table 20 Perceived dependence in the previous 12 months on individual drug classes, by Indigenous status—women (percent)

	Indigenous	Non-Indigenous	Combined
Perceived dependence on cannabis**	24.7	17.8	19.3
Perceived dependence on amphetamine/methylamphetamine	20.4	17.3	18.0
Perceived dependence on heroin**	10.2	15.4	14.3
Perceived dependence on benzodiazepines	4.9	6.2	5.9
Perceived dependence on MDMA (ecstasy)	0.3	0.5	0.4

n = 2,660 (2,068 non-Indigenous women and 592 Indigenous women)

**p < .001

Source: AIC DUMA collection 2002–2006 [computer file]

significant differences between Indigenous and non-Indigenous women on this measure.

Just prior to the current arrest, 72 percent of Indigenous women and 55 percent of non-Indigenous women had been using alcohol or other drugs ($p < .001$). Forty-one percent of Indigenous and 17 percent of non-Indigenous women had been drinking alcohol; non-Indigenous women were more likely to have been using illicit drugs only (39% vs 31%).

The relationships between Indigenous status, nature of AOD dependence, and current MSO are explored in Figure 5 and Figure 6. In every dependency category, Indigenous female detainees were more likely than non-Indigenous women to be charged with violent offences, and non-Indigenous women detainees were more likely than Indigenous ones to have been charged with property offences. Nevertheless, associations between alcohol dependence and violent crime and between illicit-drug dependence and property crime are demonstrated. The exception to this was non-Indigenous women dependent on alcohol only, of whom similar proportions recorded violent and property offences.

Summary

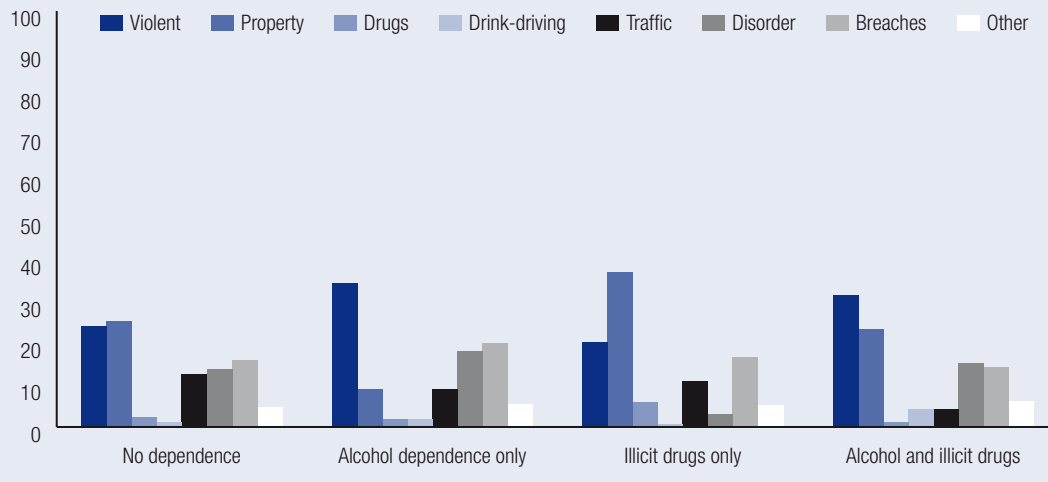
Although all female detainees in DUMA demonstrated significant social disadvantage over both women in the general community and male police detainees, Indigenous ones suffered even further disadvantage. They were younger, had less education, were more likely to be caring for children and living in public housing, and were less likely to

be employed than non-Indigenous women. In these characteristics, they epitomise the socioeconomic status of Indigenous women in the criminal justice system generally (Aboriginal and Torres Strait Islander Social Justice Commissioner 2002).

Other differences between the Indigenous and non-Indigenous women in the study include the nature of the most serious offence and AOD use. Indigenous women were more likely to have been charged with violent or disorderly offences or breaches of legal order and were more likely to have been imprisoned in the previous 12 months. Their drug use was more likely to be restricted to alcohol and cannabis, but, importantly, they were more likely to be dependent on alcohol or combined alcohol and illicit drug use. Indeed, almost 40 percent were dependent on alcohol. A higher percentage of Indigenous than of non-Indigenous women had been drinking alcohol before the most recent arrest. Relationships between alcohol dependence and violent crime in both Indigenous and non-Indigenous women were demonstrated, but there was a stronger effect in Indigenous women.

These findings are similar to those found in the DUCO women's study: that Indigenous female prisoners were more likely than non-Indigenous female prisoners to be involved in violent offending, less likely to be involved in drug crime, and more likely to have used alcohol and to be alcohol-dependent. The funding of a DUMA site in Darwin by the Federal Government for a period of four years under the National Illicit Drugs Strategy will provide further information on the role of alcohol among Indigenous police detainees.

Figure 5 MSO—Indigenous women* (percent of those with that dependence)

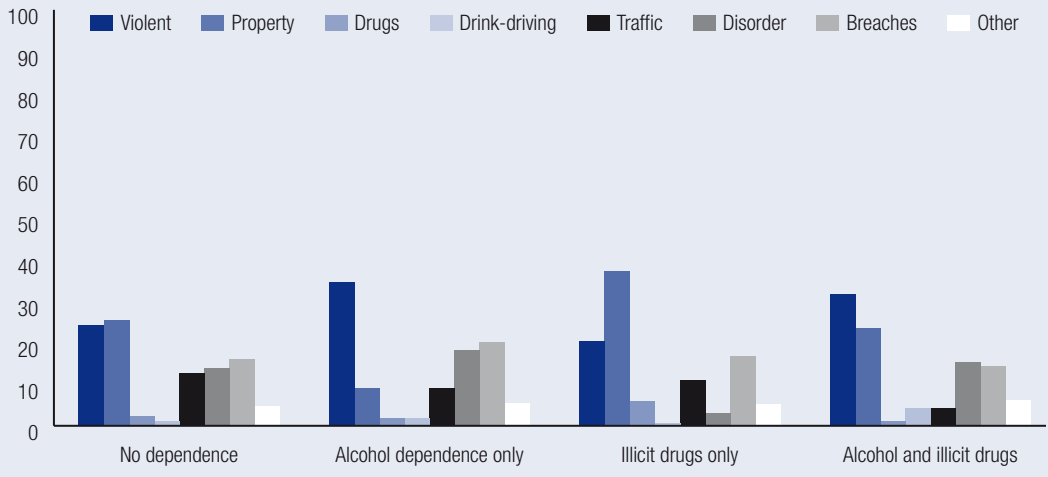


n = 377

*p < .05

Source: AIC DUMA collection 2002–2006 [computer file]

Figure 6 MSO—non-Indigenous women (percent of those with that dependence)**



n = 1,268

**p < .001

Source: AIC DUMA collection 2002–2006 [computer file]

Drug and alcohol treatment

So far, this report has highlighted the finding that drug and alcohol use, particularly use of illicit substances, appears to play a strong part in women’s involvement in the criminal justice system. Among the female police detainees, many had been

using illicit drugs on a regular basis prior to being arrested for the first time. Despite similar findings suggested in past literature on the link between women’s drug use and crime, research continues to show that fewer women than men tend to enter drug- or alcohol-treatment programs and that those who do enter them tend to experience a number of

problems different from those that men experience. These include care of dependent children and limitation of access to appropriate and affordable treatment programs (Stevens & Wardlaw 1994; Willis & Rushforth 2003). Furthermore, some researchers suggest that the stigma of using drugs, particularly in those who are mothers, may contribute to women's being less likely to seek drug treatment, for fear of such repercussions as removal of their children (Stevens & Wardlaw 1994; Taylor 1993).

In addition, there may be differences between men and women in the types of treatment programs they access and why they access them. Women may be more likely to enter opioid maintenance pharmacotherapies in order to terminate drug use or reduce drug use during pregnancy (Taylor 1993). Alternatively, hypothetically, women may be less likely to enter treatment programs in which they are required to live on site, because of potential difficulties in arranging child care for the duration of their treatment stay. Maintenance treatment may prove to be the most effective treatment option that meets some women's flexibility requirements.

The Australian Institute of Health and Welfare publishes data on the profiles of closed (completed) treatment episodes for clients registered for alcohol and other drug treatment in Australia. The data cover a variety of treatment types, including withdrawal management (detoxification), counselling, support and case management, and information and education. Based on the 2005–06 Alcohol and Other Drug Treatment Services National Minimum Data Set (AODTS-NMDS), there were 151,362 such closed treatment episodes in government-funded alcohol- and other drug-treatment agencies (AIHW 2007b). One-third of all registrants were female. Nationally, alcohol was the principal drug of concern (39%), followed by cannabis (25%), opioids (17%) and amphetamines (11%) (AIHW 2007b). Importantly, among other exclusions, the AODTS-NMDS data exclude agencies whose primary activity concerns opioid maintenance pharmacotherapies such as methadone maintenance. As such, the data underestimate treatment primarily concerning opiates such as heroin.

In the DUMA questionnaire, information is collected regarding detainees' experience with drug and alcohol treatment. The present section compares male and female police detainees in order to

examine whether the proportion of detainees who are currently in drug and/or alcohol treatment, or who have been at some point in their life, varies by gender. In addition, it examines possible differences in the types of treatment programs entered; reasons for entering treatment; and the main substance the detainee was being treated for. These matters are also examined specifically with respect to Indigenous women detainees.

Table 21 shows a breakdown by gender of the proportion of detainees reporting current or prior involvement in a drug- or alcohol-treatment program. Of those detainees who reported having ever consumed alcohol or illicit drugs at some point in their life, 38 percent had been in a drug- or alcohol-treatment program. Women detainees were significantly more likely to have been in a treatment program at some point in their life (44%) than were male detainees (37%). Non-Indigenous women (44%) were more likely than Indigenous women detainees (39%) to have been in a treatment program.

Female police detainees were also significantly more likely (41%) than male ones (28%) to report currently being in a drug- or alcohol-treatment program. Of those women who reported current involvement, approximately half (47%) were over the age of 30 years. Non-Indigenous female detainees were almost twice as likely as Indigenous women to be currently involved in a drug- or alcohol-treatment program (29% vs 17%). Interestingly, given that the research literature suggests that women with children may be less likely to enter treatment programs, or may have difficulty accessing treatment programs, of those women detainees currently in a treatment program, approximately half (49%) reported being responsible for the care of dependent children, compared with 30 percent of male detainees.

Table 21 Current or prior involvement in a drug- and/or alcohol-treatment program, by gender (percent)

	Women	Men	Combined	(Number)
Ever**	43.7	36.5	37.6	17,289
Current**	41.2	27.6	30.0	6,487

**p < .001

Source: AIC DUMA collection 2002–2006 [computer file]

Table 22 shows a breakdown, by gender, of the types of treatment programs police detainees reported current involvement in. Detainees could report involvement in more than one treatment program.

The most common type of treatment program that both male and female police detainees reported was methadone maintenance, in which female detainees were significantly more likely than males to report currently being involved. It is noteworthy that although female police detainees were significantly more likely to test positive to most drug types (particularly heroin) and to report using drugs in the past year, aside from naltrexone, methadone maintenance was the only program they were more likely than males to report being involved in. Male detainees were more likely to report involvement in all other treatment program types (aside from naltrexone). Furthermore, although female detainees were more likely to report currently being in a treatment program, the only program they were more likely than males to be in was a methadone maintenance program; male detainees were more likely than female detainees to be participating in a range of other types of treatment program. There were no significant differences between Indigenous and non-Indigenous female detainees in the types of current treatment programs entered.

Table 22 Types of current drug- and alcohol-treatment programs entered, by gender^a (percent)

	Women	Men	Combined
Detox*	1.9	4.9	4.2
Rehabilitation program / therapeutic community**	5.5	10.4	9.2
Outpatient/counselling*	19.3	24.5	23.2
Support group (AA, NA, church, etc.)**	4.7	9.4	8.2
Methadone maintenance**	61.2	39.5	45.0
Naltrexone	4.1	3.6	3.8
Buprenorphine**	13.4	21.4	19.3
GP	6.2	6.7	6.6
Other*	1.2	3.3	2.8

n = 1,944 (1,457 men and 487 women)

a: Respondents could enter more than one, so numbers will not total 100

*p < .05

**p < .001

Source: AIC DUMA collection 2002–2006 [computer file]

Table 23 shows that of all treatment programs, both women and men were most likely to be in one for heroin use. Approximately two-thirds of both male and female detainees currently in a treatment program reported heroin as the main drug they were being treated for. This was followed in both groups by amphetamine/methylamphetamine. Male detainees were slightly more likely to report being in treatment for alcohol use (9%) than were females (7%). This reflects the finding that male police detainees were more likely to report having used alcohol in the past 12 months and to be classified as dependent on alcohol than were female detainees.

Police detainees in DUMA are also asked why they had entered their current treatment program. Male detainees were more likely than females to report entering the treatment program due to a drug court requirement (13% vs 5%). A similar proportion (20%) of males and females reported entering the treatment program through self-referral. Prior to the third quarter of 2005, detainees could also report entering the program voluntarily. From the second quarter of 2002 to the second quarter of 2005, 65 percent of female detainees and 55 percent of male detainees reported entering their current treatment program voluntarily.

The finding that female police detainees were less likely than male detainees to report entering the treatment program because of a drug court requirement is interesting. It has been suggested by some researchers that the strict eligibility criteria

Table 23 Main substances that detainees are being treated for, by gender* (percent)

	Women	Men	Combined
Alcohol	7.4	9.3	8.8
Cannabis	<1	3.6	2.8
Cocaine	<1	<1	<1
Heroin	70.9	65.6	66.9
Opiates	8.3	5.9	6.5
Amphetamine/ methylamphetamine	10.7	12.5	12.1
Benzodiazepines	<1	<1	<1
Other	1.5	2.3	2.1

n = 1,936 (1,452 men and 484 women)

*p < .05

Source: AIC DUMA collection 2002–2006 [computer file]

surrounding drug courts may lead to some women's being less likely to participate in treatment programs in response to a drug court requirement (Payne 2006). Examples of such eligibility criteria include that the offender plead guilty to the offence, be likely to otherwise be imprisoned for the offence, not have been diagnosed with a mental illness, and have a drug problem and wish to participate in the drug-court program. There are a number of factors that may preclude women from entering a drug-court program, particularly their greater likelihood to be experiencing mental health problems and to be responsible for family and childcare arrangements (Payne 2006). It is not that these factors exclude women from participating in drug court programs or treatment programs in general, but that they may affect the types of treatment programs entered and possibly precipitate early withdrawal or termination by causing the female participants difficulty in meeting the eligibility criteria.

Furthermore, it was found that Indigenous women (2%) were less likely than non-Indigenous women (5%) to report entering their current treatment program due to a drug court requirement. There are also a number of factors that may explain this finding, such as Indigenous women detainees' greater likelihood of having been arrested for a violent offence, which excludes them from accessing drug court programs. In addition, access to such programs may be extremely difficult for Indigenous detainees living in rural and remote areas of Australia (Payne 2006).

Female police detainees who had used alcohol or other drugs at some point in their lives were significantly more likely than male detainees to report difficulty in accessing treatment programs for their alcohol or drug use. Twelve percent of female detainees reported that they had tried to enter a drug- or alcohol-treatment program in the past 12 months but had been turned away due to a lack of places, compared with eight percent of male detainees. There were no significant differences between Indigenous and non-Indigenous women in terms of difficulties accessing drug- or alcohol-treatment programs. Unfortunately, the DUMA questionnaire does not elicit other reasons for inability to access these treatment programs.

Summary

Differing proportions of male and female detainees in DUMA reported both current and prior involvement in a drug- and/or alcohol-treatment program. Of those detainees who reported using alcohol or drugs at some point in their lives, women detainees were significantly more likely than male detainees to report both current and prior involvement in a treatment program. Both women and men detainees were most likely to report that heroin was the main substance they were currently in a treatment program for. In support of this, the most common type of current treatment program entered by both groups was methadone maintenance.

Some differences were found in the reasons male and female detainees reported for entering the treatment programs. Male detainees were more likely than female detainees to have entered a treatment program upon a drug court requirement, perhaps reflecting the stricter eligibility criteria of these types of programs and females' difficulties, due to such matters as childcare responsibilities and mental health issues, in accessing and remaining in such programs.

It is important to recognise that many women who enter drug and/or alcohol treatment programs have different treatment needs from men and that there is a need for different treatment approaches for female drug users. The finding that female detainees were more likely than males to report both prior and current involvement in a treatment program suggests that they may differ from those examined in other research studies, which found that women in the general population were less likely than men to report involvement in a treatment program (Stevens & Wardlaw 1994). It may be that the female police detainees in DUMA had reached the point at which their drug and/or alcohol use was more problematic and they sought out or were forced into a treatment program. It is noteworthy, however, that the vast majority of female detainees in a treatment program were in a methadone-maintenance program, with very few reporting involvement in other types. This may suggest that other programs may not be addressing the needs of female drug and/or alcohol users.

Mental health issues

The relationship between drug and alcohol use and mental health is an under-researched area, particularly in relation to women (Johnson 2006b). Research suggests that it is important that when women enter treatment programs, whether for drug and/or alcohol problems or for mental health problems, treatment practitioners recognise these multiple problems and address them accordingly (Ettorre 1992; Johnson 2006b).

Among women prisoners in the DUCO study, 60 percent reported experiencing mental health problems while growing up (Johnson 2004). In addition, the prevalence of mental health problems was greater in women prisoners dependent on drugs than in non-dependent ones. A separate study exploring concurrent drug and alcohol dependency and mental health problems among female prisoners in the DUCO sample found that concurrence of substance dependency and mental health problems in women was more common than incidence of either independently of the other (Johnson 2006b).

One particular issue that has been raised in research in this area is the question of whether mental health problems lead to substance abuse or whether substance abuse leads to mental health problems. It has been suggested that there may, in turn, be a 'feedback loop' whereby 'abuse leads to mental health problems, which in turn may be treated with prescription drugs, which subsequently leads to obtaining drugs illegally and possibly further abuse as an adult' (Johnson 2006a: 213). Additional analysis of women prisoners from the DUCO study also revealed a significant association between experiences of physical, sexual, and emotional abuse as a child and mental health problems as an adult (Johnson 2006b).

There are two main avenues via which mental health problems among police detainees can be examined in information obtained by DUMA. First, as part of the core DUMA questionnaire, detainees are asked whether they have ever been a patient in a psychiatric hospital for at least one overnight stay. Second, a separate addendum has been developed and run on two occasions (in the third quarter of

2004 and fourth quarter of 2006) to gauge the psychological distress detainees had experienced in the month prior to interview.

The Kessler Psychological Distress Scale (K10) was chosen as the measure for the mental health addendum. The K10 scale has been used by the ABS in the 1997 National Survey of Mental Health and Wellbeing and in the 2001 National Health Survey. It is a measure of psychological distress and does not include any questions to identify psychosis. The scale consists of 10 questions about non-specific psychological distress and seeks to measure the degree of anxiety and depressive symptoms that a person may have experienced in the 30 days prior to interview.

For each question, there is a five-level response scale. Each item is scored from 1 for 'none of the time' to 5 for 'all of the time'. Scores for the 10 questions are summed, yielding a minimum score of 10 and a maximum score of 50. Respondents who did not answer all 10 questions were excluded from the data analysis. As there is no Australian or international standard method for the presentation of the scores, the present analysis uses the same cut-off levels as those the ABS used in the 2001 National Health Survey. Based on this method, there are four levels of psychological distress:

- Low (10–15)
- Moderate (16–21)
- High (22–29)
- Very high (30–50).

Table 24 displays the level of psychological distress experienced by male and female detainees in the month prior to interview, according to these ABS cut-off measures. Over all, more than half of police detainees in DUMA who completed the mental health addendum registered high or very high levels of psychological distress (54%). Approximately two-thirds (68%) of female detainees and 51 percent of male detainees were classified as experiencing high or very high levels of psychological distress. There were few differences among age groups. Indigenous women, in particular, were more likely to register high (19%) or very high (69%) levels of psychological distress than non-Indigenous women detainees (33% high and 32% very high).

The high amounts of prior psychological distress registered by police detainees in DUMA may be compared with those registered by the general population in the National Health Survey conducted by the ABS in 2004–05 (ABS 2006c). In this survey of more than 14,000 people, 63 percent of the general population registered low degrees of psychological distress, and four percent registered very high degrees. In comparison, 28 percent of police detainees registered low degrees of psychological distress, and 28 percent registered very high degrees. Furthermore, it is interesting to note that even when examining the levels of psychological distress experienced by police detainees who reported no recent drug use in the past year, this group still registered higher levels of psychological distress than the general population. For example, of those police detainees who did not report use of any drugs in the past year, 18 percent

Table 24 Prevalence and degree of psychological distress, by gender** (percent)

	Women	Men	Combined
Low	18.4	29.1	27.5
Moderate	13.5	20.0	19.0
High	30.8	24.3	25.3
Very high	37.3	26.6	28.2
Total (number)	(185)	(1,049)	(1,234)

**p < .001

Source: AIC DUMA collection 2004–2006 [computer file]

registered high levels of psychological distress. Therefore, over all, the level of prior psychological distress was much higher in police detainees than in the general population.

Given that female detainees were more likely to register high levels of psychological distress than males and that research suggests a strong link between psychological distress and alcohol and/or drug use, it is important to examine this relationship with respect to female detainees. Over all, female detainees testing positive to heroin were most likely to register very high levels of distress (53%), followed by detainees testing positive to multiple drugs (45%), and to benzodiazepines or cannabis (47% each). Detainees testing positive to MDMA (ecstasy) were least likely to register very high levels of

psychological distress (33%). The different patterns of psychological distress according to drug type could reflect the socio-demographic characteristics of female users of each drug type. Furthermore, frequency of drug use may be an important factor in female detainees who use drugs more frequently, such as those testing positive to heroin, as they are possibly more likely to register higher levels of psychological distress than ecstasy users, who may use the drug less frequently (e.g. on a more social basis over the weekend).

Table 25 shows the level of psychological distress experienced by female police detainees, according to drug and/or alcohol dependency. Please note that the category of alcohol dependency and the category of concurrent dependency on alcohol and drugs comprised small sample sizes.

Analysis of levels of the prior psychological distress experienced by female police detainees revealed that women who were concurrently dependent on alcohol and illicit drugs reported the highest levels of psychological distress (77% reported very high levels), followed by those dependent on alcohol (58%) and those dependent on illicit drugs (45%). All female detainees who were classified as dependent concurrently on alcohol and illicit drugs registered at least moderate levels of prior psychological distress. It is noteworthy that even those women who were classified as not dependent on either alcohol or illicit drugs registered reasonably high levels of prior psychological distress compared with the general community, providing support to Johnson's (2006b) findings with respect to women prisoners.

In terms of the relationship between psychological distress and involvement in the criminal justice system, of those female detainees who registered very high levels of psychological distress, 44 percent had been arrested in the previous year, and 46 percent had been in prison in the previous year.

In terms of the other measure of mental health available from the DUMA questionnaire, females were also more likely than male detainees (21% vs 15%) to report having spent at least one night in a psychiatric hospital in the past 12 months. This also differed by age, with those in the higher-age categories more likely to have spent a night in a psychiatric hospital. A higher percentage of female detainees dependent on both alcohol and illicit drugs

Table 25 Prevalence of psychological distress and alcohol/drug dependency—women** (percent)

	Not alcohol- or drug-dependent	Alcohol-dependent	Drug-dependent	Dependent on alcohol and drugs
Low	32.4	8.3	11.8	0.0
Moderate	22.5	0.0	8.2	11.8
High	29.6	33.3	35.3	11.8
Very high	15.5	58.3	44.7	76.5
Total (number)	(71)	(12)	(85)	(17)

**p < .001

Source: AIC DUMA collection 2004–2006 [computer file]

(28%) had been in a psychiatric hospital in the previous 12 months than of those dependent on alcohol (25%), of those dependent on illicit drugs (23%), and of non-dependent females (15%). In the same year, 24 percent of females who had spent a night in a psychiatric hospital had been arrested, and 29 percent had been in prison.

Summary

Over all, police detainees in DUMA registered much higher levels of psychological distress than the general population. Female police detainees were significantly more likely than male detainees to register high levels of psychological distress, and this was particularly the case for Indigenous female detainees. Mental health problems correlated more strongly with drug use than with contact with the

criminal justice system, including imprisonment. Detainees dependent concurrently on alcohol and illicit drugs were most likely to register very high levels of psychological distress. This doesn't necessarily mean that it is drug use that causes the mental health problems; it could very well be that drugs are used to cover underlying psychological distress. The fact that the DUMA sample as a whole displays much higher levels of psychological distress than the general population even without looking at drug or alcohol dependency seems to indicate that there may also be other factors at play here, such as poor life circumstances or experiences with abuse. Nevertheless, drug use could exacerbate such problems, and it is important to know the kind of drug-use behaviour and the types of drugs that have the strongest relationship with mental health problems.



Conclusion

This report set out to answer three important questions which have implications for further research and practice:

1. Are the factors associated with drug use and/or criminal behaviour for women similar to those of men?
2. To what extent are women in police detention similar to or different from women in prison?
3. To what extent are Indigenous women in DUMA similar to or different from non-Indigenous women in DUMA?

Differences between women and men in DUMA

Female police detainees were more disadvantaged than male ones, particularly in terms of completed education and occupational status, and were more likely to be using injectable illicit drugs. A higher percentage of women than men regularly used an amphetamine/methylamphetamine, heroin, benzodiazepines, or other opiates, and the men were the more likely to use cannabis, alcohol, ecstasy, cocaine, or hallucinogens on a regular basis. Female police detainees were considerably more likely than male ones to be dependent on illicit drugs, and men were more likely than females to be dependent on alcohol.

Female detainees were less likely than male ones to be involved in violent offending, and most commonly a property offence was their most serious offence. The sequencing of drug use and crime was different for women and men. Female detainees were, on average, older than male detainees at age of first arrest, and at that age many had already begun to use illicit drugs on a regular basis. Men, on the other hand, were more likely to be involved in crime before engaging in serious drug use. Therefore, among the DUMA sample, it appears that the explanatory model most applicable to women is that drug use leads to crime, while for males, it is more likely that crime leads to drug use or that the two occur in a similar period.

Alcohol use, on the whole, was associated with violent offending in both women and men, whereas illicit drug use was generally associated with property offending in both women and men. Alcohol is known to be causally linked to violence (Graham, Schmidt & Gillis 1996), and the present analysis suggests that the link may be almost as strong for women as it is for men.

Given these gender differences, it is unlikely that a literature based predominantly on male criminal behaviour would be able to reflect the realities of women's drug use and criminal behaviour. Further research into the relationship between drug use and criminal offending is needed, but at the very least

it can be said that some drug-using women would profit from services to help them to deal with their drug use before they become deeply enmeshed in the criminal justice system. Criminal justice diversion programs such as drug courts or other drug rehabilitation programs are also essential to provide early intervention before criminal lifestyles become entrenched. The key issue is for programs to become gender-focused in their approaches, in order to ensure that they be equally accessible by women and men and that the treatment programs be relevant and address the needs of women.

Differences between women in police detention and women in prison

While the DUCO women's study has helped to fill the gaps in knowledge about women in the Australian criminal justice population, the analysis of data relating to women in DUMA illuminates another aspect of this particular issue by using a sample drawn from a different corner of the criminal justice system. It is important, however, to recognise the limitations that arise because police detention represents the first step in a criminal career that, for some, culminates in imprisonment. On the one hand, sixteen percent of the women in DUMA had been in prison at least once during the previous 12 months, and we do not know what proportion had been incarcerated prior to that. On the other hand, women in prison are drawn from the same population as women in police detention; it can also be said that they represent a subset of the most serious offenders. In other words, there is possibly an overlap between police detainees participating in the DUMA program and prisoners participating in the DUCO project.

In summary, the female police detainees shared some characteristics similar to those of female prisoners in the DUCO study, particularly in terms of social disadvantage. There were differences between the two groups, however, in terms of MSO, with female detainees less likely to have a violent MSO than were women prisoners. Furthermore, although rates of AOD dependence were higher in female police detainees than in the general population, they were not as high as those in the women prisoners.

Programs to deal with the social disadvantage and drug use of prisoners while they are in prison have also been suggested (Johnson 2004), but it may also be possible, in order to help avert further crime that may result in incarceration, to offer similar programs to women (and men) detained by police. Information about the availability of drug treatment can be offered to police detainees while they are in detention (Loxley 2005), and welfare programs can be directed towards their children. Community-based treatment programs should also attempt to deal with the whole family (Johnson 2006a). All such steps may help to reduce inter-generational transmission of drug use and offending (Loxley et al. 2004).

Differences between Indigenous and non-Indigenous women in DUMA

The socioeconomic position of female Indigenous detainees in this study underscores what has been found about incarcerated Indigenous women in previous studies (Aboriginal and Torres Strait Islander Social Justice Commissioner 2002). Indigenous women were the most socially disadvantaged of all police detainees in DUMA. They also used alcohol heavily; were more likely to be involved in violent crime; and were the most likely to be involved in relatively minor offences against good order or disorderly offences, some of which may have been related to alcohol use. As did their non-Indigenous counterparts, many attributed their crime to their AOD use.

Suggestions made above about programs to reduce inter-generational social disadvantage and to engage alcohol- and drug-dependent offenders in drug treatment programs are particularly relevant to this group, but issues of cultural safety are paramount:

Links must be drawn and holistic models developed and supported which address the connections between culture, drug use, alcohol use, separation from family, violence, poverty, spiritual needs, housing, health, boredom, race discrimination and gender discrimination.

(Aboriginal and Torres Strait Islander Social Justice Commissioner 2002: 166)

Implications for research and practice

Over all, this study highlights the importance of including gender as a variable in criminological studies, particularly in research examining the relationship between drug use and crime. The results confirm that men and women do differ in terms of their pathways into drug use and crime. They differ in the types of drugs used as well as the types of crimes committed. There were also significant differences between Indigenous and non-Indigenous women. The differences have important implications both for reducing women's involvement in drug use and crime and for understanding and targeting some of the factors that may have contributed to their involvement in the first place.

First, the present study clearly demonstrates a strong link between women's drug use and offending. Female police detainees were significantly more likely to be classified as drug-dependent than were males, and women dependent on drugs were much more likely to be involved in property offending than were other groups. Furthermore, the finding that the majority of female police detainees had been using illicit drugs on a regular basis prior to involvement in the criminal justice system suggests that one way to reduce the number of women entering the criminal justice system is to reduce drug dependency through early intervention.

To see such a reduction, however, it will be important for treatment programs and practitioners to address a number of issues. The present study, along with others in the criminological literature, highlights that female drug users and offenders have generally experienced a wide range of problems that may have played a part in their initiation into drug use and crime. Women detainees in the DUMA sample were more socially and occupationally disadvantaged than male detainees and particularly than women in the general population. Many were responsible for the care of dependent children, and very few were employed full time or part time. In particular, mental health problems were significantly more common in female police detainees, particularly in those dependent on drugs and/or alcohol. In another report on DUMA police detainees based on

an addendum exploring past experiences of partner violence, it was found that females were more likely than males to report experiencing at least one incident of a physical confrontation with an intimate partner at some point in their lives (81% vs 56%) (Mouzos & Smith 2007). Past studies have also suggested that prior experiences of sexual or physical abuse play an important role in propelling women into drug and alcohol use (Johnson 2006a; Johnson 2004).

These findings suggest that in order to reduce women's drug use and crime, any interventions or treatment programs need to be multi-faceted in approach. They will need to address not only drug or alcohol use but also mental health problems and ways to improve the social and occupational disadvantage experienced by many, such as in areas of housing, education, and vocational opportunities. This is no easy task. It will involve agencies from a variety of fields, such as drug and alcohol agencies, mental health services, community and family services, and agencies in the criminal justice system, working together to address these issues and improve the lives of women.

It is important that such services and programs not only address these multiple needs but also be accessible by women. Among the DUMA sample it was found that a lower proportion of female than of male detainees reported involvement in treatment programs other than methadone maintenance. This may suggest either that these programs are not accessible by many female drug and/or alcohol users or that they are not addressing the needs of these women. A number of factors need to be taken into account in ensuring that women enter such programs. These include accessibility by women responsible for dependent children, possibly offering alternative and affordable childcare arrangements; affordability of the programs and services; and the location of the programs and services (Swift, Copeland & Hall 1995).

It is important that such services be available both in and outside the criminal justice system, in order to help women at risk of becoming enmeshed in a drug-using and criminal lifestyle and to provide women who have become involved in the criminal justice system with the resources necessary to break the cycle.

Furthermore, such services and programs need to be available to women, particularly Indigenous women, living in rural and remote areas. It was found that Indigenous female police detainees were significantly more likely than non-Indigenous ones to report being denied access to a treatment program in the past 12 months due to a lack of places. As noted above, it is also important that such programs be culturally appropriate and sensitive to the needs of Indigenous Australians.

The results of this study provide law enforcement agencies with a summary of some of the common issues experienced by many of the women who are detained by police on a daily basis. They also provide a general profile of women detainees entering police stations and watch-houses around Australia. This could assist with staff development and training to handle and manage female detainees with drug problems. For example, it highlights the important role that on-site watch-house nurses can play given the high proportions of police detainees who have used alcohol and other drugs around the time they are detained. The report points out that many police detainees experience other problems that could impinge on their watch-house experience, such as high levels of psychological distress, providing front-line police with an overview of some of these issues experienced by offenders whom they deal with on a day-to-day basis.

It is important that future research studies in this area be multifaceted in their approach, taking account of a number of factors possibly contributing to women's involvement in drug use and crime. These include

socio-demographic characteristics, past life experiences, mental health issues, initiation, use of and desistance from drugs, and involvement in the criminal justice system. Researchers need to provide in-depth, evidence-based studies demonstrating the differences between men and women in order to assist policymakers and practitioners in reducing the number of women involved in drugs and crime. This will also assist in directing future funding by demonstrating how different women could benefit from different types of treatment approaches. It is also important that further research explore some of the barriers that women and Indigenous women in particular face in obtaining drug and/or alcohol treatment, with a view to eliminating them.

In summary, the present study examines involvement in drug use and crime on the basis of three comparisons: female with male police detainees; female police detainees with female prisoners; and Indigenous with non-Indigenous female police detainees. It is important that research in this area continue to better understand the differences between male and female drug users and offenders. In particular, further research could explore whether there are any significant differences among the profiles of women who use different types of drugs or who are involved in different types of offending in terms of their pathways into drug use and crime. One of the major findings of this study is that men and women should not be treated as a homogeneous group. The same distinction is applicable to drug users and more general offenders.

Glossary

Alcohol and other drug (AOD) use

The use of any alcohol or illicit substances.

Australian Institute of Health and Welfare (AIHW)

A national Australian agency responsible for the production and dissemination of health and welfare statistics and information. AIHW manages the National Drug Strategy Household Survey (NDSHS).

Australian Institute of Criminology (AIC)

Australia's leading national research and knowledge centre on crime and justice.

Drug Use Monitoring in Australia (DUMA) program

A nationwide monitoring system managed by the Australian Institute of Criminology, DUMA involves the quarterly collection of information on drug use and crime from police detainees in police stations and watch-houses around Australia. There are two main parts to the information collected: an interviewer-administered questionnaire and a urine sample.

Drug Use Careers of Offenders (DUCO) project

An Attorney-General's Department-funded project, conducted by the Australian Institute of Criminology, that sought to measure drug use, including illicit drug use, of sentenced offenders. Over a period of three years, DUCO reported on three different

offender populations: adult male prisoners, adult female prisoners, and sentenced juvenile detainees.

Heroin

An opiate derived from morphine. It is a depressant drug, slowing activity in the central nervous system. Heroin is most commonly used intravenously, but it can also be snorted or smoked. In DUMA, self-report questions make a distinction between heroin use and use of morphine or other opiates.

Lifetime drug use

In this report, lifetime drug use is defined as ever self-reporting use of alcohol or illicit drugs in one's lifetime.

MDMA

Methylenedioxymethamphetamine, also known as ecstasy. It usually comes in tablet form. MDMA has both stimulant and hallucinogenic effects.

Methylamphetamine

Methylamphetamine (also known as methamphetamine) is a class of psycho-stimulant substance. In urine testing for DUMA, a positive result for amphetamines in the initial screening test results in further confirmatory testing to determine whether the detainee has used a methylamphetamine.

Most serious offence (MSO)

The most serious type of charge against a detainee. Each offence recorded in relation to a police detainee (either currently or in the past 12 months) is classified into one of the eight categories. Detainees with multiple offences are allocated to the category that represents the most serious of their offences using the ASOC scheme. In decreasing order of seriousness, the eight categories are violent, property, drug, drink-driving, traffic, disorder, breaches, and other.

National Drug Strategy Household Survey (NDSHS)

A survey, managed by the Australian Institute of Health and Welfare, of the general Australian population. The survey, conducted every three years, asks respondents about their drug-use patterns, attitudes, and behaviours. The 2004 survey was completed by approximately 30,000 individuals aged 12 or more.

Opiates

Alkaloids derived from the opium poppy (*Papaver somniferum*), including morphine, codeine, and, in this report, opium but excluding synthetic opioids such as heroin and methadone. Opiates are depressant drugs.

Police detainee

In this report, an individual who has been held in police custody for less than 48 hours and has consented to participate in the DUMA program.

Prisoner

In this report, an individual who has been sentenced to a term of imprisonment.

Recent alcohol use

In women, having consumed three or more drinks in a single day in the past 12 months; in men, having consumed five or more drinks in a single day in the past 12 months.

Recent illicit drug use

Use of an illicit drug on at least one occasion in the past 12 months.

Risky, high-risk, low-risk drinking patterns

Drinking patterns as defined in the 2004 National Drug Strategy Household Survey (AIHW 2005). In males, the consumption of up to 28 standard drinks per week is considered 'low risk'; 29 to 42 per week, 'risky'; 43 or more per week, 'high risk'. In females, the consumption of up to 14 standard drinks per week is considered 'low risk'; 15 to 28 per week, 'risky'; 29 or more per week, 'high risk'.

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The Drug Use Monitoring in Australia program makes a quarterly assessment of drug use by police detainees around Australia. This report finds differences in drug use between male and female detainees and between Indigenous and non-Indigenous female detainees, highlighting different patterns of drug usage and dependencies and of associated most serious offences leading to arrest.

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