

The logo graphic for NDLERF consists of a 3x3 grid of squares. The top row has three blue squares. The middle row has a white square, a grey square, and a blue square. The bottom row has a blue square, a white square, and a blue square. The text 'NDLERF' is positioned to the right of the grid, with 'NDLE' in white and 'RF' in orange.

NDLERF

An evaluation of the impact of changes
to cannabis law in WA
- Summary of Year 1 findings

Monograph Series No. 12

Funded by the National Drug Law Enforcement Research Fund
An Initiative of the National Drug Strategy

An evaluation of the impact of changes to cannabis law in WA – Summary of the Year 1 findings

Simon Lenton

Francoise Chanteloup

James Fetherston

Adam Sutton

David Hawks

Monica Barratt

Fiona Farrington

National Drug Research Institute, Curtin University of Technology

**Funded by the National Drug Law Enforcement Research Fund, an
initiative of the National Drug Strategy**

© Commonwealth of Australia 2005

ISBN 0 642 47437 0

ISSN 1449-7476

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without written permission from the Australasian Centre for Policing Research.

Opinions expressed in this publication are those of the authors and do not necessarily represent those of the National Drug Law Enforcement Research Fund (NDLERF) Board of Management or the Australian Government Department of Health and Ageing.

The research on which this report is based was funded by the National Drug Law Enforcement Research Fund, an initiative of the National Drug Strategy.

This is the summary report of *An evaluation of the impact of changes to cannabis law in WA on cannabis use, the drug market, law enforcement, knowledge and attitudes, and cannabis-related harms – Year 1*

This comprises the pre-phase of a pre-post study of the impact of the changes to cannabis law in WA. It is envisaged that the post phase will be conducted at least 18 months after the commencement of the new laws which occurred on March 22 2004.

Table of Contents

Acknowledgements	v
Other reports on this research	v
Sub-study 1	v
Sub-study 2	v
Sub-study 5	v
Sub-study 7	v
Summary report	v
Executive Summary	vi
Background	x
The larger study	x
The cannabis law changes in WA	x
The cannabis infringement notice (CIN) scheme	xi
Aims and objectives	xii
Study design	xii
Sub-studies with a year one component	xiii
Sub-studies with no year one component	xiii
Effects of changes to cannabis law in Western Australia on public attitudes, knowledge and use – Baseline, Year 1	1
Why study public attitudes?	1
Method	1
Results and discussion	1
The sample	1
Cannabis use	2
Reasons for not using or ceasing use	2
Cannabis cultivation	2
Attitudes to cannabis	2
Attitudes to cannabis law in general	3
Attitudes to the proposed cannabis legislation	3
Conclusions	4

Effects of the Western Australian Cannabis Infringement Notice Scheme on regular cannabis users regarding attitudes, use, and drug market factors – Baseline, Year 1	5
Why study regular cannabis users	5
Method	5
Limitations of the study	5
Results and discussion	6
The sample	6
Cannabis use	6
Influences on cannabis use	6
Cannabis-related problems and benefits	6
Driving and other hazardous activities	7
Attitudes towards existing laws	7
The cannabis market	8
Most recent score	8
Price, potency and availability	9
Perceptions of the shape of the cannabis market in WA	10
Cultivation of cannabis	11
Experience of supplying cannabis	12
Cannabis and the law – experience	13
Last contact with police	13
Cannabis law: Knowledge and attitudes	15
Understanding of 'prohibition with civil penalties'	15
Attitudes to the law	15
Cannabis cautioning	16
Likelihood of apprehension	16
Attitudes to the law and police	16
Knowledge and attitudes toward the new system	17
Attitudes to proposed penalties	17
Overall fairness of the scheme	17
Community impact of the legislative change	18
Impact on personal cannabis use	19
Intent to grow cannabis under the proposed scheme	20
Impact on the cannabis market generally	20
Impact on personal market participation	20
Impact of changes on willingness to seek treatment	21
Conclusions	22
Review of policy makers, police and judicial attitudes regarding proposed changes to cannabis law in WA – Final Report	23
Rationale	23
Method	23
Pre-implementation interviews and findings	24

Post-implementation interviews and findings 24

Conclusions 26

Effects of changes to cannabis law in WA on attitudes and drug use behaviour of school children – Baseline, Year 1 27

Why study school children? 27

Component 1: Survey of students in years 9 and 12 at a sample of government schools in WA 28

Method 28

Results and discussion 28

 The sample 28

 Knowledge about cannabis, health, extent of use and the law 28

 Knowledge of penalties 29

 Understanding the meaning of 'prohibition with civil penalties' 29

 Attitudes towards cannabis use and cannabis law 29

Cannabis and other drug use 30

 Reasons why young people use cannabis 30

 Opportunity to use cannabis and other drugs 30

 Lifetime cannabis use/non-use and intention to use 30

 Reasons for not using cannabis 30

 Frequency of drug use 31

 Drug-related risky activities, problems and health problems 31

 Passenger in car where driver drug affected 32

Cannabis users – experience 32

 Age of first use 32

 How first obtained cannabis 32

 How usually obtain cannabis now 32

 Ease of obtaining cannabis now 32

 Method of cannabis use 33

 Location of use 33

 People usually use with 33

 Other drugs offered when buying cannabis 33

 Supplying cannabis 33

Reasons for use or non-use 34

 Reasons for using cannabis 34

 Continued use of cannabis 34

 Quitters' reasons for not using cannabis 34

Anticipated impact of legal penalty regimes 34

 Anticipated impact of a change to prohibition with civil penalties on own use 34

 Anticipated impact of a change to legalisation on own use 35

 Comparison of likely impact of legalisation versus prohibition with civil penalties on own use 35

Conclusions 35

Component 2: Focus group study of school drug education teachers from government schools in WA	36
Method	36
Results and discussion	36
Context – current school cannabis education	36
Effect of current law on conducting cannabis education in the classroom and belief about how proposed laws would change this	37
Impact of existing and proposed cannabis laws on school drug policy	37
Students understanding of current cannabis law and the proposed scheme	37
Supports needed to ensure students received education about the proposed scheme for cannabis	38
Impact of cannabis law on students’ cannabis use	38
Support required at the school level to assist students seeking help for their cannabis use	39
Conclusions	39
References	40

Acknowledgements

The authors would like to thank the following for their contribution to this project:

- The many people from a variety of agencies who provided advice and support on this project.
- The anonymous participants who were interviewed, surveyed, or took part in focus groups as a part of this project.
- The members of the project advisory group.
- The many NDRI staff who in numerous ways contributed to the conduct of this project.
- The National Drug Law Enforcement Research Fund who provided the bulk of the funding for this project and to the Commonwealth Department of Health and Ageing who also contributed funding through their core grant to the National Drug Research Institute.

Other reports on this research

This is a list of the Year 1 Sub-study reports published as part of the *Evaluation of the impact of changes to cannabis law in Western Australia on cannabis use, the drug market, law enforcement, knowledge and attitudes, and cannabis-related harms*.

Sub-study 1

Fetherston, J. & Lenton, S. (2005) *Effects of the Western Australian Cannabis Infringement Notice Scheme on public attitudes, knowledge and use – Baseline, Year 1*. Perth, National Drug Research Institute.

Sub-study 2

Chanteloup, F., Lenton, S., Barratt, M. & Fetherston, J. (2005) *Effects of the Western Australian Cannabis Infringement Notice Scheme on regular cannabis users regarding attitudes, use, and drug market factors – Baseline, Year 1*. Perth, National Drug Research Institute.

Sub-study 5

Sutton, A. (2005) *Review of policy makers, police and judicial perspectives on the Western Australian Cannabis Infringement Notice Scheme – Baseline, Year 1*. Perth, National Drug Research Institute.

Sub-study 7

Farringdon, F. & Lenton, S. (2005) *Effects of the Western Australian Cannabis Infringement Notice Scheme on the attitudes and drug use of school children – Baseline, Year 1*. Perth, National Drug Research Institute.

Summary report

Lenton, S., Chanteloup, F., Fetherston, J., Sutton, A., Hawks, D., Barratt, M. & Farringdon, F. (2005) *An evaluation of the impact of changes to cannabis law in WA – Summary of the Year 1 findings*. (National Drug Law Enforcement Research Fund Monograph No. 12). Canberra, Commonwealth of Australia.

Executive Summary

This is a summary report on the first phase of four of seven sub-studies of a larger project to *evaluate the impact of changes to cannabis law in Western Australia on cannabis use, the drug market, law enforcement, knowledge and attitudes, and cannabis-related harms.*

This larger project is a pre-post evaluation of changes to legislation and regulations for minor cannabis offences as a result of recommendations of the WA Community Drug Summit held by the WA Government in August 2001. The Cannabis Control Bill 2003 was introduced into the WA Parliament on 20 March 2003 and passed both houses of Parliament on 23 September 2003. The *Cannabis Control Act 2003* came into effect on 22 March 2004. The Act introduced the Cannabis Infringement Notice (CIN) Scheme, a *prohibition with civil penalties scheme* for minor cannabis possession and cultivation offences by adults.

The evaluation investigates: police implementation of the changes; drug market effects; impact on regular cannabis users, population prevalence, knowledge and attitudes regarding cannabis and the law; effect on school children; effect on apprehended cannabis users; and population impact on health problems associated with cannabis use.

The National Drug Law Enforcement Research Fund (NDLERF) agreed to initially fund year 1 of this 2 year study to be conducted over 3 years.

The study consists of seven sub-studies, four of which entail data collection before, and at least 18 months after, the proposed changes are implemented. This time frame should allow for lags in implementing components of the proposed changes and the bedding down of these. The sub-studies with no year one component will largely be retrospective studies of existing data or retrospective reports from subjects.

A description of and results of the four sub-studies with a pre-change component are summarised in this report. They include:

- *A study of the effects of changes in cannabis law in WA on general population prevalence of cannabis use, attitudes, knowledge regarding cannabis and the law* – A primarily quantitative study involving a pre-post telephone survey (n = approx. 800 per wave) and additional analysis of existing population survey data during the post-change phase.
- *A study of regular (at least weekly) cannabis users regarding rates of cannabis and other drug use, drug market factors, and attitudes regarding cannabis and the law* – Comprising an in-depth qualitative and quantitative interview (n = approx. 100 per wave) investigating both impacts on patterns of use and drug market factors (especially original source of cannabis).
- *A study of police, policy makers and judicial attitudes (re cannabis, law, goals of the scheme etc.) and practices (discretion, net widening etc.)* – Involving primarily qualitative interviews (n= approx. 30) and possibly some focus groups (n=3).
- *A study of impact of legislative change on attitudes and drug use behaviour of school children* – A qualitative and quantitative survey of Year 9 and Year 12 students (n = approx. 2600 per wave) and a focus group study of drug educators (n = approx. 25).

The main findings are as follows:

- The public attitude telephone survey of 809 members of the WA public found that, when unaccompanied by an explanation, understanding of what was meant by the phrase *prohibition with civil penalties* was shown to be relatively poor, with only 57% correctly

interpreting its meaning, 30% thinking criminal penalties would apply, and 8% thinking it would be legal. Once the new proposed legislation, including the concept of *prohibition with civil penalties*, was explained in detail to the respondents, 79% of the entire sample stated that it appeared to be 'a good idea' and 70% of the sample indicated that they believed the severity of its penalties to be 'about right'. Not surprisingly, support for the scheme was lowest among those who: had never used cannabis; were more religious; were older; were politically 'right-wing'; and those who had children who might be at a vulnerable age for present or future cannabis use. However, even within these subgroups, opinion of the proposed laws was almost invariably viewed by an absolute majority as 'a good idea'.

- With regard to specific features of the CIN scheme, while 48% of the public surveyed agreed that hydroponic cultivation of cannabis should be excluded from the infringement notice scheme, 44% did not. Some 77% of respondents supported the idea that police should have powers to deal with suppliers of hydroponic equipment who engaged in criminal activity such as commercial cannabis production. It was agreed by 70% of the sample that police should be equipped with discretionary powers to prevent people exploiting loopholes within the new laws, such as engaging in supply under the infringement notice limits.
- Generally, members of the public surveyed did not believe that the new laws would have any noticeable effect on the numbers of people using cannabis, the cost of the drug, or the ease of obtaining it, although 51% believed more people would cultivate cannabis. Overwhelmingly, it was agreed by 78% of the sample that education would be a more appropriate response to minor cannabis offences in the community than the use of legal sanctions which resulted in the offender receiving a criminal record.
- The in-depth interview study of 100 regular (at least weekly) cannabis users showed that possession levels eligible for a CIN are about right. They appear reasonable for users as 99% typically scored less than the 30 gram cut-off for a CIN. They seem workable for police as 67% of 'typical scores' by regular users were under 3 grams and were thus well below the 15 gram cut-off for the lowest level of CIN. This suggested that, in the majority of cases, there should be no need for police to weigh the cannabis to determine whether a low level CIN should apply.
- When regular cannabis users were asked as to the original source of cannabis at their most recent use, 36% said the cannabis had come from a 'backyard user/grower', 28% a 'large scale supplier', but only 9% indicated that the cannabis they had used had been cultivated by themselves, and 23% 'did not know'. These findings reinforce the importance of considering the shape of the supply-side of the market in reducing cannabis-related harm, as has been done in the WA Scheme.
- According to regular cannabis users, at the time of interview, prior to the introduction of the CIN scheme, a gram of cannabis typically sold for \$25, an ounce for \$250 (non-hydro) to \$300 (hydro). Some 80% of the sample said that over the previous 6 months the price of cannabis had been 'stable', the potency was 'high' (59%), and that cannabis was 'very easy' (60%) or 'easy' (31%) to get.
- With regards to potency, a number of regular cannabis users emphasised the importance of the strain or variety of cannabis plant, over whether the cannabis was hydroponically or non-hydroponically grown, as being most important.
- Overall, the data from regular cannabis users reinforces the view that there is not a homogenous cannabis market in WA. There are small-scale user-growers, networks of self-suppliers, and large-scale organised suppliers. Different suppliers of cannabis may have different access to other drugs. While some buyers' experience is that the person they buy cannabis from only supplies that drug, this is not the case for all buyers of cannabis.

- Some 88% of the 57 regular users who commented suggested that there would be no impact on cannabis use generally as a result of the legal change. In many cases cannabis use, or lack thereof, was understood to occur for reasons separate from any legislative framework in place. Most saw the cannabis and other drug markets as distinct and only saw low levels of violence and 'rip-offs' associated with the market, as such, little change was expected in these.
- Overall, 72% (n=69) of regular users interviewed said they intended to grow cannabis when the proposed scheme was introduced. Some 72% (n=50) of these said they were only intending to grow 1-2 non-hydro plants. That is, they would grow within the limits eligible for an infringement notice.
- With regards to regular cannabis users' personal involvement in the market, 32% of those who commented said the proposed scheme would have no impact, 19% said they were more likely to share cannabis with a small group of peers, and 15% were likely to purchase less often. Some 27% said they would consider selling cannabis for profit once the proposed scheme was introduced. This included 16% who were current sellers and would continue to so, 5% who had sold in the past and said that they might consider selling again once the proposed system came into effect, and 5% who had never sold cannabis before but would consider it.
- Some 81% of regular cannabis users said that either they, or cannabis users in general, would be more willing to seek treatment as a result of the proposed changes.
- The small qualitative study of police, policy makers and justice personnel (n=30) indicates that the system is being implemented professionally, but that in light of the Police Royal Commission experience the Police Service is being extremely cautious in its administration of infringement notice procedures – requiring officers to take offenders back to the station and weigh cannabis seized rather than issue notices on the spot. This approach seems somewhat inconsistent with the legislators' intention to grant police significant capacity to exercise judgement and discretion in relation to the issuing of notices.
- Interviews with police suggest the new scheme has so far not elicited any evidence that commercial producers are trying to exploit the infringement notice provisions as occurred in South Australia, although more time will be needed to assess this.
- Many law enforcement personnel see provisions which allow recipients of a notice to satisfy their obligations by attending an education session as extremely beneficial.
- Understanding of the new laws amongst both police and members of the public is far from perfect. For the system to achieve the outcomes intended by legislators, it is essential that levels of understanding improve.
- The student survey of 2638 students in years 9 and 12 from 11 government secondary schools in Perth found that students knew more about the risks and harms associated with cannabis than they did about the prevalence of use and cannabis law. Some 50% of the year 12s and 28% of the year 9s reported having ever used cannabis. Some 54% of all students said that they had had the opportunity to use cannabis and 25% said that they had the opportunity to use other illegal drugs. The use of cannabis alone, or in combination with alcohol, was likely to be associated with the quality of school work suffering. This is consistent with other research and supports the decision taken to exclude those under 18 from the CIN scheme, but rather have them continue to be dealt with through the juvenile justice system.
- Only 32% of students understood the term *prohibition with civil penalties*. Once explained, some 70% of students surveyed who had never used cannabis said they would 'not try it' if such a scheme were introduced, 5% said they 'would try it' and 24% 'did not know'. Significantly more (11%) said that they would try the drug if it were *legalised*. Together, these findings support introduction of *prohibition with civil penalty* schemes such as the CIN scheme, but not legalisation of cannabis use.

- Overwhelmingly teachers participating in the focus group study (n=24) believed the current cannabis law had no impact on student cannabis use and believed that the proposed changes would similarly have no impact on student use, primarily because cannabis use remained illegal. There was a concern by some in the general community that the CIN scheme would undermine drug education in schools. The drug educators accessed in this focus group study suggested that this was unlikely.

The main conclusions are as follows:

- Consistent with earlier research, this research indicates that, once explained, there is a high level of public support for applying *prohibition with civil penalty* schemes such as the CIN scheme, to minor cannabis offences and this strong public support exists across the political spectrum. Few believed that the changes would result in more people using the drug.
- The research suggests that the CIN scheme will not have much, if any, impact on the cannabis use of regular users. However, there was suggestive evidence that the scheme may exert some *marginal deterrence* effects in that some regular users behaving outside the limits of the scheme intended to change their purchasing or growing behaviours to fit within the limits eligible for a CIN once it was implemented.
- While the Western Australia Police Service had done an admirable job in implementing the CIN scheme within a short time frame, in some areas there had been a mismatch between the aims of the CIN scheme as articulated in the *Cannabis Control Act 2003* and the way it was being implemented by police in the early phases. It is recommended that this be addressed.
- The finding that introducing a *prohibition with civil penalties* scheme like the CIN scheme is unlikely to increase cannabis use by school children, but that full *legalisation* of cannabis may well do so, supports the view that the CIN scheme represents the correct policy setting.
- Media and other campaigns to inform the public about the CIN scheme, especially that cannabis cultivation and use remain illegal, and to warn about risks associated with cannabis use, should be extended.
- These phase one data provide a good baseline against which to compare the post-change data from phase two of this research.

Background

The larger study

This is a report on the first phase of four of seven sub-studies of a larger project funded to *evaluate the impact of changes to cannabis law in Western Australia on cannabis use, the drug market, law enforcement, knowledge and attitudes, and cannabis-related harms*.

The National Drug Law Enforcement Research Fund (NDLERF) agreed to initially fund year 1 of this 2 year study to be conducted over 3 years.

The cannabis law changes in WA

This larger project is a pre-post evaluation of changes to legislation and regulations for minor cannabis offences as a result of recommendations of the WA Community Drug Summit held by the WA Government in August 2001. The WA Government endorsed the Summit's recommendations on 27 November 2001 and, as a result, set up a Ministerial Working Party on Drug Law Reform to provide advice on how the recommended cannabis and other drug law reforms could be implemented. The Working Party presented its report (Prior, Swensen, Migro et al., 2002) to the Minister of Health in March 2002. As a consequence the Cannabis Control Bill 2003 was introduced into the WA Parliament on 20 March 2003 and passed both houses of Parliament on 23 September 2003. The *Cannabis Control Act 2003* came into effect on 22 March 2004. The main features of the changes to cannabis law exemplified in the Bill and the accompanying initiatives are summarised in the box on page xi.

The Cannabis Infringement Notice (CIN) Scheme

Principles and Goals:

The scheme recognises that cannabis, like other drugs, has the capacity to cause harm.

The scheme should:

- Not encourage use, nor patterns of use, which may increase harm;
- Reduce the adverse social costs of being apprehended for a minor cannabis offence;
- Move cannabis supply away from large-scale, criminal, commercial suppliers;
- Free up the police and the courts to deal with more serious crimes.

Key Features^[1]:

- The possession of cannabis for personal use remains illegal.
- An adult possessing up to 15 grams of cannabis is eligible for an infringement notice with a penalty of \$100.
- An adult possessing more than 15 but not more than 30 grams of cannabis is eligible for an infringement notice with a penalty of \$150.
- Possession by an adult of a used smoking implement attracts a penalty of \$100.
- Cultivation by an adult of not more than 2 non-hydroponic cannabis plants is eligible for an infringement notice with a penalty of \$200. Adults in households where there are more than 2 plants are not eligible for an infringement notice. Persons cultivating cannabis hydroponically are not eligible for an infringement notice but are subject to criminal prosecution.
- Offenders are required to pay the penalty in full within 28 days or complete a specified cannabis education session.
- Those receiving more than two infringement notices across more than two separate days within a three-year period do not have the option of paying a fine. They must complete the education session or face a criminal charge.
- Juveniles are not eligible for an infringement notice under the CIN scheme but can be cautioned and directed to intervention programs.
- Police will lay criminal charges against persons who attempt to flout the intention of the scheme, for example by engaging in cannabis supply, even if they are only in possession of amounts otherwise eligible for an infringement notice.
- Where those otherwise eligible for an infringement notice face more serious charges for other concurrent offences, police will issue criminal charges for the cannabis matters, rather than issue a CIN.
- Thresholds for dealing have been reduced from 100 grams or 25 plants to 100 grams or 10 plants.
- Persons possessing hashish, or hashish oil are not eligible for an infringement notice.
- Implementation of the scheme has been accompanied by a public education campaign on the harms of cannabis and the laws that apply.
- 'Head shops' (cannabis paraphernalia retailers) and hydroponic equipment suppliers now are subject to regulation.
- The scheme will be subject to ongoing monitoring and review.

[1] After the data collection for the project was conducted, the government made two changes to the scheme proposed by the Working Party. Given the timing of these changes it was not possible to evaluate public attitudes to these as part of this phase of the study. These changes involved: (1) Making possession of a used smoking implement an offence under the CIN scheme, attracting a \$100 fine. (2) In response to an Upper House amendment moved by the opposition, the government decided to cap the number of notices so that those receiving more than 2 infringement notices across more than 2 separate days within a 3 year period will not have the option of paying a fine. They will have to complete the education session or face a criminal charge.

Aims and objectives

The evaluation investigates: police implementation of the changes; drug market effects; impact on regular cannabis users, population prevalence, knowledge and attitudes regarding cannabis and the law; effect on school children; effect on apprehended cannabis users; and population impact on health problems associated with cannabis use.

The specific objectives of the project are to look at the impact of the changes to cannabis legislation and regulation introduced in WA as a consequence of the recommendations of the WA Community Drug Summit on:

- Population-based prevalence of cannabis use, attitudes, knowledge regarding cannabis and the law, and deterrent effect of cannabis law.
- Rates of cannabis and other drug use and attitudes re cannabis and the law among regular cannabis users.
- Drug market issues: price, availability, source (user-growers vs. large scale criminal suppliers etc.), cannabis supplying, income from supplying cannabis, perceived risk of apprehension for supplying.
- Attitudes and practices of policy makers, members of the law enforcement sector and magistracy regarding expectations of the legislative changes and their effects on the drug market.
- School students: knowledge of law, attitudes to cannabis, cannabis use and experience of the drug market.
- Perceptions of school teachers regarding the influence on students and drug education in schools, and judicial sectors involved in enforcing the new legislation and regulations for minor cannabis offences.
- Perceptions of law enforcement personnel on the influence of the new legislation and regulations for minor cannabis offences on the drug market and its dynamics.
- Police attitudes (re cannabis, law, goals of the scheme etc.) and practices (discretion, net widening etc.).
- Individuals apprehended under the existing cannabis cautioning scheme and the new scheme in terms of cannabis use, attitudes to the law and social impacts.
- Trends in law enforcement activity in relation to minor cannabis offences including the number of apprehensions (arrests, cautions and infringement notices issued), and comparison with cautioning and arrest data prior to the legislative change in order to determine the extent of net widening, and the burden or savings on the criminal justice system.
- Numbers of people seeking treatment for cannabis-related problems.
- Serious road and other injuries, and psychosis and violence and related hospital admissions among the population in general, and young males in particular.

Study design

The study consists of seven sub-studies, four of which entail data collection before, and at least 18 months after, the proposed changes are implemented. This time frame should allow for lags in implementing components of the proposed changes and the bedding down of these. The sub-studies with no year one component will largely be retrospective studies of existing data or retrospective reports from subjects. A summary of the sub-studies follows.

Sub-studies with a year one component

- *A study of the effects of changes in cannabis law in WA on general population prevalence of cannabis use, attitudes, knowledge regarding cannabis and the law* – A primarily quantitative study involving a pre-post telephone survey (n = approx. 800 per wave) and additional analysis of existing population survey data during the post-change phase.
- *A study of regular (at least weekly) cannabis users regarding rates of cannabis and other drug use, drug market factors, and attitudes re cannabis and the law* – Comprising an in-depth qualitative and quantitative interview (n = approx. 100 per wave) investigating both impacts on patterns of use and drug market factors (especially original source of cannabis).
- *A study of police, policy makers and judicial attitudes (re cannabis, law, goals of the scheme etc.) and practices (discretion, net widening etc.)* – Involving primarily qualitative interviews (n= approx 30) and possibly some focus groups (n=3).
- *A study of impact of legislative change on attitudes and drug use behaviour of school children* – A qualitative and quantitative survey of Year 9 and Year 12 students (n = approx 2600 per wave).

Sub-studies with no year one component

- *A study of individuals apprehended under the new scheme in terms of cannabis use, attitudes to the law and police, and social impacts* – This is a descriptive interview study with approx. 80 ex-piators and 80 non-ex-piators.
- *An analysis of law enforcement data for individuals apprehended under the new scheme and comparison of that with those apprehended under the existing cannabis cautioning scheme* – Involving retrospective analysis of existing data.
- *A study of existing treatment seeking and cannabis-related morbidity and mortality indicator data* – Involving retrospective analysis using time series data on treatment utilization and health indicators.

Effects of changes to cannabis law in Western Australia on public attitudes, knowledge and use – Baseline, Year 1

By: James Fetherston and Simon Lenton

Why study public attitudes?

Research in criminology suggests that public opinion is crucial in determining the effectiveness of laws (e.g. Sarat, 1977; Silberman, 1976; Tyler, 1990). Additionally, an individual's 'moral commitment' to a particular law is one of the most powerful predictors of whether they will obey that law (Paternoster & Piquero, 1995; Tittle, 1977).

Attempts to reform drug laws often generate considerable controversy and public debate. This was certainly true in the WA case (Lenton, 2004). However, views expressed in public forums, such as letters to the editor of newspapers or calls to talkback radio, probably represent the views of people at the extremes of opinion, but not necessarily the 'silent majority'. If it is important to gauge public acceptance of particular laws, as the above criminological research suggests, then it is crucial to access members of the public directly, such as was attempted in this study.

Method

This pre-phase component of the sub-study was conducted via randomised anonymous telephone interviews that attempted to address areas including respondents' attitudes towards cannabis, knowledge of existing WA cannabis laws, attitudes towards proposed legislative changes, general attitudes towards the law and police, and their own experiences of cannabis use. The interviews were conducted using Computer Assisted Telephone Interviewing (CATI). Calls were made during October 2002, resulting in 809 completed interviews with a response rate of 38%, and a metropolitan to rural ratio that was reflective of that reported in the most recent WA population census.

Results and discussion

The Sample

The sample was evenly divided between male and female respondents with an age range from 14 to 70 that was largely representative of the age distribution of the WA population described in the most recent census, albeit with a slight overrepresentation in the 61-70 years age group. It was hypothesised that this was likely to be due to these older respondents having increased disposable leisure time and thus being more amenable to the idea of participation in a relatively lengthy survey. In keeping with earlier research concerning the opinions of older respondents on cannabis (Commonwealth Department of Health and Family Services, 1996), any affect that this overrepresentation may have had upon this study's outcomes would be unlikely to favour any softening of cannabis legislation.

Cannabis use

More than half (54%) of the sample reported having ever used cannabis at some point in their lives and 18% reported use of the drug in the last 12 months. Although the number of lifetime users was greater than that found by recent household surveys of the WA population, the number having used it in the last 12 months was no different. This suggests the sample was not biased towards recent users of the drug. Male respondents were more than twice as likely as females to have used cannabis recently. As expected, the most negative attitudes towards both cannabis and the proposed legislative changes tended to derive from those respondents who had never used the drug.

Almost three quarters (71%) of respondents who had recently used cannabis indicated that they would most commonly use the flowering heads of the female cannabis plant.

Age had a considerable bearing on patterns of cannabis use, with rates of use declining as the age of the respondents increased. Preference for the use of hydroponically cultivated cannabis was only found in a minority of the recent cannabis users in the sample. However, cannabis using respondents under 25 years of age were significantly more likely to report both the use of hydroponically cultivated cannabis and to express a preference for cannabis grown in this fashion. Similarly, although the most popular method of consumption across the entire sample was the smoking of cannabis in joints, amongst respondents under 25, the use of a bong was more common.

Reasons for not using or ceasing use

More than half (54%) of respondents indicated that the reason they had 'never tried' or had 'given up' cannabis was that they had no desire to use the drug. Other common responses dealt with concern over health (27%) or psychological (17%) factors. The illegal nature of the drug was given as a reason for never having used by 15% of respondents and by only 8% of those who had ceased use. Education was rarely cited as a reason for having never used the drug, with only 3% of respondents mentioning it, and it was not mentioned at all in the context of having ceased cannabis use.

Cannabis cultivation

The practice of cultivating cannabis amongst this sample was relatively uncommon, with only 11% (n=16) of those respondents who had used the drug in the last 12 months saying they were current growers. All of those who grew cannabis did so for self-supply, with half of these saying that three-quarters or more of the cannabis they smoked was self grown. Note that the small numbers here suggest caution in interpreting this data.

Attitudes to cannabis

There was a common perception across the sample that rates of cannabis use in WA were higher than survey data such as the National Drug Strategy Household Surveys would tend to indicate. Consistent with the literature, this tendency to overestimate was even more pronounced amongst those respondents who had used the drug.

Across the sample, cannabis was not viewed in a very positive light. Some 64% of the total sample disagreed that the benefits of cannabis use outweigh its harms and risks, 69% agreed that people under 18 should not use the drug and 89% believed that driving a car while affected by cannabis should be a criminal offence. As expected, those respondents who had used cannabis, and more particularly those who had used it in the last 12 months, tended to be much less negative in their views than those who had never used it.

Despite these generally negative attitudes towards cannabis, 42% agreed that it should be legal for people over the age of 18 to use cannabis and nearly 49% of the sample believed that it should not be illegal for a person to give another a small quantity of cannabis. There was general agreement (84%) that cannabis could be beneficial for people with certain medical conditions.

Attitudes to cannabis law in general

With regards to the deterrent value of the law, just 40% of the sample agreed that many people who might use cannabis are deterred by the possibility of getting a criminal conviction, a view that was not significantly affected by whether or not respondents had used cannabis themselves. While the sample was roughly evenly divided on whether strict laws deter drug use, most believed that the chances of being apprehended for a cannabis offence were low. Only 11% of the sample believed users, and only 15% thought those growing it, were likely to be apprehended. Supply, or 'dealing', was more commonly seen as likely to result in apprehension, but even then only by 35% of the sample. These figures were not significantly affected by whether or not respondents' or their families had a history of cannabis-related charges. Some 77% of respondents believed police time could be better spent than on investigating minor cannabis offenders. Education was viewed by 78% of the sample as a more appropriate response to minor cannabis offences than legal sanctions that resulted in the offender receiving a criminal record.

Knowledge of penalties and police powers applicable under WA's existing cannabis laws was found to be relatively patchy. For example, while 75% of the sample was aware of the police option of issuing cautions for possession of small amounts of cannabis, 80% of respondents wrongly believed that police required a warrant to search a house where they believed cannabis to be present. Perceptions of the current laws as being 'too harsh', 'about right' or 'too lenient' were approximately evenly spread across the sample. These views were significantly affected by respondents' history of cannabis use, with 46% of those who had never used the drug viewing them as 'too lenient' as opposed to just 16% of those who had ever used cannabis at some point in their lives.

Some 61% of the sample thought that possession of less than 100 grams of cannabis for personal use should be legal, 59% thought that growing up to two cannabis plants should not be a criminal offence (i.e. decriminalisation) and 53% thought that growing cannabis for an adult's personal use should be legal (i.e. no penalties).

Attitudes to the proposed cannabis legislation

Once the new proposed legislation including the concept of *prohibition with civil penalties* was explained in detail to the respondents, 79% of the entire sample stated that it appeared to be 'a good idea' and 70% of the sample indicated that they believed the severity of its penalties to be 'about right'. These responses were found to be significantly affected not only by respondents' level of personal experience of cannabis, but also by religiosity, age, political affiliation and age of offspring. However, even within these subgroups, opinion of the proposed laws was almost invariably viewed by an absolute majority as 'a good idea'. Only among respondents of 17 years or younger did the view of its strictness as being 'about right' not hold an absolute majority (48%), with this group more likely than older respondents to say that the proposed laws were 'too strict'.

Generally, respondents did not believe that the new laws would have any noticeable effect on the numbers of people using cannabis, the cost of the drug, or the ease of obtaining it. Although 51% believed more people would cultivate cannabis, only 5% of respondents indicated that they would do this themselves. Similarly, over 90% of the sample indicated that the new legislation would be unlikely to cause any change in the amount of cannabis they personally consumed, or to the

frequency with which they consumed it. Alterations in their use of other drugs or alcohol was also felt to be very unlikely, with 95% of the sample indicating that they did not anticipate this to change.

While 48% of the sample agreed that hydroponic cultivation of cannabis should be excluded from the infringement notice scheme, 44% did not. Some 77% of respondents supported the idea that police should have powers to deal with suppliers of hydroponic equipment who engaged in criminal activity such as commercial cannabis production. It was agreed by 70% of the sample that police should be equipped with discretionary powers to prevent people exploiting loopholes within the new laws, such as engaging in supply under the infringement notice limits.

Overwhelmingly it was agreed by 78% of the sample that education would be a more appropriate response to minor cannabis offences in the community than the use of legal sanctions which resulted in the offender receiving a criminal record.

Conclusions

These data suggest that prior to its implementation the CIN scheme was highly acceptable to the majority of the community. Most believed that the legislative change would not result in changes to levels of cannabis use or ease of obtaining cannabis. These high levels of public support for the proposed model should be of interest to the general public, to policy makers, and to legislators on both sides of the political spectrum.

The levels of knowledge about cannabis, health and the law, and rates of cannabis use in the sample, will provide a good baseline for comparing with the post-change evaluation results. These results suggest that more needs to be done to educate the general public about the health effects of cannabis and, in the context of the introduction of the CIN scheme, the laws relating to it. The results should inform the development of public education campaigns on these issues.

Effects of the Western Australian Cannabis Infringement Notice Scheme on regular cannabis users regarding attitudes, use, and drug market factors – Baseline, Year 1

By: Francoise Chanteloup, Simon Lenton, Monica Barratt & James Fetherston

Why study regular cannabis users

Regular cannabis users are a particularly important group to study for a number of reasons. Firstly, previous research on the impact of *prohibition with civil penalty schemes* for minor cannabis offences has tended to focus on the impact on population rates of use and rates of use by school children (e.g. Donnelly, Hall & Christie, 1999, 2000). However, those who are already regular users of the drug may be a sentinel group for detecting any changes in rates of cannabis use or engaging in cannabis cultivation. Secondly, regular users of cannabis are one group who may be at a higher risk of developing the adverse effects of cannabis, and in particular may be more at risk of dependence. They are also likely to be best placed to comment on the effect of the proposed changes on the cannabis market. Finally they are most likely to come to the attention of police and are thus well positioned to comment on the proposed changes in laws and the associated educational and other interventions for those apprehended under the proposed scheme.

Thus the aims of this sub-study were to explore the impact of changes in the laws applying to cannabis in WA on a sample of regular cannabis users in terms of:

- Rates of cannabis and other drug use and attitudes re cannabis and the law.
- Drug market issues: price, availability, source (user-growers vs. large scale criminal suppliers etc.), cannabis supplying, income from cannabis supplying, perceived risk of apprehension for supplying.

Method

In this pre-phase component of the sub-study 100 regular (at least weekly) cannabis users were recruited through newspaper advertising, flyers and by snowballing, and were interviewed between October 2002 and February 2003. Interviews were completed prior to the Cannabis Control Bill entering the WA Parliament on March 20, 2003. They were both quantitative and qualitative and conducted on a one-to-one basis by three interviewers in a private rented office, cafes/bars and occasionally at the participant's home. On average, each interview was 2 hours 14 minutes.

Limitations of the study

Like many other studies of hidden behaviours such as illicit drug use, this study employs convenience sampling techniques as it is not possible to randomly sample cannabis users. The illegality of cannabis use means the characteristics of the population of cannabis users cannot be reliably determined. Although this suggests caution in generalizing from the results of this study to regular cannabis users as a whole, the use of a variety of recruitment approaches reduces the likelihood of sampling bias. The use of similar recruitment strategies in the post-phase of the research will support the validity of the pre-post comparisons made.

Results and discussion

The sample

The sample comprised 67 males and 33 females with a mean age of 32 years. Over half (56%) of the sample were single and 46% had completed some post-secondary education. Sixty-one percent of participants were in paid employment, 20% were unemployed, 14% were students, 9% were engaged in home duties, and 11% were receiving a sickness benefit/pension. Some 35% of the sample earned not more than \$12,000, 34% earned between \$12,001 and \$30,000, and the remainder (30%) earned more than \$30,000. Some 63% had used an illicit drug other than cannabis in the last 12 months.

Cannabis use

Seventy-three percent of the sample used cannabis at least daily, consuming on average 7.9 units of cannabis (joints, cones or bongs) per day and said they were typically affected by cannabis for 4 hours per day on average. The most common form of cannabis they typically used was hydroponic heads (69%) followed by non-hydroponic heads (15%) but 50% indicated that given the choice they would prefer to use non-hydroponic heads.

Some 67% said they typically scored a bag or less (bag, foil, stick, gram, a few grams) the next most frequent amount being 'an ounce' (approx. 28 grams) nominated by 15% of respondents. Overall, 99% of the sample said that they typically scored an ounce or less over the last 6 months. These figures suggest the limits eligible for a CIN (of not more than 15 (\$100) and more than 15 but not more than 30 grams (\$150)) are about right. They appear reasonable for users as 99% were under the 30 gram cut-off for a CIN. They seem workable for police as 67% were under 3 grams and were thus well below the 15 gram cut-off for the lowest level of CIN, meaning that in the majority of cases there should be no need for police to weigh the cannabis to determine whether a low level CIN should apply.

Influences on cannabis use

Some 83% of the sample said that they had rules or guidelines about when they would, or would not, use cannabis and 59% had, at some stage, attempted to stop using cannabis altogether. There were 43% of the sample who said that 'most' of their friends used cannabis and a further 10% said 'all' their friends used the drug. In contrast 63% said their family disapproved of their cannabis use to some extent. Although 44% said that the prospect of being caught by police for using cannabis worried them, 71% said that such worries did not affect their use of the drug. Asked about the impact on their use if cannabis was made as legal as alcohol, 5% said it would affect their use 'a lot' and 3% said it would have a moderate effect, while 66% said it would have 'no effect at all'. These findings, and those discussed in later sections, point to the importance of 'non-legal' or 'normative' influences on use, such as peer attitudes and behaviour, in contrast to the formal legal factors such as the risk of detection and the legal status of the drug. Such results are consistent with a large body of criminological theory and research, most notably the work of Tyler (1990) and Sherman (1993).

Cannabis-related problems and benefits

Some 39% of the sample was deemed cannabis dependent on a standardised measure of dependence and 65% said there were aspects of their cannabis use that bothered them; however, only 11% had ever received treatment for cannabis-related problems, and 75% of the sample believed cannabis to be 'moderately' or 'very' safe. Some 62% of respondents said that they had personally experienced some health-related problems, most commonly memory impairment (19%) and respiratory problems (15%). There were 43% who said they had experienced some cannabis-

related social problems, most commonly anti-social behaviour (9%) and problems associated with the illegality of use (9%). There were 66% of respondents who said they had experienced the benefits of cannabis use, most commonly its ability to reduce stress (57%) followed by its use for pain relief (50%). Users' personal experiences of cannabis-related health and social problems provide an opportunity for motivational interviewing.

These findings have relevance for the change in focus in the introduction of the CIN scheme, from seeing cannabis use as primarily an issue of criminal law, to seeing it primarily a health issue with implications for public education, education of offenders and provision of appropriate treatment for those with cannabis dependence and other cannabis-related problems (Prior, Swensen, Migro, et al., 2002). In this regard, the post-change study will address the uptake of the education option by those issued a CIN, their level of dependence, and participant feedback on the usefulness of these sessions. The extent to which they are successful at facilitating treatment referral for at least a small proportion of apprehended offenders with cannabis-related health problems will need to be investigated, while taking into account the low baseline of treatment participation among this group.

Driving and other hazardous activities

With regards to legal matters, 46% of the sample reported prior contact with West Australian police regarding a cannabis-related offence and 87% of these were apprehended. Although 44% said that the prospect of being caught by police for using cannabis worried them, 71% said that such worries did not affect their use of the drug. Some 65% of the sample said that over the last 6 months they had driven a vehicle whilst under the influence of cannabis, and 32% had driven whilst smoking the drug. This occurred despite 46% of the sample believing cannabis could affect driving performance, but only 19% said it could affect *their* driving performance.

At the time of writing there were new legislative provisions targeted at drug-affected driving before the WA Parliament. In part these are aimed at improving detection rates and the capacity of police and the criminal justice system to deal with drug driving offences. One measure of the effectiveness of interventions to target these risky behaviours will be the proportion of regular cannabis users in the post-change phase of the study who report engaging in them.

Attitudes towards existing laws

Consistent with earlier research on apprehended cannabis users in WA and SA (Lenton, Humeniuk et al. 2000) this sample showed a high level of support for cannabis use being legalised. Thus, 87% of the 94 respondents who discussed their views of the laws concerning possession of cannabis for personal use believed that personal use of cannabis should not be penalised – that is, it should be legal. Some 83% of the 96 respondents who discussed their views of the laws concerning growing cannabis believed that no penalties should exist for growing small amounts of cannabis for personal use, but many commented that larger amounts should be subject to penalties. Some 75% of 93 respondents who discussed the issue believed that penalties should exist for supplying cannabis. In many instances this was articulated in terms of small versus large-scale supply, noting that organised commercial supply should be penalised.

If you grow it yourself and share with your friends, fine. People who get into a business, that own it purely and simply for money and have no emotion or feeling for it [should be penalised].

[ID86, male aged 56]

Some 74% of respondents believed that penalties were appropriate for driving while affected by cannabis with 70 of 94 respondents expressing this view. Most thought driving whilst affected by cannabis should be treated the same as drink driving.

The cannabis market

Impact on the cannabis market is one of the major issues of interest in the evaluation of the proposed cannabis laws for WA. Changes between the pre- and post-change phases of the research with regards to price, potency and availability will be important to document. So too will be the proportion of the market supplied by small-scale user-growers as opposed to large commercial suppliers, the availability of other drugs when people are buying cannabis, the extent to which regular users attempt to self-supply by engaging in growing, and the extent to which regular users get involved in cannabis supply.

As a consequence of the government's exclusion of hydroponic cultivation of cannabis from the CIN scheme, the relative availability of hydroponic and non-hydroponic cannabis, and the prevalence of violence and 'rip-offs' among regular cannabis users, will be of particular interest. It has been suggested that back-yard cannabis plants grown outdoors are probably more at risk of theft than hydroponic plants which can be grown indoors, although the definition of hydroponic cultivation which applies to the interpretation of the term under the CIN scheme – as provided in the Second Reading Speech of the Cannabis Control Bill 2003 – was 'cultivation by placing the roots of the plant in a nutrient solution rather than in soil' (Parliament of Western Australia, 2003, p. 5697). In not referring to artificial lighting this definition would allow that plants grown indoors in soil would be eligible for a CIN.

Results bearing on all these issues are presented in this section on the cannabis market and will constitute an important baseline for the pre-post comparison.

Most recent score

Respondents were asked about their typical pattern of purchasing over the last 6 months. About half (53%) purchased cannabis on a weekly or more frequent basis, the average amount spent on the drug being about \$50 per week. Some 53% of the sample said it typically took 30 minutes or less to score cannabis.

Overwhelmingly respondents described their most recent score as a very matter-of-fact transaction. Of the 70 respondents who commented, in no case could the situation be understood as 'drug pushing'. In contrast, there was a clear intent on the part of the respondents to acquire cannabis.

There were not many differences between respondents' description of the parameters of their 'most recent' score and their 'typical' score over the previous 6 months. This probably reflects both the stability in the cannabis market over this period and the process of retrospective recall of such information.

Most frequently, on the last occasion people took an hour or less to score. Some 60% said that their last score was from 'a friend', and the next most numerous response was the 'dealer's home' (30%). With regards to the original source of the cannabis at their most recent score, 38% said a 'backyard user-grower', 30% said a 'large scale supplier' and 32% 'did not know'. When asked as to the original source of cannabis at their most recent use, 36% said the cannabis had come from a 'backyard user/grower', 28% a 'large scale supplier', but only 9% indicated that the cannabis that they had used had been cultivated by themselves, and 23% 'did not know'. This is quite similar to cannabis users in the WA IDU sample interviewed in the 2002 Illicit Drug Reporting system

(Fetherston & Lenton, 2003), where 51% said the cannabis had come from a 'backyard user / grower', 21% a 'large scale supplier', but only 7% indicated that the cannabis that they had used had been cultivated by themselves, and 24% 'did not know'.

Lenton (2001, 2002) has argued that although previous research suggested that 6% of cannabis users (Adikhari & Summerill 2000), and 9% of first-time convicted cannabis users (Lenton & Heale, 2000) obtained the drug from 'a dealer', there were good reasons to believe that in many cases the original source of the cannabis obtained from other sources such as 'friends' may be larger scale commercial suppliers (Swift, Copeland & Lenton, 2000). The above findings on the original source of cannabis support this view. They reinforce the importance of considering the shape of the supply-side of the market in reducing cannabis-related harm (Lenton, 2001, 2002) as has been done in the WA scheme (Prior, Swensen, Migro, et al., 2002).

One of the goals of the CIN scheme is to reduce the proportion of cannabis that users claim is sourced from large commercial suppliers. These large scale players are thought more likely to be involved in violence and standover tactics and to also be the source of other more hazardous drugs (Prior, Migro, Tomassini et al., 2002). This study suggests that there may indeed be some opportunity to shift supply in this manner for at least a third of the sample who say that the original source was large scale criminal suppliers. It will also be of interest to see what proportion of the sample in the post-change sample state that they typically grow their own cannabis and what percent score from small-scale or 'backyard' user-growers.

Seventy-six percent said that at their most recent score the cannabis was hydroponic heads, while 16% said non-hydroponic heads. Some 59% scored a bag or less (bag, foil, stick, gram) and the next most frequent amount was an ounce obtained by 21% at their last score. The three most common reasons for scoring that amount were cost or economic factors (56%), that the amount met consumption needs (35%) or availability factors (18%). The modal amount spent on the last score was \$25.00 (34%), the next most frequent amount spent was \$50.00 (22%), followed by \$250 (12%). Just under half (48%) scored for their own use, a similar proportion (49%) to share with others, and two respondents (2%) scored for the purpose of dealing.

Price, potency and availability

According to respondents, over the previous 6 months a gram of cannabis typically sold for \$25, and an ounce for \$250 (non-hydro) to \$300 (hydro). Some 80% of the sample said that the price of cannabis had been stable, the potency was 'high' (59%), and that cannabis was 'very easy' (60%) or 'easy' (31%) to get. Cannabis price, purity and availability data for the present study was similar to that from the injecting drug users interviewed as part of the WA Illicit Drug Reporting System (Fetherston & Lenton, 2003, Hargreaves, & Lenton, 2001, 2002) where price has remained stable at \$250 per ounce (in 2003 \$270 for hydro and \$220 for non-hydro), with potency consistently rated as 'high' and availability as consistently 'easy' or 'very easy' (Fetherston & Lenton, 2004).

A number of respondents commented on what they believed were the main factors influencing the potency of cannabis. These included whether the cannabis was hydroponically grown or not, the strain or variety of cannabis, aspects of the growing process, improvements in skill of growers, and finally factors concerning the individual cannabis user. Most notably a number of respondents emphasised the importance of the strain or variety of cannabis plant, over whether the cannabis was hydroponically or non-hydroponically grown, as being most important with regards to potency.

People are under the misunderstanding that hydro cannabis is stronger than cannabis that is not grown hydro. It's got nothing to do with it – it's the strain of plant. So I could have ... one strain of plant, 2 clones or cuttings, grow one outside, grow one indoors and when they have finished their cycle have them tested, and they will be the same THC level.

[ID21, male aged 37]

A number of specific aspects of the growing process were noted as important in producing high potency cannabis including the level of knowledge of the grower, the experience of the grower, or the way in which the grower treats the product throughout the process. There was general agreement that more expert growers could produce higher quality product.

It's actually getting better and better. The growers, especially commercial growers, seem to really know what they are doing. The strains they are getting are just phenomenal.

[ID87, male aged 40, never grown]

Previous work has concluded that there is no evidence that the potency of cannabis plants has increased up to 30 times, as has been claimed. Seizure data suggests a modest increase in potency (Hall & Swift, 2000). It has been suggested that changing patterns of cannabis use, in particular the use of the more potent flowering 'heads' of the plant (rather than the leaves), may account for apparent increases in the potency of cannabis used in Australia (Hall & Swift, 2000). The data presented in the current study suggest that it is likely to be the strain of the plant, rather than the hydroponic growing technique used, which is likely to have a *direct* impact on cannabis potency. It would appear that if hydroponics have had an impact on the potency of cannabis, it is likely to be *indirectly* by (1) the increased yield from hydroponic cultivation contributing to a situation where 'heads' are the bulk of the market; (2) larger, commercial, 'more expert' and predominately hydroponic cannabis growers selecting strains to produce a more potent product which is seen as more desirable by significant numbers of consumers.

Availability of cannabis appears to depend upon a number of factors: personal contacts, seasonal factors, whether the cannabis is hydroponically grown or not, and, at times, the impact of police operations.

Perceptions of the shape of the cannabis market in WA

There was considerable variation within the sample regarding the extent to which respondents could comment on the shape of the cannabis market in WA. In the majority of cases respondents commented on the part of the market which they had direct contact with, principally their friends and immediate suppliers. It appeared that those who only scored for their personal use usually had limited knowledge concerning market activities beyond their personal networks. Those who appeared to be most informed were those with personal experience of cannabis supply and associated cultivation.

Some 65% of the 72 respondents who discussed the shape of the market suggested that there are two levels to the market: the lower level end user groups, including small scale growers who self-supply, and the larger scale profit oriented (criminal) groups. Some described a separation between the growers and sellers. The two levels of smaller-scale user-growers and larger commercial, criminal groups appear quite separate.

In 56% of cases cannabis users' point of reference in terms of the selling and supply process was their personal contact. This referred to either their participation in a small network involving backyard growers, or purchasing from friends who obtained their supply from dealers.

Although there were a handful of respondents who described the involvement of organised groups – principally from South Australia – in large scale cannabis supply in Western Australia, this was the exception.

An important question is the extent to which cannabis and other drug markets are separate. As part of their qualitative accounts to a couple of questions, including their most recent score, some 32 respondents suggested that other drugs were available if they were interested. In some cases respondents stated their cannabis supplier could access other drugs although they tended to only deal in cannabis.

It's like he doesn't provide other stuff, but he can. The guy he gets his pot off, like his boss, that guy does other stuff and so he gets it off him.

[ID38, female aged 19]

Other respondents suggested that although their usual suppliers might deal in cannabis alone, they are exposed to other drugs when forced to leave their regular network. However, in the section on likely impact of the proposed scheme, 34 respondents said that cannabis and other drug markets were already distinct. Yet 14 respondents commented that the proposed changes might work to create distinct markets between cannabis and other drugs.

Having considered what appears to be conflicting data on the extent to which the markets for cannabis and other drugs are distinct, the following conclusions seem appropriate: (1) Some suppliers may indeed only sell cannabis. This might be the case for smaller scale or backyard suppliers. (2) Others may only have cannabis 'on hand' and be known as 'cannabis suppliers' but with more notice they could get other drugs. (3) There are others who are known to sell cannabis along with a range of other drugs.

The extent to which a user's perception is that the market for cannabis is distinct from other drugs is likely to depend on their experience of a particular part of the wider market. Additionally, if cannabis is one's 'drug of choice' then one might not explore the possibility of other drugs with the supplier, thus the perception that the person they score cannabis from only supplies that drug could contribute to the perception of a distinct cannabis market.

Overall, the data reinforces the view that there is not a homogenous cannabis market. There are small-scale user-growers, networks of self-suppliers, and large-scale organised suppliers. Different suppliers of cannabis may have different access to other drugs. While some buyers' experience is that the person they buy cannabis from only supplies that drug, this is not the case for all buyers of cannabis.

Cultivation of cannabis

Some 71% of respondents had grown cannabis at some point in their lives and 56% of these had done so in the last 12 months. Most (77%) of these used non-hydroponic methods only, seven (18%) used only hydroponic methods and two (5%) grew both hydroponic and non-hydroponic cannabis. While, in the last 12 months, 66% (n=21) of those who grew non-hydro cannabis produced a harvest to maturity, 100% (n=9) of those using hydroponic methods did so. This could reflect the greater reliability of the controlled environment of hydroponic growing both in terms of growing conditions and security and concealment, but possibly also reflects that those who grew using this method were more likely to be more experienced or knowledgeable. This was in part reflected in the number of plants grown to maturity. In the last 12 months only 16% of those using non-hydroponic methods grew more than 5 plants to maturity, compared to 44% of those using hydroponic methods.

Among those who had grown cannabis in the last 12 months, only 21% said that most of the cannabis they smoked was self grown, 50% had not given away any self-grown cannabis, and only 8% had been subject to violence or 'rip-offs' in the past 6 months.

Fifty-nine people commented on their reasons for growing. Respondents were comprised of both current and past growers and experienced varying levels of success in their attempts. Reasons for growing included: the cost of purchasing cannabis; growing for profit; experimentation; enjoyment of the growing process; self sufficiency; the social aspect; avoidance of the criminal element; and self supply for medicinal use.

Among those who could be seen as 'organized growers' there appeared to be at least two groups. On one level are those whose objective is to self-supply small groups of fellow users within the group with cannabis, in some cases with different strains. On another level are those growers whose involvement in cannabis growing is principally for profit.

Those who grew non-hydroponically expressed a number of reasons for doing so, including: experimentation; their belief that 'bush weed' was a healthier product; that it was less complicated than hydroponic methods; and a perceived greater risk of growing hydroponically. Nine respondents gave reasons why they grew using hydroponic methods. These could be summarised in two themes: concealment and quality.

There were 50 respondents who commented on their choice of crop size. In many cases crop size consisted of one to two plants, although in a few cases the numbers were larger. Three primary themes emerged: perceived need; experimentation; and fear of detection. Decisions regarding crop size often took into account the possibility that not all plants would produce harvestable heads. This could be due to factors such as some plants dying from disease, or the fact that only the female plants are of use. The assumption that not all plants would reach fruition resulted in planting a higher number with the intention of achieving something smaller.

The difficult nature of growing cannabis was addressed by 28 respondents. Issues included lack of knowledge, and external factors such as 'rip-offs'. The overall impression was that while throwing a few seeds in the ground might appear 'easy', the process of getting plants to maturity and a 'quality product' appears to be far more difficult than many might think. This has implications for the possible impact of the CIN scheme on cannabis cultivators. The exclusion of hydroponic cultivation from the scheme, and the difficulty in growing outdoor cannabis plants to maturity, may be factors which, together, limit the extent to which the scheme leads to more regular cannabis users cultivating cannabis for their own use. In addition, however, these data provide further evidence that the scheme is unlikely to result in a rapid expansion in cannabis cultivation and the cannabis market as predicted by some critics of the scheme.

Experience of supplying cannabis

In order to get a more detailed understanding of respondents' involvement in cannabis supply, it was explained that, for the purpose of this study, the term 'selling' was used to describe the sale of cannabis for profit; 'distributing' to describe supply of cannabis on a 'not-for-profit' basis; and 'giving' to describe the provision of cannabis for free.

Overall, 88% of the sample had ever given cannabis away and 75% had done so during the previous 6 months, overwhelmingly (93%) to 'friends'. Of those who gave cannabis away in the last 6 months, 72% did it on 10 occasions or less over that period.

Some 71% of respondents said that they had ever distributed cannabis 'not-for-profit' or bought on behalf of others 'not-for-profit'. About half (52%) the sample did this in the previous 6 months, mostly (65%) on 10 occasions or less, and almost all (94%) to 'friends'. Some 41% of those who distributed cannabis on a 'not-for-profit' basis over the last 6 months said that they believed the original source of that cannabis to be large-scale criminal suppliers.

Overall, 50% of the sample had ever sold cannabis for profit and 13% had done so in the last 6 months. Just over half (54%) did it on 10 occasions or less and almost all (92%) to 'friends'. Those who sold cannabis for profit over the last 6 months said that they believed the original source of that cannabis was roughly evenly divided between large-scale criminal suppliers (31%), the respondent (23%), and other small-time growers (31%). Some 46% said between 1 and 25% of their income came from selling cannabis over the last 12 months. Income derived from selling cannabis over this period ranged from \$80 to \$13,000.

Overall, 5 (9%) of the 54 cases who sold or distributed cannabis in the last 6 months reported violence or 'rip-offs' over this period.

The results on involvement in supplying cannabis are of interest for a number of reasons. Firstly they underscore that, for many in the cannabis market, 'supply' to friends on a not-for-profit basis and distributing to their peers was seen by them as an unremarkable part of their involvement in cannabis use, and not seen as 'dealing' as such. However, while this may be the reality of the market, this is not the way such activities are treated in the letter of the law. It is clear that how police and the courts interpret the law in practice can have a major impact on how the law impacts on those engaging in this activity.

Cannabis and the law - experience

Nearly half (46%) of the sample reported prior contact with Western Australia Police regarding a cannabis-related offence and 87% of these were apprehended. The high rate of convictions is consistent with earlier research (e.g. Lenton, Ferrante & Loh 1996). None had been imprisoned for a cannabis offence. In terms of convictions, 15 (33%) had one conviction, five (11%) had 2 convictions, two (4%) had 3 convictions, and five people (11%) more than 3 convictions. The re-arrest rate for this regular using sample is higher than the 7% in ten years found for the population of all first-time cannabis use offenders in WA (Valuri, Indermaur & Ferrante, 2002).

Only 31% of the present sample said that none of their friends or acquaintances had been caught by police in relation to cannabis.

Some 57% of the sample said that they had heard about the WA Cannabis Cautioning scheme, but none had ever received a caution under this scheme. Some 86% of those who knew someone who had been apprehended by police said that this had 'no impact' on their own use of the drug.

Last contact with police

Of the 42 respondents who described their last contact with police regarding cannabis, 76% were for possession, 36% were for an implement, 14% for cultivation and 14% for selling or supplying. In 38% of these cases police were motivated by suspicion of cannabis offence (possession, use, cultivation or selling), 26% were a result of police investigating another matter or person, and in 17% of cases police were on routine patrol. Most commonly people were in their own home (36%), in a motor vehicle (26%), or in a street, park or beach (24%), when they last had contact with police regarding cannabis. Some 64% of respondents said that on that occasion they were under the influence of a drug, mostly (85%) cannabis. Where the outcome was known, 55% appeared in court and were convicted, 8% were summonsed and convicted without appearing in court, 34% received an informal warning, and 3% received a juvenile caution.

Consistent with earlier work (e.g. Lenton, Humeniuk, & Heale & Christie, 2000; Erickson, 1980), experience with the law apparently had little impact on the cannabis use of the majority of these experienced cannabis users. Some 86% of those respondents who had contact with the law regarding their cannabis use reported that it had no impact on their cannabis use. Some 10% said that they were more careful about where and how they used, 5% stopped for a while, and 2% said that they reduced their consumption initially.

It is not surprising that legal sanctions do little to deter cannabis use among users. The criminological literature suggests that deterrence effects are likely to be undermined by a low likelihood of apprehension; low levels of public support for criminal penalties; attitudes of those apprehended and their peers which are very positive toward cannabis; and significant punishment avoidance effects (getting away with using without being caught), especially for experienced users (Lenton, 2005).

One of the potential adverse impacts of infringement notice schemes such as that implemented in WA is that there will be a 'net widening' effect where more people will come into contact with the law if police reduce their use of informal cautions and warnings in favour of issuing an infringement notice, with the increased likelihood of further involvement with the law once the person has become formally known to police. It will be of interest to see whether in the post-phase research the proportion of people who report receiving an informal warning decreases as a result of the CIN scheme.

Regarding police conduct, some 61% of the sample said that police had behaved 'lawfully', 44% said that they were 'respectful' and 37% said that they were 'friendly'. On the negative side, 49% said that police were 'hostile' and 39% stated that they were 'offensive'. With regards to their own behaviour towards police, 96% said they were 'cooperative' with police, 88% said that they were 'respectful' and 66% said that they were 'friendly' toward police. On the negative side, 10% said that they behaved in a 'hostile' manner toward police and 5% stated that they were 'offensive' to police.

As a result of their last contact with police regarding cannabis, 45% had become 'less trusting' of police and 33% had become 'more fearful' of police. As a result of the contact, 38% had become 'more antagonistic', 47% 'less respectful', and 21% had become 'more hostile' toward the legal system generally (the law in general, the cannabis law, police and the courts).

Forty-two respondents discussed the way in which their cannabis-related contact with the police impacted their attitude toward the law, police and the courts. For seventeen respondents, having contact with the police for a cannabis-related incident had a negative impact on their views towards the police. This was articulated in two ways. Among those who believed there was a change in attitude as a result, the following themes emerged: enhanced existing negative feelings towards police and the law; maintained existing negative feelings; perception of unjust treatment; sense that the cannabis laws were unfair and required change; and the view that the cannabis laws were wasteful of criminal justice resources.

It just reconfirmed what I already felt. And that the laws were unjust. Many times, more often than now, the punishment would outweigh the crime.

[ID71, male aged 20]

There were five respondents who suggested that they had a positive experience the last time they had contact with police regarding cannabis and in some cases this resulted in them improving their attitude toward police and the legal system generally.

...I mean I was actually quite impressed that I was listened to in court, and my individual story was taken into account. It wasn't just another single parent trying to make some money, it was for personal use only. I walked out of there with a lot more respect than the first time I'd been in and been told I was about to head to [prison].

[ID55, female aged 39]

Previous research (Lenton, Humeniuk, Heale & Christie, 2000) suggested that a *prohibition with civil penalties* scheme, as opposed to a *prohibition with criminal penalties* scheme, would be likely to reinforce respect for the police and the law, rather than undermine compliance with it. Those convicted under the *prohibition with criminal penalties* scheme were less likely to say that, when apprehended, police were friendly and respected their rights as a citizen, and were more likely to say that police treated them as if they were a criminal. Those convicted under *prohibition with criminal penalties* had become less respectful, less trusting and more fearful of police as a result of the incident compared to the *civil penalty* group (Lenton, Humeniuk, Heale & Christie 2000). Given this, it will be interesting to see whether the change from a system of criminal to civil penalties under the proposed change to the cannabis laws in WA results in respondents developing less negative attitudes to police as a result of being apprehended.

Cannabis Law: Knowledge and attitudes

Understanding of 'prohibition with civil penalties'

The vast majority (83%) of respondents understood that *prohibition with civil penalties* meant 'still illegal, a fine, but no criminal penalty applies'. Only 5% of the sample thought it meant that cannabis use would be 'legal'. This suggests that this term is well understood by regular cannabis users, and should be preferred over 'decriminalisation' which has previously been shown to be frequently confused with 'legalisation' by many members of the public (Lenton & Ovenden, 1996).

Attitudes to the law

Some 96% of the sample thought it should be legal to possess a small amount of cannabis for personal use, 31% did not know that it was a criminal, rather than a civil, offence, but 100% believed that if cannabis use was to remain illegal it should be a civil rather than a criminal offence.

Ninety-four percent of the sample thought it should be legal to grow a cannabis plant, 15% did not know that it was a criminal, rather than a civil, offence, but 94% believed that if cultivation of a cannabis plant was to remain illegal it should be a civil rather than a criminal offence.

Some 97% of the sample was aware that it was currently illegal in WA for an adult to grow a cannabis plant using hydroponic equipment, but 81% of the sample thought it should be legal and 16% thought it should remain illegal. Some 87% believed that if hydroponic cultivation of a cannabis plant was to remain illegal, it should be a civil rather than a criminal offence.

Some 99% of the sample was aware that it was currently illegal in WA for an adult to sell cannabis to another adult, but 71% of the sample thought it should be legal. Some 88% of the sample believed that if sale of cannabis from one adult to another was to remain illegal it should be a civil rather than a criminal offence. In contrast, 85% thought it should be illegal for an adult to sell cannabis to a person under the age of 18 years and 75% thought criminal rather than civil penalties should apply for this offence. With regards to penalties, only 63% thought that an adult caught selling a small amount of cannabis to another adult would likely get a criminal conviction and 20% incorrectly thought they could get a formal caution.

Almost half (49%) of this sample of regular cannabis users agreed 'strongly' or at least 'somewhat' that police should have the power to remove people from the hydroponic equipment industry who police have evidence are engaging in criminal activities such as commercial cannabis production.

Some 88% of the sample was aware that it was currently illegal in WA to drive while affected by cannabis, but 29% thought it should be legal. Although 29% did not know that driving whilst affected by cannabis was a criminal, rather than a civil, offence, 63% believed that if it remained illegal it should be a civil rather than a criminal offence. Sixty-five percent of respondents agreed, to some extent, that police should test drivers for cannabis.

Although these regular cannabis users believed most personal use and cultivation should be legalised, unsurprisingly there was high levels of support for civil over criminal penalties if these were to remain illegal. The sizeable minorities of the sample who believed that civil rather than criminal penalties applied to many of these offences reinforces that education targeted at regular users should include information about the laws applying to cannabis, as suggested in the proposed WA scheme (Prior, Swensen, Migro, et al., 2002).

Cannabis cautioning

With regards to the WA Cannabis Cautioning System about 81% understood that under the system in place at the time of interview such cautions only applied to adult first offenders. Despite this, only 47% said that a criminal conviction would be recorded for a second offence, where this in fact happened more than 95% of the time. Some 28% of the sample incorrectly thought that a caution was possible for cultivation of cannabis plants under the cautioning system, and only 50% believed one could get a criminal conviction for cultivation of a small number of plants. This shows among this sample of frequent cannabis users there was a low level of knowledge of the detail of the existing cannabis cautioning system.

Likelihood of apprehension

Some 96% of respondents thought it would be unlikely that they would be caught by police if they were in possession of a small amount of cannabis for personal use and 88% thought they would be unlikely to be caught if they were growing a small number of cannabis plants. Similarly 88% thought it was unlikely they would be caught if they were selling a small amount of cannabis. These findings reinforce that the low likelihood of apprehension undermines the effectiveness of the threat of the law to deter cannabis use (Lenton, 2000), especially among experienced offenders (Lenton, 2003), many of whom will have an extensive history of avoiding punishment (Stafford & Warr, 1994).

Attitudes to the law and police

Consistent with earlier work with apprehended cannabis users (Lenton, Humeniuk, Heale & Christie, 2000), most of the sample were, in general, law-abiding and had respect for the law in general. Overall, 78% of the sample saw themselves as a law-abiding citizen, at least to some extent, and 69% agreed that most laws are fair. Some 95% believed it was important that people in a society respect most of its laws. However, 37% believed that it was acceptable to break the law if you can get away with it, and 28% believed that people should break laws they disagree with.

Some 82% of respondents agreed, to some extent, that police deserve respect for their role in maintaining law and order, yet 97% believed that some police abuse their authority over people they suspect have broken the law. Perhaps most relevant for the current study was that only 25% of the sample believed that police generally treat cannabis users with respect. Not surprisingly, 94%

disagreed that police should be given more power to crack down on cannabis in the community, and 99% believed that police time could be better spent than in pursuing minor cannabis offenders.

Knowledge and attitudes toward the new system

Respondents were given a standardised verbal description of the proposed legislative changes for cannabis in WA and were then asked questions about their understanding of the scheme and their attitudes toward it.

Most people understood which of the possession and cultivation offences attracted civil and criminal penalties under the new scheme, with 83% of responses correct on these items. For most of these offences the overwhelming majority (83% to 97% depending on the offence) said it would be unlikely they would be apprehended under the new scheme. The exception was cultivation of 3 to 10 hydroponic plants, which was seen by a larger minority of respondents as more likely to result in detection, with only 54% believing it was unlikely they would be apprehended.

Attitudes to proposed penalties

Respondents were asked the extent to which a range of possible penalties would be a problem for them if they received them. In general, the potential penalties associated with the proposed scheme (fines of \$100 to \$200, an education session, no criminal charge) were rated as far less a problem than potential penalties under the existing model (criminal conviction, 2 year prison sentence). For example, an education session was seen as 'no problem at all' or 'a small problem' by 81% of the sample, whereas a \$200 fine was seen as 'a big problem' or 'a very big problem' by 82% of the sample. This suggests that, for the majority of regular users at least, the option of attending an education session in lieu of a fine will likely be an attractive option for many.

Whereas 79% of the sample agreed either strongly or somewhat that possession of less than 15 grams of cannabis and up to 30 grams should be a non-criminal offence, fines for these offences were less likely to be rated as fair. For example, only 43% of the sample agreed that it was fair for possession of not more than 30 grams of cannabis to attract a \$100 fine.

Only 30% of the sample agreed that it was fair for possession of more than 30 grams of cannabis to attract a criminal charge. Whereas 87% of the sample agreed that it was fair that growing less than 2 non-hydro plants should be a non-criminal offence, only 11% agreed that it was fair that criminal penalties applied to the cultivation of 2 hydroponic plants.

Overall fairness of the scheme

Given the high level of support for legalisation of cannabis, it is not surprising that many thought fines for the offences that would attract a CIN under the proposed scheme were unfair. Similar sentiments were evident in the qualitative accounts where, although a minority thought the scheme was fair overall and many thought that cannabis should be legalised, a majority expressed the view that the proposed scheme was fairer than the existing criminal regime.

Well I still say it should be legal.

*So in that sense it's not quite fitting in with what you want?

No. I don't think there should be any punishment.

[ID59, female aged 34]

Well it's fairer than what it has been. A change is better than no change at all.

[ID96, female aged 32]

Hydroponic growing appeared to be the aspect of the proposed changes that provoked a significant reaction when discussing issues of fairness concerning the proposed changes. A number also pointed to the apparent inconsistency between the 30 gram limit on harvested cannabis and the two plant limit.

Because they say possession of 15-30 grams and growing 1 to 2 non-hydro plants, so while that plant is in the ground you are within legal limits; as soon as you harvest that plant you're outside the legal limit. It's a huge trap that a lot of people are going to get caught in and I believe that whoever formulated this plan did it on purpose.

[ID11, female aged 50]

Like in any legislative system, there are potential anomalies in the CIN scheme. An obvious one, recognised by its architects (Prior, Swensen, Migro, et al., 2002) was the discrepancy between the amount of cannabis on two growing plants which would be eligible for a CIN being far greater than the 30 grams eligible for a CIN once harvested.

Despite the scepticism of the respondent quoted above, a number of attempts to deal with this anomaly were considered and rejected by the Ministerial Working Party. In the end it was left to the discretion of the police and the courts in applying the law, with one of the goals of the scheme articulated by the Working Party being to move cannabis supply away from large-scale criminal, commercial suppliers (Prior, Swensen, Migro, et al., 2002). Guidance as to the intent of the Act was given in the Second Reading Speech in the WA Parliament. This emphasised that:

The prosecution of minor cannabis offenders is costly in terms of police and court time. Law enforcement and the criminal justice system should target and heavily penalise those connected or involved in the business of large scale cannabis supply, those who also sell other prohibited drugs, and those engaging in violence or standover tactics.

(Kucera in Parliament of Western Australia, 2003, p. 5696.)

Clearly, if law enforcement chose to deal with anomalies such as this one by charging those cultivating 2 plants with criminal charges because they just harvested their crop, then this will undermine the scheme's capacity to shift the market. The post-phase of the research will document the extent to which this has happened.

Community impact of the legislative change

Respondents were asked to comment on what they saw would be the impact of the scheme at a community level. Some 50 of 57 respondents who commented suggested that there would be no impact on cannabis use generally. In many cases cannabis use or lack thereof was understood to occur for reasons separate from any legislative framework in place.

Nothing, nothing at all, I don't think people give a toss about the law to be honest with you.

[ID79, female aged 22]

Others suggested similar levels of caution would exist, thus translating into a lack of change in behaviour with the proposed changes:

Everyone would still have to be on their toes, obviously, if they didn't want to get into trouble.

[ID3, male aged 47]

Some 43 respondents commented on whether the proposed changes would impact on young people in a negative manner. Twenty-six people did not believe that the proposed changes would have an adverse impact on cannabis use by young people, whereas 11 believed that there might be an impact in terms of encouraging young people to use cannabis.

I think it might just make it a bit more open for first timers, stuff like that, you know, maybe young schoolies and stuff like that. It might... but besides that, I don't think it will affect it.

[ID73, male aged 20]

There were 44 respondents who discussed the issue of whether the proposed changes would impact on the public use of cannabis and 24 of these did not believe the changes in legislation would encourage more use of cannabis in public places, whereas 20 said it would.

I don't think so. I think with people who do smoke it's become so ingrained to be private about your use that I don't think that will make a great deal of difference. It's not like they're legalising it.

[ID32, female aged 32]

The extent to which the proposed changes result in such changes at a community level should be able to be detected in the post-change sub-studies of the general population, school children and regular users, as well as in analysis of police and health data.

Impact on personal cannabis use

Some 93 respondents commented on whether they thought the proposed changes would impact on their cannabis use and 79 (85%) of these said the proposed changes would have little impact on their cannabis use. Those who discussed the reasons for an anticipated lack of impact identified various reasons.

The current system is not having any impact so the new system is not going to change it very much. I still don't want to get caught.

[ID85, male aged 32]

Twenty-two respondents commented on whether they might use cannabis in public settings more often. For twenty respondents the proposed changes would have no impact on where they smoked. According to two respondents the fact that cannabis remained illegal meant that their location of use would not change:

Because you can still get fined, so I'm not going to exactly smoke it willy-nilly everywhere.

[ID80, female aged 28]

These results are consistent with considerable prior research which suggests that the formal aspects of the law have little impact on cannabis use, especially by experienced, or regular, users (see MacCoun, 1993; Williams and Hawkins, 1986).

Intent to grow cannabis under the proposed scheme

Overall, 72% (n=70) said they intended to grow cannabis under the proposed scheme. Whereas 83% (n=57) of those who had ever grown cannabis said they would, only 46% (n=13) of those who had never done so said that they intended to grow cannabis under the proposed changes. Overall 73% (n=50) of those who intended to grow cannabis once the proposed scheme came into effect said they would grow within the provisions eligible for a CIN – that is, 1 to 2 non-hydroponic plants.

Impact on the cannabis market generally

A number of interesting themes emerged from discussion with respondents concerning the impact of the proposed legislative changes upon aspects of the cannabis market. However, because this was qualitative data and not all participants engaged in this topic in a similar fashion, little can be concluded from the proportion of respondents who discussed each theme. One of the possible impacts commented on by many respondents was the possible creation of distinct markets between cannabis and other drugs. Some thirty-four respondents said that cannabis and other drug markets were already distinct, 14 thought it might work to separate markets and 12 said there would be no impact on whether cannabis and other drug markets were separate.

Fifty-six respondents commented on whether the proposed changes would impact the levels of violence and 'rip-offs' associated with the drug market. In 25 cases it was believed that there would be no impact. In some cases this was attributed to a perceived absence of violence associated with the cannabis market generally.

Impact on personal market participation

Among those 93 respondents who discussed the issue, thirty respondents believed that there would be no impact on their personal involvement with the market. Eighteen respondents suggested that under the proposed changes they might be more likely to share cannabis with a small peer group.

Yeah personally I think my mates would have their own in their back yards as well. So I wouldn't have to supply them and they wouldn't have to supply me. If anything it would be my crops out is yours in? Yep, okay, trade off – give me an ounce now and I'll give you one when mine is ready. That sort of thing.

[ID19, male aged 22]

Some 14 respondents believed they might purchase cannabis less often as a result of the proposed changes and the same number believed the proposed changes would impact in some way the organised distribution of cannabis. For example:

Yeah the big guys aren't gonna get as much of the deal.

[ID59, female aged 34]

There were 73 respondents who commented on whether they would consider selling for profit under the proposed scheme. Of these, 20 said they would consider selling cannabis under the proposed scheme. This included 12 who were current sellers and would continue to do so despite the proposed changes, 4 who had sold in the past said that they might consider selling again under the proposed system, and 4 who had never sold cannabis before, but would consider it. Thus there were only 8 of 72 individuals who said they would enter or re-enter the cannabis market as sellers. One of the criticisms of the scheme made by the Liberal opposition is that it will entice otherwise law abiding cannabis users into selling cannabis for profit. These data suggest that among regular cannabis users, this will rarely happen.

There were a couple of respondents who believed that the exclusion of hydroponic cultivation under the proposed scheme, and what they saw as a decrease in the quality of available cannabis due to an increase in the proportion of non-hydro cannabis in the market, was an opportunity to be exploited. For example:

Yeah it would definitely be more beneficial ... to me because [if] they'd ... know that you've got the hydro they'll come to you ... before they go to the bush people.

[ID30, female aged 28]

There were 53 respondents who indicated they would not consider selling cannabis under the proposed scheme. Twenty respondents suggested that they would not supply simply because they had no interest in doing so, 17 noted an avoidance of the lifestyle associated with selling cannabis, and for 14 the maintenance of the illegality of cannabis was a reason.

Dealing in drugs doesn't really appeal to me. I'd like to have the money but I think of all the other stuff that comes with it. Not so much the threat of getting caught but just people constantly ringing you up for things and that sort of thing.

[ID67, male age 21]

Well, basically because I'm not growing, but basically because if you are selling, it's dealing. But yeah, it's criminal penalties basically.

[ID23, male aged 31]

Impact of changes on willingness to seek treatment

A total of 93 respondents discussed whether or not there might be an enhanced willingness to seek treatment in the context of the proposed legislative changes. Of these, 81% said that either they or cannabis users in general would be more willing to seek treatment as a result of the proposed changes.

Well, I suppose because they are being a bit more lenient here, I suppose that it would probably help me thinking "Ok I can turn to someone for help".

[ID60, male aged 21]

I suppose I would, yeah. You wouldn't feel [you'd] get labelled.

[ID98, female aged 30]

Some 12 respondents discussed their views of the educational aspect of the proposed legislative changes. In all cases they believed the proposed changes would result in an increased willingness for users to seek treatment. Reasons why included that for those who are apprehended the education session might result in heightened awareness of aspects of their cannabis use, and an increased awareness of available services.

Yep, I think that they would know that it's a recognised problem, and they would see that there are avenues for them if they wish to go there.

[ID79, female aged 22]

Some 30 respondents said they would seek treatment should they require it irrespective of whatever legal framework existed. Some 29 people responded that they would not be more likely to seek treatment in the context of the proposed legislative changes. Reasons included a rejection

of expert forms of knowledge, not seeing their use within a problem framework, and others who said they would not seek treatment simply explained that they saw no relationship between willingness to seek treatment and the legal structure.

As mentioned above, one of the goals of the proposed scheme is to remove the risk of a criminal record as a barrier to cannabis users seeking treatment. The post-change phase of the study will provide an opportunity to measure the extent to which this has occurred.

Conclusions

The data collected in this study provide a good baseline for determining the impact of the CIN scheme on regular users' cannabis use, associated risks and harms, and involvement in the cannabis market as buyers, growers and sellers. The data on rates of cannabis use in this group suggest that the possession limits eligible for a CIN are workable for both users and police. Consistent with earlier research, these regular users did not expect that change in the laws would have much, if any, impact on their use of the drug. However, there was a trend for people who were growing more than the limits available for a CIN (1-2 non-hydro plants) to intend to reduce their cultivation to make it eligible for less severe penalties. This suggests the scheme may exert some *marginal deterrence* effects where previously there had been very little if any scope under the criminal penalty scheme.

The finding that a large majority said there were aspects of their cannabis use that bothered them is consistent with the shift to seeing cannabis use primarily as a health issue, rather than one of criminal law, and points to opportunities for public health education and screening programs in primary care. Together with the finding that more would be willing to seek treatment under a civil penalty rather than a criminal scheme, this suggests that a significant proportion of this regular using group may be amenable to treatment contact to reduce, if not stop, their cannabis use and associated harms.

One of the goals of the CIN scheme as articulated by the Ministerial Working Party on Drug Law Reform is to reduce the proportion of the market supplied by large-scale commercial cannabis suppliers over small-scale user-growers. If this is to happen then one would expect to see a larger proportion of regular users engaging in cultivation to supply themselves and/or their peers. Among this sample, the vast majority of those who expressed an intention to cultivate cannabis under the proposed scheme were those who had grown cannabis previously, rather than new initiates.

Overall, this pre-change study provided inconclusive findings on likely market impact, largely as a result of the heterogenous nature of the market and individuals' relationships with it. The pre-post comparison made possible with completion of the second phase of the study should give a stronger indication of whether the CIN scheme has shifted the market in ways hoped for by the scheme's architects.

Review of policy makers, police and judicial attitudes regarding proposed changes to cannabis law in WA – Final Report

By: Adam Sutton and David Hawks

Rationale

Western Australia is the fourth Australian jurisdiction – after South Australia, the Australian Capital Territory and the Northern Territory – to introduce prohibition with civil penalties for minor cannabis offences. Advocates of this approach argue that it enables governments, through statutes and their enforcement, to make it clear that cannabis use, possession, cultivation and distribution are disapproved. At the same time, infringement notices offer individuals found committing less serious offences the opportunity to avoid a court appearance and adverse career and other social consequences associated with a conviction or finding of guilt for a drug offence. Extending the infringement notice option to cultivation of a small number of plants for personal use may also make it more likely that some regular users will not need to rely on illicit drug supply networks that are dominated by organized crime.

Research on cannabis infringement notice systems elsewhere has identified a number of law enforcement and criminal justice problems that Western Australia has tried to avoid. South Australia, for example, has seen some commercial cannabis producers avoid prosecution by keeping the numbers of plants at any one location under the infringement limit. The *Cannabis Control Act 2003* deals with this problem by excluding hydroponic cultivation from the infringement provisions and limiting the 'infringeable' number of plants to two per household. Western Australian legislation also gives police the discretion to charge offenders detected with infringeable amounts in their possession, if they believe such individuals are flouting the intention of the law by engaging in commercial dealing.

Infringement notice systems in other states also have experienced low rates of compliance. To help combat this problem, Western Australia's legislation allows people unable or unwilling to pay amounts specified on the infringement notice to discharge their obligations by attending a specified cannabis education session at a community-based drug treatment centre. Such sessions explain the health and other risks associated with cannabis use, and are designed to assist offenders to make more informed choices. This and other distinctive aspects of the Western Australian legislation are explained in more detail in the full report.

Method

Research took the form of intensive semi-structured interviews and a small number of focus group discussions. Data was collected both at the pre-implementation stage (March and June 2003) and shortly after the *Cannabis Control Act 2003* became operational (mid-June 2004).

Both phases of research employed qualitative rather than quantitative methods. Interviews and focus groups were of approximately one hour's duration, and were audiotaped and transcribed. During the first round of interviews, interviewees who were not familiar with the details of the proposed scheme were given a brief article outlining the CIN recommendations and how they were being evaluated.

Audiotaped interviews were transcribed by the Chief Investigator and analysed for key themes. Standard techniques for qualitative analysis were employed. The small number of participants in both phases of data collection meant that it was not necessary to employ data analysis software. Ethics approval for the sub-study, formally classified as 'low risk', was obtained from the Department of Criminology Human Research Ethics Advisory Group, a designated sub-committee of the University of Melbourne's Human Research Ethics Committee. Prior to the commencement of each interview or discussion, informants were briefed on the study aims and methodology. They were then presented with, and signed, a written statement formally confirming their agreement to participate. All participants were told that, should they wish, they could withdraw from the research at any stage before data analysis and report writing began. As anticipated, collection of interview and focus group data did not give rise to any distress or concerns among respondents.

Pre-implementation interviews and findings

Pre-implementation interviews clarified the aims of the *Cannabis Control Act* and provided insight into extensive information gathering and consultations that had preceded its implementation. Informants indicated that the key objective was to develop reforms that would be accepted by the public and by the law enforcement and other agencies required to put them into effect. Senior police in Western Australia generally understood and accepted the aims of an infringement notice system, and the Police Service had been represented on the Ministerial Working Party that had researched and drafted the model behind the initial Bill (Prior, Swensen, Migro, et al., 2002). For reasons outlined in the report, it was not possible to interview large numbers of operational police prior to implementation. Among those who were interviewed, however, a few expressed concerns that rank and file personnel might perceive cannabis infringement notices as a form of 'de facto' legalization, and as a result might not bother to administer them. Other police, however, were enthusiastic about the proposed new provisions – and in particular about the idea that the infringement notice system might result in large numbers of offenders 'turning their lives around' after attending an education session. A few police interviewed during the pre-implementation phase seemed to interpret the proposed 'flouting' provisions – which allow individuals to be prosecuted in a criminal court even if they might technically be eligible for an infringement notice – more broadly than the researchers understood the Ministerial Working Party to intend. Overall, pre-implementation research suggested that criminal justice personnel would accept the cannabis infringement notice system, but that there was potential for its aims to be misunderstood. There also was a possibility that implementation of a cannabis infringement notice system would be accompanied by significant 'net widening', with far more individuals receiving notices than had been charged with a minor cannabis offence under the previous legislation.

Post-implementation interviews and findings

Post-implementation research updated perspectives canvassed during the pre-implementation interviews. In addition, it sought information on procedures for instructing operational police on the infringement notice provisions and procedures, how the system was working in practice, whether operational police fully understood the new system and whether the public seemed to have an adequate grasp of the *Cannabis Control Act*. Again, data was collected through semi-structured interviews supplemented by a focus group discussion. Those taking part included operational police who had administered notices, a number of station sergeants, staff from the Western Australian Police Service's Alcohol and Drug Coordination Unit (responsible for developing and implementing relevant police training) and key staff from Western Australia's Drug and Alcohol Office (responsible for public education in relation to the *Cannabis Control Act*).

Research indicated that at this early stage of implementation – just three months after the Act was proclaimed – some operational enforcement personnel (i.e. station sergeants and constables) still were uncertain about the circumstances under which cannabis infringement notices should be issued. This was not surprising, given the relatively short time – approximately six months – Western Australia's Police Service had to train its members. The Alcohol and Drug Coordination Unit stated that at the time of interviews, approximately fifty five percent of 'front-line' police had been trained on the *Cannabis Control Act* and associated police regulations. It will be some time – we estimate eighteen months – before infringement notices fully settle in, in an operational sense. In the meantime, media and other sources should be cautious about reading too much into police data on numbers of notices issued and on rates of compliance.

Research during the early stages of implementation also indicated that cannabis infringement notices might result in less savings in police work-time than architects of the legislation had anticipated. This was because rather than issuing notices 'on the spot', Western Australian police were taking offenders back to the station in order to interview them and weigh and seal cannabis seized. Police at all levels of the organization saw this as necessary in order to minimize the possibility that, after a notice had been issued, an offender would allege that the apprehending officer had stolen part of the cannabis seized. The recent Royal Commission into the Western Australian Police Service had seen many such allegations aired. While appreciating police concerns about false allegations, the researchers are of the view that in many instances – for example, when only a minimal amount has been detected – it may not be necessary for police to interrupt a patrol in order to weigh cannabis at the station before issuing a notice. This would be more consistent with the aims of the *Cannabis Control Act*, and the legislators' intention that police be accorded judgement and discretion in its administration. It is to be hoped that, as police become more experienced with the cannabis infringement notice procedures, they will become more confident about issuing notices on the spot.

Police interviewed during the post-implementation stage took an extremely professional approach to the *Cannabis Control Act*: the researchers found no evidence that operational police might ignore or boycott its provisions. Concerns about net widening do, however, remain. Evidence from other jurisdictions indicates that once an infringement notice system has been introduced, police are less likely to apply other sanctions – such as a caution – against minor cannabis offenders. Enforcement personnel interviewed in the course of the present study indicated that they would be less likely to caution a minor cannabis offender now that infringement notices were available, and some saw the fact that the recipients could discharge their obligations by attending an education session as a positive incentive to give them an infringement notice. Police were pessimistic, however, about possibilities for achieving high rates of compliance with the infringement notice provisions. In their view, many offenders would ignore notices received, just as they ignored and tried to evade other fines and obligations.

A final issue highlighted by post-implementation research was the need for more public education about the *Cannabis Control Act*. Police reported that members of the public seemed confused about cannabis infringement notice provisions, with many feeling that private possession and use of cannabis, and cultivation of small amounts, now were legal. This confusion may be a by-product of vigorous political and media debates that occurred when the Cannabis Control Bill was making its way through parliament. Attempts already have been made to dispel this confusion through media campaigns, convenience advertising in hotels and other venues, and community based education. However, more needs to be done in this area.

Conclusions

Experience in South Australia and other jurisdictions has highlighted the need to continuously monitor police and other criminal justice perspectives when implementing a prohibition with civil penalties approach to minor cannabis offences. The main aim of the current study has been to provide opportunities for criminal justice personnel to provide feedback on the reforms.

This preliminary data suggested that while the Western Australia Police Service had done an admirable job in implementing the CIN scheme in a very short time frame, in some areas there had been a mismatch between the aims of the CIN scheme as articulated in the *Cannabis Control Act 2003* and the way it was being implemented by police. It is recommended that: (1) police explore possibilities for a higher proportion of CINs to be issued 'on the spot' rather than requiring the offender to be brought back to the station; (2) to reduce the likelihood of 'net widening', there is clarification of police expectations regarding the potency of the education session to 'turn people's lives around'; and (3) further public education is undertaken to clarify community misunderstandings about the CIN scheme.

Effects of changes to cannabis law in WA on attitudes and drug use behaviour of school children – Baseline, Year 1

By: Fiona Farrington and Simon Lenton

Why study school children?

Although the legislative and other changes relate to cannabis use by adults, young people are one group who may be at a higher risk of developing the adverse acute and chronic effects of cannabis, and in particular may be more at risk of dependence. An important question is the extent to which changes to laws affecting adults may impact on the drug use of school age people.

The aims of this sub-study of the impact of legislative change on attitudes and drug use behaviour of school children were to:

- Determine the extent to which the changes in legislation and regulations for minor cannabis offences applying to adults affect school students, cannabis use, knowledge and attitudes to cannabis and the law, and their experience of acquiring and supplying cannabis in the drug market.
- Examine perceptions of teachers – who provide school drug education regarding the influence of the new legislation and regulations for minor cannabis offences – on how drug education is conducted in schools and whether students' attitudes to cannabis use change.

There were two components to this sub-study. The first was a two-wave survey of students in years 9 and 12 at a sample of government schools in WA. The second component of this sub-study was a focus group study of school drug education teachers.

The first wave was conducted in the months before the Cannabis Control Bill was tabled before the Parliament of Western Australia, and the second wave will be conducted at least 18 months after the proclamation of the *Cannabis Control Act 2003* on 22 March 2004, when the laws came into effect. This summary describes the methods and results of the pre-change data collected in each component separately.

Component 1: Survey of students in years 9 and 12 at a sample of government schools in WA

Method

The selection of schools for involvement in this study was restricted to Perth (capital city) metropolitan, government secondary schools. Random selection of schools from which year 9 and year 12 students were drawn was conducted using an index provided to the researcher by the Education Department of Western Australia, which scores schools on a range of socio-demographic factors. Eleven schools were recruited for involvement in the study.

The questionnaire was developed to measure students' cannabis-related knowledge (including knowledge of the laws and the consequences of being apprehended, cannabis-related harms and risks and age specific cannabis use); attitudes to cannabis use (including perceived effects of cannabis use, potential harms that can result as a consequence of cannabis use and perception of the degree to which young people view cannabis use as 'normal'); attitudes to cannabis law (including preferred legal status, likelihood of apprehension, and impact on non-use, intention to use and use); patterns of cannabis use (including frequency of use, context of use and intention to use); and drug market factors (including perception of availability, perception of cost and perception of potency). Prior to the survey, the questionnaire was piloted with students and underwent expert review to assess face and content validity.

The questionnaire was piloted in two classes of year 9 students from two schools (n=55). The survey itself was conducted during May, June and July 2002. Passive consent procedures were used. The anonymous, self-completion questionnaires were completed by students under the guidance of trained researchers who instructed students and responded to questions following a set procedure. The primary researcher administered the majority of questionnaires; however, four other researchers administered questionnaires at various times during the survey period. All researchers used a set protocol to administer the questionnaires. Students took between 30 to 60 minutes to complete the questionnaire. Consistent with Education Department policy, classroom teachers were in attendance; however, they did not respond to questions or actively move around the classroom and were therefore unlikely to have influenced student responses. All questionnaires were scored by an optical mark recognition scanner. Quantitative analysis was undertaken using SPSS 6.1 for Windows (SPSS Inc., 2000).

Results and discussion

The sample

A total of 2,638 eligible questionnaires were received, 62% from Year 9 students and 38% from Year 12 students. The sample was 51% female and 49% male. The age distribution reflected the sampling of years 9 and 12 students: 61% were from 13 or 14 years of age and 37% were 16 or 17 years old. Recruitment of respondents accessed young people from across metropolitan Perth.

Knowledge about cannabis, health, extent of use and the law

In general respondents did not possess a high degree of knowledge about cannabis. They were more knowledgeable about cannabis-related harms, risks and problems than prevalence of use and current cannabis law. Thus, while some 81% believed that people who use cannabis regularly can become dependent on the drug and 71% believed that use increased the risk of mental illness in some people, only 11% correctly disagreed with the statement 'most 13 year old students in WA have tried cannabis', and only 36% believed that currently in WA it was not legal for an adult to have a small amount of cannabis for their personal use.

This suggests that education for school age children needs to focus not only on the harms associated with cannabis, but importantly on challenging incorrect assumptions that overestimate prevalence of school age use and informing them about the laws which apply to it, in particular that use is illegal.

Knowledge of penalties

Overall, respondents appeared to have a better knowledge of the current penalties applying to use of cannabis by adults than they did to use by juveniles such as themselves. For example only 28% thought a juvenile caught in possession of a small amount of cannabis could get a criminal conviction recorded, and only 33% thought it would result in referral to a juvenile justice team, while the most commonly identified correct response was a formal caution by a police officer. In contrast, with regards to existing penalties for use by an adult, 74% correctly identified a fine, 52% a formal caution and 51% a criminal conviction.

This suggests that education for school age people about the penalties applying to cannabis offences should ensure that it addresses penalties for school-age people, and not simply those that apply to adults.

Understanding the meaning of 'Prohibition with civil penalties'

While the phrase *prohibition with civil penalties* is well understood by the majority of adults (e.g. Lenton & Ovenden, 1996) only about a third (32%) of all school student respondents in this study understood the term: 23% thought it would be illegal with a criminal conviction recorded, while about 5% thought it meant such offences would be legal, and 35% were unsure.

This suggests a more thorough explanation of the prohibition with civil penalties approach is required with school age students. An example is 'much like speeding in a motor vehicle, still illegal, not condoned, but resulting in a fine, but not a criminal record.'

Attitudes towards cannabis use and cannabis law

Attitudes towards cannabis use were generally as expected. The younger respondents (year 9) and those who had never used cannabis generally had less favourable attitudes to the drug. Thus, while 65% of year 9s and 77% of those who had never tried cannabis agreed with the statement '*I would be concerned if my friends were using cannabis*', only 50% of year 12s and 30% of those who had tried the drug did so.

Similarly, year 9s and those who had never tried cannabis, in general held less favourable attitudes to cannabis law reform. For example, 31% of year 9 students compared to 24% of year 12 students agreed that '*the current cannabis laws, which apply to adults in WA, deter people under 18 from using cannabis*'.

With regards to the specific question of whether cannabis use by an adult should be a criminal offence, this trend continued. Half (49%) of year 9 students and 40% of those who had never used the drug thought it should not be criminal, compared to 66% of year 12 students and 82% of those who had ever used cannabis.

Those who said '*cannabis use by an adult should be a criminal offence*' gave '*health effects*', '*because it stops people from using*' and because cannabis '*leads to other drug use*', as the top three reasons why it should remain a criminal offence. There were few differences between year 9s, year 12s, those who had never tried cannabis and those who had ever tried the drug in ranking these reasons. The most frequently nominated reasons given by those who said that '*cannabis use by an adult should NOT be a criminal offence*' were that '*private use of small amounts doesn't hurt*'

others', 'police can focus on more serious offences' and that cannabis 'was no worse than alcohol or tobacco'. There were no differences between year 9s, year 12s, those who had never tried cannabis and those who had ever tried the drug in ranking these reasons.

Cannabis and other drug use

Reasons why young people use cannabis

In response to being asked why people their age use cannabis, both 'makes them feel good' and 'because their friends use' were rated highly by the whole sample. However, year 12 students and those who had ever used cannabis gave 'to appear cool' and 'pressure from friends' far less often than year 9 students and those who had never used the drug. It would appear that these more disparaging reasons are less likely to be given by the older and cannabis experienced students.

Opportunity to use cannabis and other drugs

Overall 86% of all students said that they had had the opportunity to use alcohol, 54% to use cannabis and 25% said that they had the opportunity to use other illegal drugs. As expected, year 12 students were more likely to say that they had had such opportunities than year 9 students. It will be interesting to see whether there is any change in the post-change study of opportunity to use cannabis.

Interestingly, while only 16% of those who had not used cannabis in the last 12 months said they had ever had an opportunity to use other illegal drugs, 53% of those who had used cannabis in the last 12 months said they had ever had such an opportunity. This does not suggest that cannabis use has a causal relationship to other drug use, but that recent cannabis users are more likely to be exposed to opportunities to use other illicit drugs. This is consistent with research that suggests early cannabis use is a (non-causal) marker of other drug use and suggests that the mechanism which links the two is more likely to be social and concerned with peer networks and drug use opportunities than it is to be due to the drug itself (Kandel, 2002).

Lifetime cannabis use/non-use and intention to use

Overall, 37% of the sample said that they had ever used cannabis. As expected significantly more (50%) year 12 students had used cannabis than their year 9 counterparts (28%). Lifetime use figures were comparable with other recent data from a benchmark survey of WA school students which found 53% of 17 year old students and 28% of 14 year old students had ever used cannabis (Fairthorne, Hayman & White, 2004). Those in the current study that had not used cannabis were asked whether they intended to try the drug. Although the majority (64%) of students who had never tried cannabis indicated that they would not try it in the future, a higher proportion of year 9 students (12%) reported that they would try cannabis, compared to year 12 students (9%).

Reasons for not using cannabis

Those who had never used cannabis were asked their reasons for not using. There were no significant differences between year 9 and year 12 responses on this item. The top five reasons given were: 'I don't need it' (76%), 'can have a good time without using it' (67%), 'concerned it might affect my health' (64%) and 'it's illegal' (60%). It is worth noting that the illegality of cannabis was the fourth highest reason cited for non-use because cannabis use remains illegal under the CIN scheme. Other results summarised below suggested more students would try cannabis if use by adults was fully legalised.

Frequency of drug use

While 39% of year 12 students had used cannabis in the last 12 months, 24% of year 9 students had done so. Furthermore, 21% of the year 12s, compared to 16% of the year 9s, had used the drug in the last 4 weeks. There was little difference between the proportion of year 12 (12%) and year 9 (11%) students who said that they had used cannabis in the last week. The proportions of year 9 and 12 students who had ever used cannabis were not significantly different from the proportions found in a 2002 benchmark survey of West Australian high school students (Fairthorne, Hayman & White, 2004).

Whereas 19% of year 12 students indicated they had ever used illegal drugs other than cannabis, only 9% of year 9 students did so. The majority of these students in both years indicated that they had only used one to two times. More year 12 students (14%) also reported using other illegal drugs in the last 12 months than year 9 students (6%).

In their own right these figures are not remarkable, but their comparison with data from the 18 month evaluation of the new cannabis laws will be a key indicator of the extent to which the changes have affected cannabis or other drug use among school children.

Drug-related risky activities, problems and health problems

A larger proportion of students who had used alcohol and cannabis in combination (34%) in the last 12 months said they had undertaken any of the risky activities while affected by those drugs compared to those who had used alcohol alone (27%) or cannabis alone. Among year 12 students, more reported driving a car while affected by cannabis alone (9%) than alcohol alone (6%), or alcohol and cannabis in combination (6%).

A larger proportion of students who had used alcohol and cannabis in combination (30%) or cannabis alone (28%) in the last 12 months said they had experienced any of the problems over that period compared to those who had used alcohol alone (23%). *'School work suffering'* was the most frequently mentioned problem for those using cannabis alone (13%) over the last 12 months but was the 6th most common problem mentioned by students using alcohol alone (6%), or alcohol and cannabis in combination (8%).

There was a significantly larger proportion of students who had used alcohol and cannabis in combination (46%) in the last 12 months that said they had experienced any of the health problems over that period, compared to those who had used alcohol alone (39%), but not those who had used cannabis alone (42%). With regards to alcohol, year 12 students who had used alcohol in the last 12 months were significantly more likely to report health problems with the use of alcohol on its own than their year 9 counterparts. Hangovers were the most common health problem identified with regards to use of alcohol on its own.

These findings clearly point to the increased risky behaviours and subsequent health harms associated with the use of cannabis and alcohol in combination, over either drug on its own. They suggest that harm reduction messages targeted at young people who use cannabis should emphasise the risks of poly drug use, especially with alcohol. The finding that use of cannabis alone, or in combination with alcohol, was significantly more likely to be associated with school work suffering is consistent with longitudinal studies that have shown that early heavy use of cannabis is associated with poor educational achievement and early school leaving (Lynskey & Hall, 2000). This finding supports the recommendation of the Working Party on Drug Law reform to exclude those under 18 from the CIN scheme, but rather have them continue to be dealt with through the juvenile justice system. In this way juveniles could be issued with conditional cautions which can require that alone, or with their parents, they must attend counselling in order to be

eligible for a caution. While juvenile cannabis use may not necessarily be sinister, assessment by a qualified counsellor may help identify those whose pattern of use puts them at risk of such problems.

Passenger in car where driver drug affected

More students indicated they had been a passenger in a car in the last 12 months where the driver had been affected by alcohol alone (34%) than cannabis alone (21%) or a combination of the two (13%). Year 12 students were more likely than year 9 students to report having been in a car where the driver was affected by alcohol alone (25% vs 13%) and alcohol and cannabis (15% vs 8%). There were no significant differences between the proportion of year 9 and year 12 students who had been in a car in the last 12 months where the driver was affected by alcohol alone.

Cannabis users – experience

Age of first use

The mean age of commencing cannabis use for year 9 students who had tried the drug was 12.2 years compared to 13.9 years for year 12 students.

How first obtained cannabis

The majority of students who had used cannabis said that they had first obtained it by being '*given it by a family member or friend*' (62%), or being '*given it by someone else*' (15%). Some 9% said they first got cannabis by '*buying it from a dealer or supplier*', whereas 7% '*bought it from a friend or family member*'. Only 2% '*grew it*' the first time they used it.

How usually obtain cannabis now

The majority of students who had used cannabis said that they now usually obtain cannabis by being '*given it by a family member or friend*' (38%), followed by '*buying it from a dealer or supplier*' (15%) or '*buying it from a friend or family member*' (13%). Some 7% said that nowadays they usually get it given to them by '*someone other than a friend or family member*' and 4% said they usually '*grow it*'.

It will be of interest to see whether the introduction of the CIN scheme is associated with a different pattern of acquiring cannabis for school children who use the drug. Currently 51% of the sample said they mainly got their cannabis from a friend or family member.

Ease of obtaining cannabis now

Overall 85% of students who had used cannabis said it was '*easy*' or '*very easy*' to obtain now. Year 12 students who had used the drug, compared to their year 9 counterparts, were more likely to say it was '*very easy*' (53% vs 46%) to obtain.

Although there are likely to be ceiling effects for the proportion who find it '*easy*' or '*very easy*' to obtain, the proportions who find it '*very easy*' should provide an adequate baseline to test whether the proposed legislative changes in WA result in increased availability of cannabis for year 9 and 12 students.

Method of cannabis use

Overall there was no significant difference between year 9 and 12 cannabis users regarding their most common method of using the drug. Most commonly mentioned method of use was 'a bong' (51%), followed by 'joints' (17%), 'a pipe' (14%) and a 'bucket bong' (12%). Only 2% said that they mostly 'ate it'.

Location of use

Again rankings of the usual place of use did not differ between the years. Most commonly mentioned were 'friend's house' (69%), 'parties' (61%), 'public places' (44%), 'own home' (32%), 'in cars' (21%) and 'school' (16%).

People usually use with

Overwhelmingly students who had used cannabis said they usually used cannabis with 'close friends' (80%). However, a greater proportion of year 12 students (84%) compared to year 9 students (77%) said they mostly used with 'close friends', whereas more year 9 students (6%), compared to year 12 students (2%) said that they usually used with siblings.

Other drugs offered when buying cannabis

Respondents were asked 'which of the following drugs have you ever been offered when obtaining cannabis?' The majority of students (55%) reported being offered alcohol when obtaining cannabis. Whereas 60% of year 9 students indicated they had been offered alcohol when obtaining cannabis, only 50% of year 12 students did so. Both years reported that the next two most commonly offered drugs when obtaining cannabis were amphetamines (35%) and ecstasy (23%). Some 34% of year 12 students reported not being offered any other drugs when obtaining cannabis compared to 24% of year 9 students.

It is possible that within 18 months of the proposed legislative changes there may be shifts in the cannabis market toward a larger proportion of the market being supplied by small-time user-growers, rather than larger scale suppliers with other criminal associations who also supply other drugs. If this happens, changes may occur in the availability of other drugs when obtaining cannabis. If these changes are evident among school age consumers of cannabis then one could expect effects on the proportion offered other drugs when obtaining cannabis.

Supplying cannabis

Most (58%) of those who had ever used cannabis said that they had never supplied the drug to others. Some 29% said that they had 'given it to friends or family', 25% had 'given it to others', 18% had 'sold to others' and 14% had 'sold it to friends or family'. Responses for year 9 and year 12 cannabis users were very similar.

There would be understandable community concern if the introduction of the CIN scheme was associated with increased involvement in cannabis dealing by school students. While there is no indication in the literature that this is likely to occur, the post-change data collection should allow any such changes to be detected, should they occur.

Reasons for use or non-use

Reasons for using cannabis

The majority of students who had used cannabis (56%) identified using cannabis *'for fun/to have a good time'*. Some 48% said they did so because it *'makes me feel good'* and 43% identified *'experimenting/curiosity'*. *'Pressure from friends'* was the least commonly identified reason for both years, identified by 11% of year 9 users (ranked 14th) and 5% of year 12 users (ranked 13th).

McBride (2002) noted that responding to 'peer pressure' is a core component of 'resistance skills training', one of the approaches to school drug education which has been claimed to have an impact on students' behaviour. However, this approach has been called into question by others (e.g. Paglia & Room, 1998) who say the approach overplays the influence of peer pressure on behaviour, compared to peer preference. The results in the current study are consistent with this in that preferences for the drug (to have fun, feel good, experiment, etc) were identified by more cannabis using school students as reasons they used the drug than was the influence of peer pressure. This has implications for the content of school drug education.

Continued use of cannabis

Just under half (48%) of students who had ever used cannabis indicated that they still used the drug. There was a significant difference between years, with 54% of year 9 students who had ever used the drug compared to 43% of year 12 students saying they still used cannabis.

Quitters' reasons for not using cannabis

Those who had used cannabis but no longer did so were asked their reasons for no longer using the drug. The majority of students (52%) indicated that they no longer used cannabis because they were *only experimenting* and the next most common reason mentioned by both years was they could *have a good time without using it*. There were differences between the rank of reasons given by year 9 and year 12 quitters beyond these first two ranks. For example, the third most common reason for year 9 students (30%) was *it was affecting my health*; however, only 17% (rank 8) of year 12 students selected this reason.

Anticipated impact of legal penalty regimes

Anticipated impact of a change to prohibition with civil penalties on own use

Overall, 55% of students said that they would *'not try'* cannabis if civil penalties applied, 9% said they would *'use as often as they do now'*, 6% said they *'would try it'*, and 27% were unsure. Among those who had never used the drug, 70% said they would *'not try it'* if prohibition with civil penalties were introduced and 5% said they *'would try it'*. Some 24% of those who had not used the drug said they were unsure how a change to civil penalties would affect their use.

Some 26% of those who had ever used cannabis said that they *'would not use it'*, 7% said they'd *'try it'*, 8% *'would use it less often than [they do] now'*, 25% would *'use it as often as they do now'*, and 3% would use it *'more often than they do now'*. Some 32% of those who had used cannabis said that they were unsure what impact a change to civil penalties would have on their use.

Anticipated impact of a change to legalisation on own use

Overall, 50% of students said that they would '*not try*' cannabis if it were legalised, 10% said they would '*use as often as they do now*', 9% said they '*would try it*', and 24% were unsure. Among those who had never used the drug 66% said they would '*not try it*' if it were legalised and 11% said they '*would try it*'. Some 22% of those who had not used the drug said they were unsure how a change to legalise cannabis would affect their use.

Some 23% of those who had ever used cannabis said that they '*would not use it*', 6% said they'd '*try it*', 3% '*would use it less often than [they do] now*', 27% would '*use it as often as they do now*', and 14% would use it '*more often than they do now*'. Some 27% of those who had used cannabis said that they were unsure what impact a change to legalisation would have on their use.

Comparison of likely impact of legalisation versus prohibition with civil penalties on own use

Students were asked two questions about the impact of different legal structures on their own intention to use cannabis. Given the imperfect understanding of the terms *prohibition with civil penalties* and *legalisation*, the questions explained the terms as 'civil penalties, like a fine for speeding in a motor vehicle' and 'made legal, so using it was no longer an offence of any kind'. Taken together these last two items suggest that, among students who had not used cannabis, significantly more (11% vs 5%) said that they would try the drug if it were legalised, compared to if prohibition with civil penalties were introduced. Furthermore, among those who had used the drug, 14% said they would use it more often than they do now under a system of legalisation whereas only 3% said they would use more under a prohibition with civil penalties scheme.

Conclusions

While there was a concern that changing laws concerning cannabis use by adults may have an impact on cannabis use by school children, this pre-change study suggests that this is unlikely to happen.

Two obvious conclusions emerge from the results on likely impact of the legislative changes on respondents' cannabis use. Firstly, consistent with the literature which failed to find that 'decriminalisation' of cannabis affected rates of use by children (Johnson, O'Malley & Bachman, 1981; Neill, Christie & Cormack, 1991; Saveland & Bray, 1980 each cited in Single, Christie & Ali, 2000), whether cannabis use for adults is illegal and *criminal*, or illegal and subject to *civil penalties*, has little impact on drug use intentions of the vast majority of the school students in this sample. Secondly, the results suggest that if cannabis use for adults was *legalised* a significantly larger minority of current non-users would use it and current users would use it more often. Together, these conclusions support introduction of *prohibition with civil penalty* schemes such as the CIN scheme, but not legalisation of cannabis use. It will be interesting to see whether the post-change data support the use intentions of the school students surveyed in this pre-change phase of the study.

Component 2: Focus group study of school drug education teachers from government schools in WA

Method

Four focus groups of 6 drug education teachers each were held in August 2002. Teachers from 20 government high schools responded with 2 schools offering to send two teachers. The total sample comprised 11 males and 13 females (n=24) representing a variety of schools, reflecting teaching experiences covering a broad socio-economic range.

Prior to attending the focus groups, participants were sent a one page summary of the proposed legal changes for cannabis to inform their consideration of the issues covered in the focus group discussion. It should be noted that students were not given such a summary as part of the student survey component.

The focus groups lasted approximately 90 minutes and were audio-taped and transcribed to ensure that the richness of the data was retained and accurately presented. Transcripts were subjected to theme analysis.

Results and discussion

Context – Current school cannabis education

The majority of teachers from each group indicated that although drug education had a high priority within the Health and Physical Education learning area, in the context of the whole school it had a low priority. Many teachers believed that the low status of Health Education in schools accounted for this low priority.

All teachers agreed that cannabis education was conducted at their school during Health Education. They indicated that the amount of cannabis education students received varied from school to school as did the year or years in which it was conducted. Although the majority of teachers acknowledged that cannabis education occurred over several years, the number of lessons students received also varied from school to school. The majority of teachers acknowledged that if possible they would like to spend more time on cannabis education, identifying 'lack of time' in Health Education and 'the crowded curriculum' as the major reasons for the variability in time allocated to cannabis education.

It was clear that cannabis education occurred predominantly in lower school (years 8-10). All teachers acknowledged that it is important to discuss the laws with students but again time was a constraining factor.

When prompted about the quality of the cannabis education programs currently being conducted in schools, all teachers agreed it varied and was dependent on the school and the degree of commitment to drug education of the teachers in the school. All teachers agreed that there were very poor programs running in schools. They identified the K-10 Curriculum as an example of an outdated, content-driven program that was still being used.

School drug education materials on the CIN Scheme have been developed by The Drug and Alcohol Office of the WA Health Department in conjunction with the School Drug Education Program of the WA Department of Education. It will be of interest in the post-phase data collection to see whether these materials are well received by school drug educators.

Effect of current law on conducting cannabis education in the classroom and belief about how proposed laws would change this

All teachers agreed that the current cannabis laws have no impact on the way they conduct cannabis education. When prompted about the proposed scheme and if they thought it might impact on the way cannabis education was conducted in the classroom, all teachers agreed that the new cannabis laws would need to be discussed with students. Many teachers indicated that the coverage of other issues would not change nor would the way they taught it.

There was a concern by some in the community that the CIN scheme would undermine drug education in schools. The views of the drug educators accessed in this focus group study suggests that this is unlikely.

Impact of existing and proposed cannabis laws on school drug policy

All teachers agreed that due to the illegal status of cannabis, schools took a hard line regarding any incidence of use by students and this was reflected in the school drug policy. When prompted about whether the proposed scheme would result in any changes to school policy, all teachers agreed there would probably be no changes because cannabis would still be illegal and the changes would not affect students. Although the majority believed suspension was not the best option, they felt that the reality was the lack of staff and money for counselling left schools with no other option.

This again suggests that the CIN scheme is unlikely to have an effect in school drug policy.

Students' understanding of current cannabis law and the proposed scheme

All teachers agreed that many students displayed inaccurate knowledge about the current cannabis laws and had limited understanding of how the laws related to them. They indicated they spent much of their time, when talking about the current cannabis law, dispelling common myths.

The majority of teachers thought that many students believed that the possession of cannabis was legal. The majority of teachers indicated that students generally don't believe they will be caught for a cannabis offence and, in the unlikely event they are, they are convinced that nothing will happen to them.

Many teachers commented that students were confused due to the variety of ways young people could be dealt with regarding cannabis-related offences. Furthermore they felt that the inconsistent way in which the sanctions were applied added to the confusion and made it difficult to teach in the classroom.

In response to prompting about the level of understanding students displayed regarding the proposed scheme, all teachers agreed that students were confused and did not realise that any changes to the cannabis law would only apply to adults. The majority of teachers acknowledged that there was a general lack of understanding of the term 'decriminalisation', with many students thinking that it meant that the possession of cannabis was going to be legal. The majority of teachers indicated that the media coverage to date had impacted negatively on student knowledge and young people were receiving incorrect messages with no corrective education.

One teacher was very concerned that he found it extremely difficult to obtain information about the proposed scheme to clarify the situation for students. All teachers in this group were adamant that it was critical to keep schools informed.

Since the time when these data were collected, the public education about the CIN scheme has been conducted. While this has attempted to address some of the misunderstandings described above, it is unclear to what extent this has been successful. It is likely that at least some of the public, and some school aged children, will continue to misunderstand the scheme. For that reason, it is important that school-based drug education addresses the issue in an ongoing way, rather than simply at implementation of the scheme.

Supports needed to ensure students receive education about the proposed scheme for cannabis

All teachers agreed that for students to receive education about the proposed scheme a resource should be produced that could be easily implemented in the classroom. Many of these teachers emphasised that due to the lack of funds in Health Education, the resource should be provided to all schools free of charge. The majority of teachers indicated that the resource should cater for the individual differences of students, including their cannabis use status, different learning styles and cultural differences.

Furthermore, many teachers identified the types of teaching strategies and content they felt should be incorporated into the resource, principally that it be skills-based and interactive. Some commented that any education about the proposed scheme should occur across the whole school and not only in Health Education.

In addition to an appropriate resource, professional development of all teachers was identified as a key issue in ensuring students receive the correct information about the proposed scheme. All teachers agreed that if teachers were to attend professional development out of the school it was essential that funds to cover their teacher relief were provided. They all felt, however, that a more effective method would be to conduct any professional development at whole of school professional development day. Teachers discussed the need for quality presenters, such as School Drug Education Project (SDEP) staff and SDEP Regional Organising Committees, to deliver the professional development at the school to ensure that teachers were engaged and received the correct messages.

The Teacher Support Package of the School Drug Education Project is being reviewed in the second half of 2004. The above feedback from teachers will be provided to that review so that it can be considered in the review of materials for school drug educators.

Impact of cannabis law on students' cannabis use

All teachers indicated that they thought the current cannabis law had no impact on student use. They believed many students were experimenting or purposely indulging in cannabis use as risk taking behaviour and the law had neither an encouraging or deterrent effect. When asked if they thought the proposed scheme would have any impact on student use, all the teachers agreed that it wouldn't, due to the existing increased social acceptability of cannabis.

This again reinforces the earlier conclusion that the introduction of the CIN scheme is unlikely to have an impact on the cannabis use of school children, and is consistent with earlier research in this regard.

Supports required at the school level to assist students seeking help for their cannabis use.

The majority of teachers indicated that most students would not seek help from the school for their cannabis use because the support structures available in schools did not encourage young people using cannabis to access them. Furthermore, given the hard line most schools have regarding cannabis use with suspension being the predominant consequence of being caught, students may feel intimidated about admitting they use cannabis to school staff.

Most teachers felt that schools did have supports in place to cater for students who wanted some help, mentioning the student services team, the school nurse and the school psychologist as people students could talk to.

This suggests that there may be functional barriers to cannabis using school children seeking assistance from within the school system for problems associated with their cannabis use. It is likely that improving responses for such students will involve a combination of attempting to reduce these barriers, but also looking outside the school system (e.g. GPs, psychologists and others in the community) to facilitate access to appropriate support for school children seeking counselling or other treatment for problematic cannabis use. One of the aims of the CIN scheme is that in removing the risk of a criminal conviction, it would remove a significant disincentive to adult cannabis users seeking help from their GP and others, for problems associated with their cannabis use. As part of this, strategies are being put in place to develop the capacity of GPs to deal with cannabis-related problems. There will likely be an opportunity to improve access for school students to GPs and other primary health care workers who are able to assist them to address their problematic cannabis use.

Conclusions

There was a concern that introducing a prohibition with civil penalties for minor cannabis offences by adults would undermine the feasibility of school drug education around cannabis. This small, focus group study with school drug educators suggests that this is unlikely, as long as use remains illegal. Typically, the drug educators believed that most school children are unaware of the law and that it had little impact on their cannabis use.

References

- Adhikari, P., & Summerill, A. (2000). *National Drug Strategy Household Survey 1998: Detailed Findings*. Canberra: Australian Institute of Health and Welfare.
- Brooks, A., Stothard, C., Moss, J., Christie, P. & Ali, R. (1999). *Costs associated with the operation of the Cannabis Expiation Notice Scheme in South Australia*. Adelaide: Drug and Alcohol Services Council.
- Chen, K., Kandel, D. B. & Davies, M. (1997) Relationships between frequency and quantity of marijuana use and last year proxy of dependence among adolescents and adults in the United States. *Drug and Alcohol Dependence*, 46, 53-67.
- Donnelly, N., Hall, W. & Christie, P. (1999). *The effects of the CEN scheme on levels and patterns of cannabis use in South Australia: Evidence from National Drug Strategy Household Surveys 1985-1995*. Canberra: Commonwealth Department of Health and Family Services.
- Donnelly, N., Hall, W. & Christie, P. (2000) The effects of the CEN scheme on levels and patterns of cannabis use in South Australia: evidence from National Drug Strategy Household Surveys 1985-95. *Drug and Alcohol Review*, 19(3), 265-269.
- Erickson, P. (1980). *Cannabis criminals: the social effects of punishment on drug users*. Toronto: Addiction Research Foundation.
- Fairthorne, A., Hayman, J. & White, V. (2004) *Drug use among 12 to 17 year old Western Australian school students in 2002*. Perth: Drug and Alcohol Office.
- Fetherston, J. & Lenton, S. (2003) *WA Drug Trends 2002 – Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, NDARC Technical Report No. 149.
- Fetherston, J. & Lenton, S. (2004) *WA Drug Trends 2003 – Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, NDARC Technical Report No. 179.
- Hall, W. & Swift, W. (2000) The THC content of cannabis in Australia: evidence and implications. *Australian and New Zealand Journal of Public Health*, 24(5), 503-8.
- Hargreaves, K. & Lenton, S. (2001) *WA Drug Trends 2000 – Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, NDARC Technical Report No. 110.
- Hargreaves, K. & Lenton, S. (2002) *WA Drug Trends 2001 – Findings from the Illicit Drug Reporting System (IDRS)*. Sydney: National Drug and Alcohol Research Centre, NDARC Technical Report No. 134.
- Kandel, D. B., Ed. (2002). *Stages and pathways of drug involvement – examining the gateway hypothesis*. New York, Cambridge University Press.
- Kandel, D. B. & Chen, K. (2000) Types of marijuana users. *Journal of Studies on Alcohol*, May, 367-378.

- Lenton, S. & Heale, P. (2000) Arrest, court and social impacts of conviction for a minor cannabis offence under strict prohibition. *Contemporary Drug Problems*, 27(4), 805-833.
- Lenton, S. & Ovenden, C. (1996). Community attitudes to cannabis use in Western Australia. *Journal of Drug Issues*, 16(4), 783-804.
- Lenton, S. (2000) Cannabis policy and the burden of proof: Is it now beyond reasonable doubt that cannabis prohibition is not working? *Drug and Alcohol Review*, 19(1), 95-100.
- Lenton, S. (2001). *Cannabis: What about the supply side?* Paper presented at the Annual Conference of the Australian Professional Society on Alcohol and other Drugs (APSAD), Sydney, 29-31 October, 2001.
- Lenton, S. (2002). *Civil penalties for cannabis use: What about the supply side?* Paper presented at the 13th International Conference on the Reduction of Drug-Related Harm, Ljubljana, Slovenia, 3 -7 March 2002.
- Lenton, S. (2003). *Criminal penalties to prevent cannabis use – low deterrence and high social harms.* Paper presented at the International Research Symposium Preventing Substance Use, Risky Use and Harm: What is Evidence-Based Policy? Fremantle, 23-27 February, 2003.
- Lenton, S. (2004) Pot, politics and the press – Reflections on cannabis law reform in Western Australia. *Drug and Alcohol Review*, 23(2), 223-233.
- Lenton, S. (2005). Deterrence theory and the limitations of criminal penalties for cannabis use. In T. Stockwell, P. Gruenewald, J. Toumbourou and W. Loxley. (eds.) *Preventing harmful substance use: The evidence base for policy and practice*. Chichester, John Wiley & Sons.
- Lenton, S., Ferrante, A. & Loh, N. (1996). Dope busts in the West: Minor cannabis offences in the Western Australian criminal justice system. *Drug and Alcohol Review*, 15, 335-341.
- Lenton, S., Hummeniuk, R., Heale, P. & Christie, P. (2000) Infringement versus conviction: The social impact of a minor cannabis offence in SA and WA. *Drug and Alcohol Review*, 19, 257-264.
- Lynskey, M. & Hall, W. (2000) The effects of adolescent cannabis use on educational attainment: A review. *Addiction*, 95(11), 1621-1630.
- MacCoun, R. J. (1993). Drugs and the law: A psychological analysis of drug prohibition. *Psychological Bulletin*, 113(3), 487-512.
- McBride, N. (2002) *Systematic literature review of school drug education* (NDRI Monograph No 5). Perth: National Drug Research Institute, Curtin University of Technology
- Paglia, A. & Room, R. (1998) *Preventing substance use problems among youth: Literature review and recommendations*. Ontario: Addiction Research Foundation and Addiction and Mental Health Services Corporation.
- Parliament of Western Australia (2003) *Parliamentary Debates, Legislative Assembly. Cannabis Control Bill 2003 Second Reading*. pp. 5694-98 [Thursday, 20 March 2003] (R.C. Kucera, Minister of Health).
- Paternoster, R. & Piquero, A. (1995) Reconceptualizing deterrence: An empirical test of personal and vicarious experiences. *Journal of Research on Crime and Delinquency*, 32(3), 251-86.

- Prior, J., Swensen, G., Migro, J., Tomassini, R., Marshall, A., Lenton, S., Allsop, S., & Sim, M. (2002). *Implementation of a scheme of prohibition with civil penalties for the personal use of cannabis and other matters – Report of the Working Party on Drug Law Reform to the Minister for Health*. Perth: Drug and Alcohol Office, Health Department of WA. Available at <http://www.wa.gov.au/drugwestaus/core.html> [accessed 11/12/02].
- Sarat A. (1977) Studying American legal culture: An assessment of survey evidence. *Law and Society Review*, 11, 427-88.
- Sherman, L. W. (1993). Defiance, deterrence, and irrelevance: A theory of the criminal sanction. *Journal of Research in Crime and Delinquency*, 30(4), 445-473.
- Silberman, M. (1976) Toward a theory of criminal deterrence. *American Sociological Review*, 41, 442-61
- Single, E., Christie, P. & Ali, R. (2000) The impact of cannabis decriminalisation in Australia and the United States. *Journal of Public Health Policy*, 21(2), 157-186.
- SPSS Inc. (1999) SPSS Base 9.0 User's Guide. Chicago: SPSS Inc.
- SPSS Inc. (2000) SPSS 6.1 for Windows. Chicago: SPSS Inc.
- Stafford, M. C., & Warr, M. (1993). A rich conceptualization of general and specific deterrence. *Journal of Research in Crime and Delinquency*, 30(2), 125-135.
- Swift, W., Copeland, J., & Lenton, S. (2000). Cannabis and harm reduction. *Drug and Alcohol Review*, 19(1), 101-112.
- Tyler, T. (1990). *Why people obey the law*. New Haven: Yale University Press.
- Valuri, G.M., Indermaur, D. & Ferrante, A.M. (2002) *The Criminal Careers of Drug Offenders in Western Australia: A study of the recidivism and criminal history of those arrested for a drug offence in Western Australia between 1989 and 1999*. Crime Research Centre, University of WA. <http://www.wa.gov.au/drugwestaus/> [Accessed June 2002].
- Williams, K. R. & Hawkins, R. (1986) Perceptual research on general deterrence: A critical review, *Law and Society Review*, 20, 545-572.