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Foreword | *Theories on the causal relationship between drug use and crime in Australian literature have often overlooked the influence of gender as a confounding variable. However, research indicates that pathways into drug use and crime differ for males and females. Using data from the Australian Institute of Criminology's Drug Use Monitoring in Australia program, this study explores the relationship between drug use, offending, mental health and experiences of child abuse among a sample of police detainees. Findings indicate that female detainees were more likely to use 'hard' drugs and to have been arrested for a property crime. The relationship between experiences of mental illness, drug use and arrest was also stronger for female detainees. The study also found a strong relationship, mediated by gender, between drug use, offending and prior experience of child abuse, with the relationship being stronger among female detainees. It is suggested that mental health care be considered as a measure to reduce recidivism, and that programs designed for male offenders may not be suitable for addressing women offenders' needs, which also tend to be more complex.*

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Mental health, abuse, drug use and crime: does gender matter?

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There are numerous theories and research studies in the criminological literature describing the relationship between drug use and offending, with Goldstein's (1985) tripartite framework being one of the most well known. Goldstein (1985) suggests that there are three ways in which drug use and offending can interact—drug use can lead to crime, crime can lead to drug use, or drug use and crime are not causally related but result from other factors such as poverty, sexual and physical abuse, mental health, and lack of education and employment opportunities. The role that gender may play within this relationship has largely been overlooked in the Australian literature until recently (Mazerolle 2008).

The focus of this study is to examine the relationship between illicit drug use and offending and two other factors that may play a role in this relationship, namely, mental health and the experience of physical and/or sexual abuse during childhood. Research suggests that the pathways into both crime and drug use are fundamentally different for men and women and that drug use plays a much greater role in women's involvement in crime than is the case for men (Johnson 2004; Makkai & Payne 2003). Few studies, however, have gone beyond looking at the direct relationship between drug use and offending to examining additional factors such as mental health and prior experience of abuse.

Gender differences in drug use and offending

Research studies in Australia and abroad have found high levels of illicit drug use among offenders. Among male offenders, the most commonly used drugs include cannabis, amphetamines, heroin, ecstasy and hallucinogens (Adams et al 2008; Holloway & Bennett 2007; Makkai & Payne 2003). Among female offenders, cannabis use has generally been found to be less prevalent, while use of the 'harder' drugs such as heroin, amphetamines and cocaine has been more prevalent, in addition to illegal use of prescription medications such as benzodiazepines (Holloway & Bennett 2007; Johnson 2004; Loxley & Adams 2009). One theory for the gender differential in illicit drug use patterns is that women tend to use illicit drugs as a form of coping or self-medication for psychological distress (Byrne & Howells 2002).

Past research has also found gender differences in male and female patterns of offending. Generally, female offenders are more likely to be involved in offences such as shoplifting, fraud and receiving stolen goods than are male offenders (Adams et al 2008; Holloway &

Bennett 2007). Men are more likely to be involved in violent crimes and offences such as vehicle theft, burglary and drug-supply offences (Adams et al 2008; Holloway & Bennett 2007).

Mental health and experience of abuse

It has been suggested that understanding women's involvement in the criminal justice system as offenders must also involve recognition of their frequent status as victims (White & Habibis 2005). Past research has found that a significant proportion of female offenders have a history of physical and sexual abuse as an adult and/or child victim (Johnson 2004). Mouzos and Smith (2007) found that female detainees were more likely than males to have experienced at least one incident of physical confrontation with an intimate partner at some point in their lives (81% vs 56%).

Further evidence for the high levels of abuse experienced by female offenders comes from comparing the results of an Australian female prisoner study (Johnson 2004) with a survey of Australian women in the community who participated in the *International Violence Against Women Survey* (Mouzos & Makkai 2004). Female prisoners were more likely than women in the general population to report having experienced sexual violence before 16 years of age (37% vs 18%), to have experienced physical violence as a child that was perpetrated by parents (30% vs 18%) and to have experienced physical violence as an adult (68% vs 48%). Importantly, numerous studies have found that experiences of abuse are often associated with the development of anxiety disorders, such as post-traumatic stress disorder, which can then lead to abuse victims self-medicating with illicit drugs and other substances (Byrne & Howells 2002; Johnson 2004; Logan et al 2006; Najavits, Weiss & Shaw 1997).

Compared with research on prior experiences of abuse and how this relates to drug use and offending, the relationship between drug use, offending and mental health is relatively under-researched and studies which also incorporate gender

differences are few. Australian studies have found that prisoners experience mental health problems at considerably higher levels compared with the general population. In a review of the mental health status of NSW prisoners, it was found that 74 percent had experienced a psychiatric disorder in the previous year compared with 22 percent of people in the general population (Butler & Allnut 2003).

In particular, it has been found that female prisoners are more likely than male prisoners to suffer from psychiatric disorders (Butler & Allnut 2003). Among female prisoners participating in the *Drug Use Careers of Offenders* study, 60 percent reported experiencing mental health problems while growing up and 34 percent reported having received a diagnosis for a mental health problem (Johnson 2006). Furthermore, the prevalence of mental health problems was higher among women prisoners dependent on drugs compared with non-dependent women prisoners. While the coexistence of drug dependence and mental illness has been found in both prisoners and people in the community, Mullen (2001) points out that this does not necessarily indicate a causal relationship.

There are few Australian studies which have investigated the relationship between drug use and offending and also examined the combined role of mental health and experience of child abuse on this relationship. Furthermore, very few studies have examined gender differences in this relationship, despite the implications this has for informing policies regarding the complex treatment needs of offenders who may have issues with drug/alcohol use, mental health and experiences of child abuse. In addition, the majority of studies are based on prison populations; therefore their applicability to offenders who are not incarcerated is unclear.

Aims of the current study

The aims of this study are to explore the relationship between drug use, offending, mental health and experiences of abuse among a sample of police detainees in Australia. Specifically, there are three research questions:

- What is the relationship between drug use and offending among the sample of police detainees and does this differ according to gender?
- What is the relationship between drug use, offending and mental health problems among the sample and does this differ according to gender?
- What is the relationship between drug use, offending and childhood abuse among the sample and does this differ according to gender?

It is beyond the scope of the data to attempt exploration of the temporal or causal relationships between drug use, offending, mental health and childhood abuse. However, there are two particularly valuable aspects of the present study. First, few existing studies have examined the interrelationship between these variables and gender. Second, police detainees are closer to the base rate of criminal offending than the prison populations on which most research is based. The detainees in this study included a broad group of offenders, ranging from people who were arrested for the first time to those with long criminal histories and from those arrested for minor crimes to those arrested for very violent offences.

Methodology

The AIC's *Drug Use Monitoring in Australia* (DUMA) program is an ongoing national drug monitoring program that collects information on a quarterly basis from people who have been detained in police custody (Makkai 1999). Data from the DUMA program were used for this study as it contains information from both male and female detainees on drug use, offending, mental health and childhood abuse.

DUMA information is collected via an interviewer-administered survey. The survey comprises a core set of routinely asked questions, as well as additional questions that are incorporated periodically via addenda and asked of subsets of detainees. In this study, data from the core questionnaire on drug use, offending characteristics, prior psychiatric hospitalisation and use of psychoactive medication were analysed,

as well as information from additional questions regarding mental health and prior history of child abuse.

This study will focus on data collected from adult police detainees (aged 18 years and over) over a five year period between 2002 to 2006 from seven of the long-term DUMA sites in New South Wales, Queensland, South Australia and Western Australia. From 2002 to 2006, a total of 18,280 police detainees participated in the DUMA study (15,387 males and 2,893 females). It should be noted that for the purposes of analysis, each participant was treated independently, however, it is acknowledged that some participants would have been included in the sample multiple times due to repeat episodes of custody.

The additional questions on mental health were administered on two occasions—in the third quarter of 2004 and fourth quarter of 2006. The questions comprised the Kessler Psychological Distress Scale (K10); 10 questions which seek to measure the degree of anxiety and depressive symptoms a person may have experienced during the previous 30 days (Andrews & Slade 2001).

The childhood abuse questions were also administered on two occasions—in the first quarter of 2003 and third quarter of 2005. They were part of a series of questions about experiences of physical and sexual abuse. The questions ranged from experiences of violence in the home during childhood to violence in more recent intimate partner relationships. Only information relating to childhood physical and sexual victimisation was utilised in this study.

While both the K10 and the child abuse questions were only administered to subsets of the sample, analysis of the entire 2002–06 dataset revealed no significant changes in the demographic, drug use or offending characteristics of the detainees. The only variables showing significant change over the five year period were *heroin use* and *imprisonment during the past year* which both declined. This analysis will not be presented here due to space limitations; however, the findings from the two subsets

of detainees who answered the two addenda are likely to be generalisable to the overall DUMA detainee sample.

Results

The results from this study provide support for distinct patterns of male and female drug use among offenders. Although there was little difference between the proportion of male and female detainees who had used at least one drug in the past month (69% vs 71%), there were gender differences in the types of drugs used (Table 1).

Table 1 Drug use in the past month by gender (%)

	Female	Male
Cannabis	54	59
Amphetamine/methylamphetamine**	43	34
Heroin**	18	13
Illegal benzodiazepines	12	8
Ecstasy	7	9
Cocaine	4	4
Street methadone	3	3
Hallucinogens	1	2

**= statistically significant gender difference $p < .01$

Note: Percentages do not total 100 due to poly-drug use

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

As well as information on drug use, detainees who had used illicit drugs in the past 12 months were asked a series of six questions which have been found to effectively screen for drug dependence (Hoffman et al 2003). Detainees who had used illicit drugs in the past 12 months and answered 'yes' to three or more of the questions on the scale were classified as drug dependent. Of those detainees who had used illicit drugs in the past month ($n=7,744$), a higher proportion of women (72%) compared with men (66%) were drug dependent ($\chi^2(1) = 18.24, p < .001$).

The most serious offence type for which detainees were currently in custody also varied by gender, with males more likely to be in custody for a violent offence and women more likely to be in custody for a property offence (Table 2). There were few gender differences in relation to the other most serious offence types.

Table 2 Most serious offence type by gender (%)

	Female	Male
Violent and firearm**	17	24
Property**	40	29
Drug	7	6
Drink or drug driving	3	4
Traffic	8	10
Disorder	6	6
Breaches	13	15
Other	5	4
Missing	1	1

**= statistically significant gender difference $p < .01$

Note: Percentages do total 100 due to rounding

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

The relationship between dependency and offending was also examined. Detainees (of both genders) charged with property or drug offences were significantly more likely than those charged with other offences to be drug dependent. Detainees charged with a drink driving offence were the least likely to be drug dependent. Although not explicitly examined in this study, other research has found that in addition to drug dependency being associated with property offending, alcohol dependency increases the likelihood of both male and female detainees being charged with a violent offence (Loxley & Adams 2009).

Mental illness among detainees

While the DUMA survey does not routinely ask direct questions about current mental health, there are two questions which provide some indirect information about mental health. First, detainees were asked whether they had ever been a patient in a psychiatric hospital for at least an overnight stay. Overall ($n=17,836$), a higher proportion of women (21%) compared with men (16%) reported having spent a night in a psychiatric hospital in the past ($\chi^2(1) = 58.54, p < .000$).

Second, detainees were asked if they had taken any prescription or 'over the counter' medications in the past fortnight and if so, what these were. Women were more likely than men to be taking benzodiazepines (18% vs 10%) and antidepressants (13% vs 7%), while four percent of both groups reported antipsychotic medication use.

Some detainees reported taking more than one of these psychoactive medications and this was more common among women than men. Overall (n=18,280), 29 percent of female detainees reported taking at least one of the abovementioned medication types during the past fortnight compared with 18 percent of males ($\chi^2(1) = 184.77$, $p < .000$).

Thirty-nine percent of female and 27 percent of male detainees reported psychiatric hospitalisation and/or psychoactive medication use and were classified for the purposes of this study as having experienced a mental illness. It is acknowledged that this indicator is somewhat crude as it cannot distinguish between people who may currently be experiencing mental illness and those who have in the past but are now better. It also does not include those who may be or have been mentally unwell but have never been admitted to a psychiatric hospital or are not taking psychoactive medication.

Mental illness, drug use and offending

Using the indicator of mental illness described above, Table 3 shows the prevalence of drug use and offending among detainees who had experienced mental illness compared with those who had not. Both male and female detainees classified as having a mental illness were significantly more likely to have used drugs and to have been arrested or spent time in prison in the past year. Among women, the only variable not associated with mental illness was drug dependence; women were equally likely to be drug dependent whether or not they had the indicator of mental illness. So, while a higher proportion of female than male detainees had indications of mental illness, the factors associated with mental illness were similar within each gender—recent drug usage, recent charges and recent imprisonment.

A subset of detainees (n=1,358) were asked questions regarding psychological distress experienced during the past month using the K10 scale. Only detainees who answered all 10 questions have been included in the analysis (n=1,219). The

Table 3 Indicator of mental illness by drug use, offending variables and gender (%)

	Mental illness	No mental illness
Males		
Used at least 1 drug in past month**	77	66
Drug dependent**	77	65
Previous charge in past year**	64	54
In prison in past year**	25	17
Females		
Used at least 1 drug in past month**	77	66
Drug dependent	76	74
Previous charge in past year**	60	52
In prison in past year**	20	14

**= chi-square statistical significance at $p < .01$

Note: Percentages do not total 100 due to rounding

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

present analysis uses the same cut-off levels as those used by the Australian Bureau of Statistics whereby there are four levels of psychological distress. Overall, female detainees reported higher levels of psychological distress than males, with 67 percent registering high or very high distress levels compared with 50 percent of males (Figure 1).

Although the K10 questions ask respondents to indicate their psychological distress over the past month, it is acknowledged that detainees' ratings may

Table 4 Indicator of mental illness by psychological distress levels and gender (%)

	Mental illness	No mental illness
Males**		
Low/moderate pd	32	57
High/very high pd	69	43
Females**		
Low/moderate pd	19	43
High/very high pd	82	58

**= chi-square statistical significance at $p < .01$

Notes: pd= psychological distress. Percentages do not total 100 due to rounding

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

be inflated by the stress of being detained in police custody and therefore may be more reflective of current distress than anxiety and/or depression.

Table 4 shows that K10 psychological distress levels were associated with the mental illness indicator designed for this study (psychiatric hospitalisation and/or current psychoactive medication use). This finding suggests that detainees who had prior experience of mental illness were also experiencing high levels of psychological distress around the time of their custody.

Additionally, a high or very high level of psychological distress was associated with a higher likelihood of having used illicit drugs in the past month, being drug dependent and having been charged in the past year.

Figure 1 Psychological distress by gender (%)



Note: Percentages do not total 100 due to rounding

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

For male detainees, it was also associated with a higher likelihood of having been in prison during the past year.

Childhood abuse, drug use and offending

A subset of detainees (n=1,709) were asked questions about their experience of physical and/or sexual abuse prior to the age of 18 years. Based on the 1,606 detainees who agreed to answer the questions, female detainees were more likely than male detainees to report having experienced at least one form of child abuse (49% vs 34%). Table 5 shows that detainees who had experienced mental illness (as indicated by either psychiatric hospitalisation and/or psychoactive medication use) were more likely to have experienced childhood abuse. Sixty-one percent of female police detainees who had experienced mental illness had also experienced abuse as a child compared with 52 percent of males. However, it is noteworthy that quite high percentages of male and female police detainees who had experienced mental illness did not report having experienced child abuse.

Table 5 Experience of childhood abuse by mental illness and gender (%)		
	Mental illness	No mental illness
Males**		
No abuse	48	72
Abuse	52	28
Females*		
No abuse	39	56
Abuse	61	44

*= chi-square statistical significance at p<.05

**= chi-square statistical significance at p<.01

Note: Percentages do not total 100 due to rounding

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

Among both female and male detainees, childhood abuse was also associated with a higher likelihood of recent illicit drug use (56% of females, 36% of males), drug dependence (64% of females, 40% of males) and having been charged in the past year (61% of females, 37% of males).

Conclusion

The results from this study provide further support for the differential patterns of male and female drug use and offending. Female police detainees were more likely than male police detainees to be using 'harder' illicit drugs such as heroin and amphetamines and were also more likely to have been arrested for a property offence. This could provide some support for the argument that females commit crime as a way to fund their drug use.

However, the value of this study is in demonstrating the importance of other factors that may also play a role in illicit drug use and offending. Police detainees who currently and/or previously experienced mental illness were found to be more likely to have used drugs in the past month and to have been arrested in the previous year compared with those who had no experience of mental illness. Furthermore, this relationship was stronger for females than males.

The gender difference in psychological distress (as measured by the K10 scale) has also been found in the general community— 15 percent of women and 10 percent of men were found to have high or very high psychological distress (ABS 2006). While the direction of the gender difference is the same in both the community and detainee samples, a much higher proportion of detainees reported psychological distress at the high and very high levels; 67 percent of female detainees and 50 percent of male detainees reported high/very high levels of psychological distress.

Psychological distress (measured by the K10 scale) was found to be associated with having been in a psychiatric hospital and/or currently being on psychoactive medications, suggesting that a very high proportion of people detained by police in Australia are mentally unwell around the time they are placed into custody. This has implications for all stages of the criminal justice system including for police in terms

of duty of care for people in custody, for courts to ensure that mental health is assessed and taken into account during all stages of the court process, and in terms of sentencing options such as imprisonment and community supervision to ensure that mental health care is incorporated.

It has been suggested that mental health care be considered as a recidivism reduction measure for female offenders due to the prevalence of mental illness among female offenders and its purported relationship to illicit drug use (Byrne & Howells 2002). The results of this study support this and it is further suggested that there is a significant proportion of the male detainee population who may also benefit from identification and treatment. It should also be noted that as men far outnumber women in the criminal justice system, even if only a small proportion of men experience mental health issues, this is likely to equate to quite large numbers requiring assistance.

As with the variable of mental health, there was a strong relationship between drug use, offending and experience of child abuse. This relationship was strongly mediated by gender, with female detainees who reported experiencing child abuse being more likely than males to have recently used drugs, to be drug dependent and to have been charged in the past year. In addition, there was a relationship between experiences of child abuse and the mental illness indicator designed in this study, with this relationship again being stronger among female detainees.

This study highlights the importance of addressing mental health problems among detained criminal populations. First, it supports other studies that have suggested that there is a need for developing better ways to identify people in police custody who are mentally unwell (Ogloff et al 2007).

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Second, it highlights the need to develop processes and services which incorporate good mental health care alongside criminal justice interventions. Most importantly, services and programs which have been designed for male offenders may not be suitable or effective for women whose treatment needs tend to be more complex due to the combined experiences of child abuse, mental health problems and drug dependence (Chesney-Lind, Morash & Stevens 2008). Programs which exist to address one particular criminogenic issue, such as illicit drug dependence, may be made more effective if they also integrate psychological treatments for co-morbid mental illness (Byrne & Howells 2002; Mullen 2001).

References

- Adams K et al 2008. *Drug use monitoring in Australia: 2007 annual report on drug use among police detainees*. Research and public policy series no. 93. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/current%20series/rpp/81-99/rpp93.aspx>
- Andrews G & Slade T 2001. Interpreting scores on the Kessler psychological distress scale (K10). *Australian and New Zealand journal of public health* 25(6): 495–497
- Australian Bureau of Statistics (ABS) 2006. *Mental health in Australia: a snapshot, 2004–05*. Canberra: ABS
- Butler T & Allnutt S 2003. *Mental illness among New South Wales' prisoners*. Matraville, NSW: NSW Corrections Health Service
- Byrne MK & Howells K 2002. The psychological needs of women prisoners: implications for rehabilitation and management. *Psychiatry, psychology and law* 9(1): 34–43
- Chesney-Lind M, Morash M & Stevens T 2008. Girls' troubles, girls' delinquency, and gender responsive programming: a review. *The Australian and New Zealand journal of criminology* 41(1): 162–189
- Goldstein P 1985. The drugs/violence nexus: a tripartite conceptual framework. *Journal of drug issues* 15: 493–506
- Hoffmann NG et al 2003. UNCOPE: a brief substance dependence screen for use with arrestees. *Journal of drug issues* 33(1): 29–44
- Holloway K & Bennett T 2007. Gender differences in drug misuse and related problem behaviors among arrestees in the UK. *Substance use & misuse* 42(6): 899–921
- Johnson H 2006. Concurrent drug and alcohol dependency and mental health problems among incarcerated women. *The Australian and New Zealand journal of criminology* 39(2): 190–217
- Johnson H 2004. *Drugs and crime: a study of incarcerated female offenders*. Research and public policy series no. 63. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/current%20series/rpp/61-80/rpp63.aspx>
- Logan TK 2006. *Women and victimization: contributing factors, interventions and implications*. Washington DC: American Psychological Association
- Loxley W & Adams K 2009. *Women, drug use and crime: findings from the drug use monitoring in Australia program*. Research and public policy series no. 99. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/current%20series/rpp/81-99/rpp99.aspx>
- Makkai T 1999. *Drug use monitoring in Australia (DUMA): a brief description*. Research and public policy series no. 21. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/current%20series/rpp/21-40/rpp21.aspx>
- Makkai T & Payne J 2003. *Drugs and crime: a study of incarcerated male offenders*. Research and public policy series no. 52. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/current%20series/rpp/41-60/rpp52.aspx>
- Mazerolle P 2008. The poverty of a gender neutral criminology: introduction to the special issue on current approaches to understanding female offending. *The Australian and New Zealand journal of criminology* 41(1): 1–8
- Mouzos J & Makkai T 2004. *Women's experiences of male violence: findings from the Australian component of the International Violence Against Women Survey (IVAWS)*. Research and public policy series no. 56. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/current%20series/rpp/41-60/rpp56.aspx>
- Mouzos J & Smith L 2007. Partner violence among a sample of police detainees. *Trends & issues in crime and criminal justice* no. 337. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/current%20series/tandi/321-340/tandi337.aspx>
- Mullen PE 2001. *Mental health and criminal justice: a review of the relationship between mental disorders and offending behaviours and on the management of the mentally abnormal offenders in the health and criminal justice services*. Canberra: Criminology Research Council. <http://www.criminologyresearchcouncil.gov.au/reports/mullen.html>
- Najavits LM, Weiss RD & Shaw SR 1997. The link between substance abuse and posttraumatic stress disorder in women. *The American journal on addictions* 6(4): 273–283
- Ogloff JR et al 2007. The identification of mental disorders in the criminal justice system. *Trends & issues in crime and criminal justice* no. 334. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/current%20series/tandi/321-340/tandi334.aspx>
- White R & Habibis D 2005. *Crime and society*. South Melbourne: OUP