

Weighing Up Crime: The estimation of criminal drug-related harm

Alex Stevens, University of Kent, UK

Paper to be presented at the Conference of the International Society for the Study of Drug Policy, Oslo, 22-23 March 2007.

Abstract

It is generally accepted that harms from crime cause a very large part of the total social harm that can be attributed to drug use. For example, crime harms accounted for 70% of the weighting of the British Drug Harm Index in 2004. This paper will explore the linkage of criminal harm to drug use and challenge the current over-estimation of the proportion of crime that can be causally attributed to drug use. This attribution tends to overstate the causal effects of drug use in generating crime and to ignore evidence (e.g. from the British New-ADAM study) that the drug-crime link should be seen as operating only between specific drugs and specific crimes. Data from the British *Offending, Crime and Justice Survey* will be used to test the hypothesis that drug users are over-represented in arrest data, compared to other offenders. It will be argued that the current use of crime and arrest rates endangers the validity of measurements of drug-related harm and so provides misleading information for policy makers.

Introduction

Developments in UK drug policy since 1998 have been heavily influenced by concerns about drug-related crime (Duke, 2006; Stevens, 2007). For example, the Director of the National Treatment Agency for Substance Misuse has been quoted as saying “[a]s drug misuse is now perceived largely as a crime problem rather than a public health or individual health and welfare issue, the role of treatment has to be justified by the contribution it can make to crime reduction” (Hayes, quoted by Nolan, 2002: 97). The problem of drug-related crime has taken statistical form in indicators that attempt to measure the cost of drug-related crime and, importantly, the share of all drug-related harm that is represented by crime. The principal such indicator is now the Drug Harm Index (DHI, MacDonald, Collingwood, & Gordon, 2006; MacDonald, Tinsley, Collingwood, Jamieson, & Pudney, 2005). The DHI is used by the British government, through the Public Service Agreement (PSA) on illegal drugs, to measure the effectiveness of the official drug strategy. The first of the three current PSA targets is¹:

“Reduce the harm caused by illegal drugs (as measured by the Drug Harm Index encompassing measures of health consequences of drug use, the availability of Class A drugs and drug related crime) including substantially increasing the number of drug misusing offenders entering treatment through the Criminal Justice System.”

¹ The other two targets relate to increasing the numbers of drug users in treatment and reducing frequent and class A drug use by young people.

Drug-related crime is heavily weighted in the DHI. For 2004, over 70% of the value of the index was contributed by indicators of crime, with over 30% coming from domestic and commercial burglary (MacDonald, Collingwood, & Gordon, 2006). This means that one of the main means by which the government measures the impact of its drug policy is heavily influenced by changes in crime.

This paper will explore the linkage of criminal harm to drug use, focusing on three problems in calculating this link. The paper will begin by describing how the DHI calculates the weighting of crime in its measurement of changes in drug-related harm. It will challenge the causal attribution of all drug users' offending to their drug use, firstly by referring to data from the New-ADAM study on the specificity of this link and secondly by challenging the limited range of causal pathways between drugs and crime that have been used in current calculations. These problems have been discussed elsewhere (see Bennett & Holloway, 2005a, 2005b). The novel feature of this paper is that, in order to illustrate a third problem with the DHI approach, it will present secondary analysis of data from the *Offending, Crime and Justice Survey*. This third problem is that the DHI, and other claims on drug-related crime that are based on arrested drug users, overestimate the proportion of crime that is drug-related, due to the over-representation of drug users in the population of arrestees, compared to their presence in the wider population of offenders.

The estimation of drug-related crime

The Drug Harm Index is not the only or the most well-known estimation of the proportion of crime that is drug-related. Many estimates have been given, for example, in parliamentary debates on drug policy. Such estimates have ranged from 20% to 70% of crime being drug-related (Stevens, 2006). A Conservative MP went so far as to claim that "the greatest cause of crime, as all law-abiding people know, is drugs" (Hawkins, 2004).

The DHI represents an attempt to calculate drug-related crime for policy purposes. The estimated cost of drug-related crime is used to weight the proportion of the index that will be contributed by the annual change in crime (MacDonald, Tinsley, Collingwood et al., 2005). The steps involved in calculating the cost of drug-related crime are:

- A. Estimate the total number of offences.
- B. Estimate the proportion that is drug-related.
- C. Use A and B to calculate the volume of drug-related crimes.
- D. Estimate unit cost of each of these crimes
- E. Multiply C by D to calculate the total cost of drug-related crime.

The authors of the DHI acknowledge that each of the stages of estimation (A, B and D) is problematic. The analysis presented in this paper focuses on stage B; the estimation of the proportion of crime that is drug-related. In the DHI, drug-related crime is taken to mean those offences committed by "serious drug users", who are defined by MacDonald *et al.* as those who have used heroin, cocaine or crack in the month previous to the offence. The DHI assumes that all crime that is committed by such drug users is related to their drug use and would not have happened if they were not using drugs.

This assumption is unfounded. Da Agra (2002: 30), for example, argues that “[t]here is no causal relationship between drugs and crime. There is a complex system of connections...[which is] irreducible both to drug addiction and to delinquent lifestyle.” While it is true that many dependent drug users report that they have committed offences to get money to buy drugs, there are several other potential links between offending and drug use which play a part in this complex connection. These are listed by Justin Russell in the report which led to the development of English Drug Treatment and Testing Orders (Russell, 1994). They include:

- Drug driven - the ‘economic-compulsive’ (Goldstein, 1985) model of drug users committing crimes in order to fund their drug habit.
- Disinhibition/aggression - the ‘psycho-pharmacological’ (Ibid) model, in which the effects of drug use increase aggression and reduce the inhibitions that prevent offending.
- Market related offending – the ‘systemic’ (Ibid) model of crime being generated through the operation of the illegal trade in drugs.
- Drug law crimes – e.g. possession, production, dealing, trafficking.
- Co-existence – crime and drug use may be done by the same people without any direct causal link.
- Crime pre-exists – for most offenders, their crimes began at an earlier age than their drug use.
- Crime-enabled drug use – crime provides funds for non-dependent drug use that would not otherwise have occurred.
- Underlying social problems – crime and drugs are linked through the, often deprived, social context in which both take place.
- Deviance disavowal – retrospective rationalisation by offenders who wish to minimise responsibility for their crimes and so claim they were caused by drugs.

The idea that the crimes of recent users of heroin, cocaine and crack are caused by their drug use reflects a limited range of the possible explanations of the link between their drug use and their offending. Some studies plausibly suggest that offending tends to accelerate during periods of frequent and dependent drug use (e.g. Anglin & Speckart, 1988; Parent & Brochu, 2002). However, the DHI’s assumption on drug-related crime exclusively relies on a direct causal link from drug use to crime. It therefore follows the tendency in contemporary discourse on drug-related crime, noted by Seddon (2006), to divorce crime and drug use from their social context and to ignore several of the linkages between them.

Data from arrestees

The reports of the DHI do not directly report the proportions of crime that are estimated to be drug-related. Back calculation, comparing the reported number of drug-related burglaries and robberies that were drug related in the original DHI for 2003 (MacDonald, Tinsley, Collingwood et al., 2005) to the total estimates of the these crimes in the 2003/4 British Crime Survey (Dodd, Nicholas, Povey, & Walker, 2004) produces approximate drug-related proportions of 54% and 61% respectively. So the DHI seems to agree with Mr Hawkins that drugs are the greatest cause of these crimes.

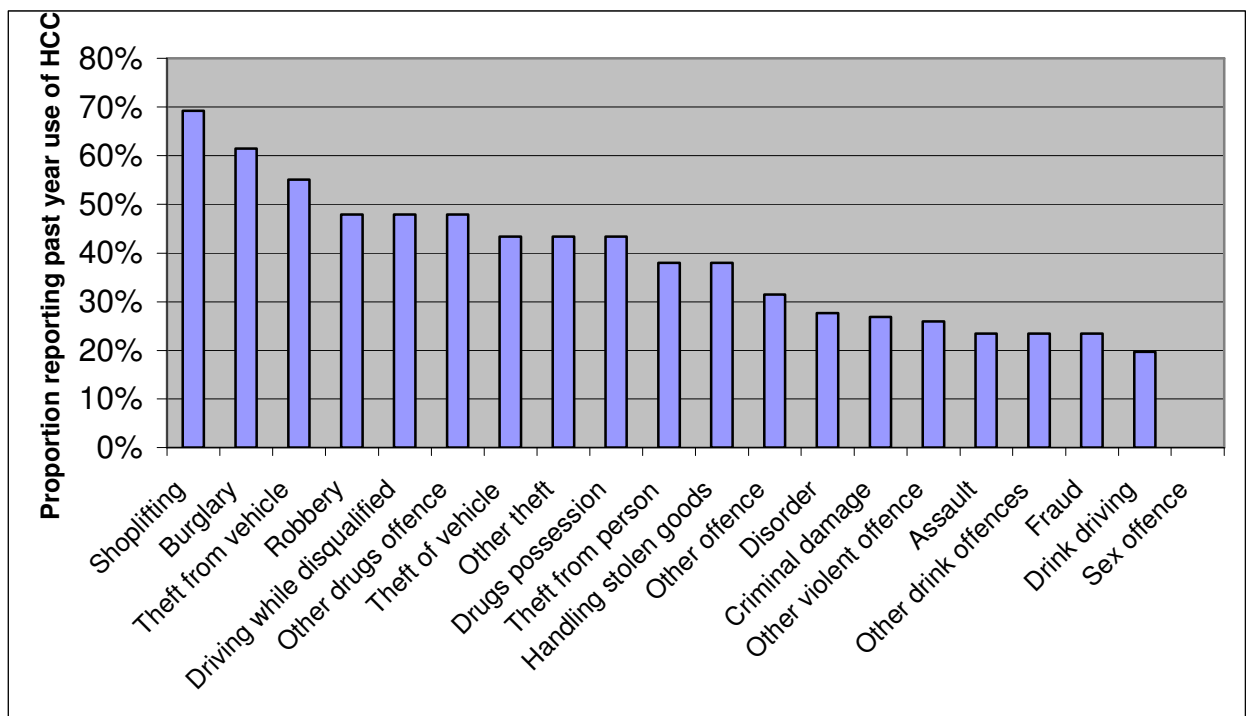
The DHI drug-related proportions are based on the New-ADAM study (Bennett, 1998, 2000; Bennett, Holloway, & Williams, 2001). However, in multivariate analysis of rates of drug use and ten categories of offending using the New-ADAM data, it was discovered that reports of drug use were a significant predictor of higher rates of only certain kinds of crime, and that significant relationships were only present for certain types of drug. Heroin use was only significantly associated with high rates of shoplifting, while crack use was significantly associated only with high rates of fraud, handling stolen goods and drug supply offences. Cocaine use was not associated with higher rates of any offence (Bennett & Holloway, 2005b). This casts doubt on the causal attribution of crimes such as burglary, which contributes the largest portion of the weighting of the DHI, to drug use.

The New-ADAM study has well-advertised limitations². The authors of the DHI acknowledge some of them. They place their faith in the more recent, annual Arrestee Survey to give a more valid measure of the proportion of crime that is drug-related.

The 2003/4 sweep of the Arrestee Survey has only recently been published (Boreham, Fuller, Hills, & Pudney, 2006). It involved 60 police custody suites and aimed to contact all their arrestees who were aged 17 or over. A total of 7,535 people were included in the survey. This only represents 23% of the eligible population of arrestees (ranging from 7% to 30% across categories of crime), largely because 68% of arrestees were not contacted (due to interviews having to fit around police requirements, or concerns over safety or the fitness of arrestees to be interviewed). This low response rate obviously leads to questions on how representative the survey respondents were of the general population of arrestees. Were the police more likely to enable an arrestee to be interviewed if they suspected drug use (the highest response rates were among arrestees for drug offences, shoplifting and burglary)? Was a high proportion of those considered not safe or fit to be interviewed made up of young male binge drinkers who may not have high rates of dependent illicit drug use (the lowest response rates were among arrestees for drink and disorder offences)?

² For example, the study's authors warn that "[t]he sampling method does not provide a nationally representative survey of arrestees, and the results should not be applied generally beyond the specific eight sites and the specific times in which the survey took place" (e.g. Holloway, Bennett, & Lower, 2004). This and other limitations were highlighted by Stimson et al (1998).

Figure 1: Reported prevalence of last year use of heroin, cocaine or crack (HCC) by reason for arrest (Boreham, Fuller, Hills et al., 2006)



Leaving aside these concerns, figure 1 shows that the proportions of arrestees who reported past year use of heroin, cocaine or crack (HCC) varied widely between the offences for which they were arrested, with approximately two thirds of shoplifting and burglary arrestees and nearly half of robbery arrestees reporting such drug use. Past month use of heroin, cocaine or crack is likely to have been lower than the rates for past year use³ but the data for this time period were not included in the published report. These figures suggest that for some crimes, a large proportion of arrestees have recently used the types of drugs that are commonly thought to cause drug-related crime. If used in the DHI, they will continue to provide estimates that large proportions of the cost of crime can be attributed to use of heroin, cocaine or crack. However, only 15% of all the interviewed arrestees reported that they had committed crime in the last 4 weeks in order to get drugs. And the proportions of arrestees who reported dependent use (which is assumed by the “drug driven” linkage of drug use to crime) were lower than those who reported any use of heroin, cocaine or crack. This again challenges the causal attribution of crime to the mere use of drugs.

Arrestees as a sample of offenders

In addition to questions on the nature of the drug-crime link and the exact proportions of arrestees whose offending is drug-related, there is a wider threat to the validity of using arrestee data to estimate the proportion of crime that is caused by drug use. This comes from the unfounded assumption that arrestees form an unbiased sample of offenders. As Jock Young (2004) has noted, this threat was highlighted by one of the founders of statistical criminology, Adolphe Quetelet. In 1842, he wrote:

³ Thirty-eight per cent of interviewed arrestees reported use of HCC in the past year, compared to 28% in the past month.

“our observations can only refer to a *certain number of known and tried offences, out of the unknown sum total of crime committed...* all the knowledge we possess on the statistics of crimes and offences will be of no utility whatever, unless we admit without question that *there is a ratio, nearly invariably the same, between known and tried offences and the unknown sum total of crimes committed.*” (Quetelet, 1842: 82, italics in original).

Quetelet argues that, without this ratio, statements on crime would be “false and absurd” and goes on to note his astonishment that the ratio had not yet been validated (Ibid). His astonishment would continue today, for there is still no way to calculate the precise ratio between the offences which are recorded and caught and the actual number of crimes, which remains a “figure known only to Mephistopheles” (Reiner, 2000a: 77). The same is true of the unknown ratio between arrested offenders and the total population of offenders. Studies such as the British Crime Survey and the Offending, Crime and Justice Survey are giving us better estimates, but knowledge has also been developing on why an invariable ratio between known and actual offenders does not exist in reality.

It is a basic finding of research on police practice that officers have to exercise discretion when choosing whom to arrest, due to the sheer volume of acts that could potentially be punished. Actions that could be defined as criminal are widespread throughout society (Karstedt & Farrall, 2006). Police discretion in deciding which actions and people to target can easily tip over into discrimination, and often does. Reiner, in his classic (2000b) text on policing, notes five types of discrimination that will inflate the presence of some social groups in crime statistics. They are⁴:

1. Categorical discrimination – the choice to treat persons differently purely on account of their membership of a certain group, regardless of the relation of this group to crime.
2. Statistical discrimination – the choice to treat persons differently on the basis of characteristics which have been statistically associated with the group to which they belong. This is especially likely to operate where, as is the case in England and Wales, the police have targets to meet, as some groups offer greater numbers of detections and “cases brought to justice” per contact made and form filled in
3. Transmitted discrimination – police acting differently towards members of a group due to the attitudes and information that are passed to them by members of the public.
4. Interactional discrimination – this occurs when members of a group tend to respond differently towards the actions of the police, and so incite a different response.
5. Institutionalised discrimination – the unintended discriminatory outcome of policies and practices that apply to all but have unequal consequences due to structural inequalities. This type of discrimination was characterised by the Stephen Lawrence inquiry as “unwitting” (Macpherson, 1999: para. 34).

Discrimination may arise from the fear of “strain” that powerful and well connected offenders are able to place on organisations that attempt to scrutinise them (Chambliss, 1976). It can also arise from the feelings of “moral indignation” that certain groups and behaviours inspire in police officers (Young, 1971). These types of discrimination

⁴ He takes the first two types from the work of Banton (1983).

may all apply to a social group that is visible, stigmatised and perceived to have high rates of offending, and whose members are often truculent when questioned, tend to be recruited from the lowest social ranks, are not wealthy enough to pay tough and persistent lawyers and who take part in activities that many police officers would characterise as immoral. These are people who display the characteristics of problematic drug use, which are often visible to the police and public in the forms of homelessness, shabby dress, visibly poor health, sedated or agitated movement when intoxicated and public use of drugs and alcohol. According to the Social Science Citation Index, no study has explicitly set out to test discrimination in the rate of arrest of illicit drug users. But it is possible to do so using recently released data from the Offending Crime and Justice Survey (OCJS).

The over-representation of drug users in arrestee data

The OCJS is a household survey of a random sample of around 5,000 people in England and Wales, aged 10-25 years old (Budd, Sharp, Weir, Wilson, & Owen, 2005). The data from the 2004 sweep of this survey were obtained from the UK Data Archive at the University of Essex. It contained 1,341 respondents who reported committing any offence in the past year and 658 who reported that they had committed an offence that was classified by the Home Office as serious (i.e. theft of a vehicle, domestic or commercial burglary, commercial or personal robbery, theft from a person, assault with injury or dealing in Class A drugs). This analysis concentrates on those who reported committing one of these serious offences, as these are the crimes that cause most social concern (results were similar to those reported here for a dataset that included all the self-reported offenders).

Data on arrest were missing for 10 respondents. Of the remainder, 10.1% reported that they had been arrested in the previous year. This data enables a test of the hypothesis that those offenders who use drugs are more likely to be arrested than those who do not.

Table 1 shows the characteristics of the available sample⁵. Table 2 shows the bivariate association, in cross-tabulation, between various self-reported characteristics of these offenders and their reporting of being arrested (these variables were chosen on the basis that they are likely, from previous theoretical and empirical research to be associated with arrest)^{6,7}.

⁵ All analyses were carried out after applying the weighting which was incorporated into the dataset in order to ensure the representativeness of the sample, with correction for sampling probability and non response. The sizes of the sample for each test (n) are reported from the unweighted data.

⁶ Age was dichotomised around the median of 16 in order to avoid the problem of linearity in the logit in the later logistic regression (which was discovered using the Box Tidwell approach).

⁷ Ethnicity was dichotomised with 1 representing black, black British or mixed and 0 representing the other categories. This was done because the black and mixed categories would be expected, from previous research, to have higher risks of arrest than the other groups and in order to increase cell sizes for analysis.

| Characteristics | n | Proportion |
|---|-----|------------|
| Sex | 648 | |
| <i>Male</i> | | 68.2% |
| <i>Female</i> | | 31.8% |
| Ethnicity | 648 | |
| <i>White</i> | | 89.6% |
| <i>Mixed</i> | | 3.4% |
| <i>Asian or asian British</i> | | 3.1% |
| <i>Black or black British</i> | | 2.7% |
| <i>Other</i> | | 1.3% |
| Age | 648 | |
| 17-25 | | 47.5% |
| 10-16 | | 52.5% |
| Reports prolific offending (more than 6 offences in the year) | 648 | 36.5% |
| Reports any drug use | 628 | 44.8% |
| Not in work or education | | 10.1% |
| Ever truanted from school | 629 | 41.6% |
| Ever excluded from school | 637 | 6.3% |

It is remarkable that the frequency of offending did not seem to be associated with the likelihood of arrest. Those who reported offending more than 6 times in the year were not significantly more likely to report being arrested than those who offended less frequently. Other variables, including age, drug use, employment/educational status and truancy were significantly associated with the likelihood of arrest.

| Characteristics | n | Proportion arrested | Significance (p) |
|---|-----|---------------------|------------------|
| Sex | 648 | | n/s |
| <i>Male</i> | | 11.4% | |
| <i>Female</i> | | 7.3% | |
| Age | 648 | | <0.01 |
| <17 | | 13.6% | |
| >16 | | 6.6% | |
| Ethnicity | 648 | | n/s |
| <i>Black, black British or mixed</i> | | 18.9% | |
| <i>Other</i> | | 9.5% | |
| Frequency of offending | 648 | | n/s |
| <i>Reports prolific offending</i> | | 10.0% | |
| <i>Does not report prolific offending</i> | | 9.9% | |
| Any drug use | 628 | | <0.01 |
| <i>Reports any drug use</i> | | 14.8% | |
| <i>Does not report any drug use</i> | | 6.5% | |
| Employment status | 648 | | <0.01 |
| <i>Unemployed or inactive</i> | | 24.6% | |
| <i>Employed or in education</i> | | 8.3% | |
| Truancy from school | 629 | | <0.01 |
| <i>Ever truanted</i> | | 14.8% | |
| <i>Never truanted</i> | | 6.1% | |
| Exclusion from school | 637 | | n/s |
| <i>Ever excluded</i> | | 15.8% | |
| <i>Never excluded</i> | | 9.4% | |

In order to test the influence of these variables on the likelihood of arrest, while taking the effect the other variables into account, a logistic regression analysis was carried out, with self-reported arrest in the previous year as the dependent, outcome variable⁸. The variables in the model were tested for multicollinearity, which was not present (after dichotomising the age variable).

Table 3 gives the results of the model.

Table 3: Logistic regression of reporting being arrested in previous year (n=607)

| | Odds ratio | Significance (p) | 95% confidence interval |
|-------------------------------|------------|------------------|-------------------------|
| Sex is male | 2.15 | 0.037 | 1.05 - 4.44 |
| Older age | 1.11 | 0.757 | 0.56 - 2.22 |
| Ethnicity is black or mixed | 2.71 | 0.04 | 1.05 - 7.01 |
| Prolific offending | 0.91 | 0.751 | 0.5 - 1.66 |
| Ever truanted | 1.68 | 0.134 | 0.85 - 3.34 |
| Ever excluded from school | 0.94 | 0.918 | 0.30 - 2.94 |
| In work or education | 0.32 | 0.004 | 0.15 - 0.69 |
| Any drug use in previous year | 1.91 | 0.047 | 1.01 - 3.6 |

Grey text indicates non-significant predictor variables (p>0.05)

This model again suggests that the frequency of offending is not a significant predictor of the likelihood of being arrested. The variables that were significant at the 95% confidence level or above were the respondent's sex, their ethnicity, their employment status and, importantly for this analysis, their drug use. Those self-reported serious offenders who reported any use of illicit drugs in the past year were nearly twice as likely to report being arrested than those who did not report drug use. When converted from the log odds reported by the SPSS model, the predicted probability of reporting arrest was 13.1% for those respondents who reported drug use compared to 7.3% for those who did not.

This dataset and these analyses are inevitably limited in their ability to test the hypothesis that drug using offenders are more likely to be arrested than non-drug using offenders. The relative infrequency of serious offending reduces the size of the sample available for these analyses. The even rarer occurrence of arrest skews the data. Both of these features reduce the power of the statistical tests and increase the likelihood of type II error (i.e. that the analyses fail to demonstrate an association that would be found by a more powerful test). However, the frequency of offending was so far from having a significant association with the likelihood of arrest that the probability of type II error in this case is small.

The reliance on self-report of offending, arrest, drug use and other variables may also limit the confidence that we have in these analyses. It has been argued that the results of surveys of this kind should be seen as social productions of the interaction between interviewer and respondent (Prior, 2003). However, the designers of this survey have

⁸ Logistic regression provides an estimate of the likelihood of reporting arrest for people in each category of the dependent, predictor variables, while taking into account the influence of the other variables in the model. This likelihood is reported in the form of the odds ratio, which indicates the odds of arrest for a person who is coded as belonging to the listed category of the predictor variable, relative to a person who is in the opposite category. For example, in table 3, male respondents were 2.15 times more likely to report being arrested than females.

been rigorous in adopting methods, such as computer-assisted self interviewing (audio-CASI), which reduce the potential for such bias to occur. And other studies have suggested that drug use and offending are reported reliably in self-report studies, especially in those that use such methods (Harrison, 1997; Thornberry & Krohn, 2000).

The data is also limited by the age range (10-25) that it covers. But this age range does include the peak ages for offending. The most problematic feature of this dataset for the analysis presented here is the low levels of use of heroin and crack reported by the sample. Household surveys are unlikely to sample a representative proportion of such drug users, as they are over-represented in the homeless and prison populations. Research on 'captive' populations of such drug users (in treatment and in prisons) has suggested that their offending tends to accelerate during periods of heavy drug use (e.g. Anglin & Speckart, 1988). A different relationship between drug use and arrest may exist for this group. However, these people are highly visible to the police. They are often personally known to police officers and are also recognisable by the physical attributes associated with problematic drug use. From the OCJS data, arrest is rare, even for 'serious' offenders, and is better predicted by drug use than by the frequency of offending. Dependent users of heroin and crack may be even more vulnerable to the modes of police discrimination which seem to contribute to the increased risk of arrest for offenders who use drugs.

For these, and other reasons, these analyses should be considered as being suggestive rather than confirmatory of the wider relationship between drug use and the likelihood of arrest. What they suggest is that drug users are over-represented in police arrest statistics, by comparison with their presence in the population of recent offenders.

This finding is supported by analysis from the Edinburgh Study of Youth Transitions (ESYT, McAra & McVie, 2005). This is a longitudinal study. Its annual sweeps involve a sample of 4,300 children, recruited in 1998 when they were about 12. The questions they were asked included demography and socio-economics, risk behaviours (including drug use), behaviours that would render them visible to the police (e.g. taunting, hanging around on the street, low parental supervision) and contact with the police. At the fourth sweep of the study, when the respondents were aged around 15, they were categorised according to whether they had had "adversarial" contact with the police. This included being told off or told to move on as well as being warned or charged. In logistic regression, it was found that the significant predictors of adversarial contact with the police included low socio-economic status, truancy, "hanging about most days" and low parental supervision. In contrast to the results reported above from the OCJS, the reported frequency of offending was found to be a significant predictor, but drug use also had an independent effect in increasing the probability of having adversarial contact with the police (with an odds ratio of 2, $p < 0.001$). The largest odds ratio was reported for contact with the police at previous sweeps of the study. Taking into account the influence of the other variables, respondents who had such previous contact were 4.4 times more likely to report adversarial contact at sweep four than those who had not (Ibid: 22).

McAra and McVie interpret their results as supporting the disciplinary model of policing, which describes the informal objective of policing as the enforcement of

social discipline by punishing, humiliating and enforcing the submission of those groups with whom they are in contact (Choongh, 1998). These groups, made up of low status segments of the working/workless classes, have been described by Lee and by Reiner as “police property” (Lee, 1981: 53). They are identified by the “dominant majority” as the proper subjects of social control by the police (Reiner, 2000b: 93). McAra and McVie conclude that police actions are influenced by class bias at the individual level and have the result of “enforcing urban discipline, labelling and keeping under surveillance a group of permanent suspects” (McAra & McVie, 2005: 28). Their concern is for the effects of such policing strategies on the life chances of the children who are targeted for police attention. In this paper, our concern is for the misleading evidence that such practices may produce for the analysis of drug policy.

The findings reported above relate to children and young people. It has been argued that there is a group of lifecourse persistent acquisitive offenders who do not grow out of acquisitive crime as most of their peers do (Moffitt, 1993) and that these people are likely to be users of addictive, illicit drugs (see Blokland, 2005). One could also argue, following the findings of the OCJS and ESYT, that there is a group of people who are labelled as criminal, who are well-known to the police and who are more likely to be arrested than other offenders. This group is likely to consist of a large proportion of people who use drugs that are rarely used by people who have a greater stake in respecting social norms of consumption and behaviour. As these people age, they are increasingly likely to be visible to police officers, who will get to know them from their long history of arrests and appearances at the police station. As noted above, the bulk of offenders are aged within the age range of the OCJS. Data from arrestees of all ages may be even more skewed towards the over-representation of older, drug-involved offenders who are well known and subject to the various types of police discrimination listed by Reiner.

The over-estimation of the proportion of crime that is drug related has serious consequences, not least for the validity of the DHI. Due to its high weighting, changes in the estimation of crime have the largest potential effect in sensitivity analysis of the DHI. A 20% change in the proportion of crime that is drug-related would have a 14% effect on the value of the DHI (MacDonald, Tinsley, Collingwood et al., 2005). The OCJS and ESYT analyses described above suggest that drug users are over-represented in arrest figures by a factor of two. If drug users are twice as likely to be arrested as other offenders (which has also been suggested by an Irish study, Connolly, 2006), then this would imply that the weighting of crime in the DHI is substantially overestimated, even before considering the problems of causal attribution of crime to drug use.

Conclusion

The Drug Harm Index is used in this paper as a statistical example of current policy discourse on drug-related crime. This discourse has, since 1998 at least, tended to emphasise crime as a problem that is strongly related to drugs and to use drug policy as a means of crime reduction. This paper does not argue that there is no link between use of drugs such as heroin, crack and cocaine and other crimes. However, it does argue that current debates and statistics on drug-related crime have tended to exaggerate the extent of this link by ignoring three main problems in calculating drug-related crime. Calculations have tended to ignore the specificity of the link between

the use of certain drugs and the commission of certain types of crime. For example, it seems likely that dependent drug use is likely to have a stronger causal link to shoplifting than it does to burglary. More importantly perhaps, potential links between drugs and crime that do not follow the uni-directional causality suggested by the economic-compulsive model have also been ignored. The social, legal and cultural contexts in which both drug use and offending take place have been under-emphasised at the expense of seeing the crime of drug users as drug-driven. And, crucially for attempts to measure the total amount and the trend in drug-related harm, arrestee samples have been used to estimate drug-related crime without acknowledging that arrestees do not form a representative sample of offenders.

For a variety of reasons, some people who commit crimes are much more likely to get arrested than others. The data presented here from the OCJS suggest that offenders who are also drug users are twice as likely to get arrested, even taking into account features such as ethnicity, sex, age and frequency of offending. Dependent drug users are often recruited from the workless and marginalised groups who have been described as “police property”. As they age into their drug using career, dependent drug users become more visible and better known to the police. Given the performance management pressures and the discrimination, both ingrained and unwitting, that is a feature of police practice, it is therefore not surprising that dependent drug users would be over-represented in samples of arrestees.

The past twelve years have seen dramatic reductions in crime. For example, the British Crime Survey has reported a 44% reduction in property crime since 1995, with particularly steep falls in domestic burglary (Walker, Kershaw, & Nicholas, 2006). There is little to suggest attendant reductions in the use of heroin, cocaine and crack. The limited evidence available rather suggests that use of these drugs increased until at least the new century and may have stabilised in this century, although there is an ongoing increase in the numbers of young people reported to be using cocaine (Reuter & Stevens, forthcoming). It is hard to square the large fall in property crime with historically high levels of use of those drugs that are supposed to be causing the majority of it. It has been claimed that this fall was caused by the large expansion of drug treatment (Hayes, 2006), but it began before this expansion began and even optimistic models of the impact of treatment place a much lower estimate on the effect of treatment on crime (Home Office, 2004).

Expansion and improvement of drug treatment should be justified on the basis of its known effects in reducing crime and health problems at the individual level (NICE, 2007a, 2007b, 2007c, 2007d). To argue for treatment on the basis that it will substantially reduce overall crime rates is not supported by the available evidence. It has been argued that the emphasis on drug-related crime, even if it brings increased investment in drug treatment that is accessed via the criminal justice system, leads to a lack of attention to the health problems of drug users (Stimson, 2000).

Exaggerating the association between drugs and crime also risks prolonging the stereotyping and stigmatisation of drug users that has long inhibited rational discussion of drug policy. Many users of Class A drugs, including heroin, are able to continue their use without resorting to crime (Shewan & Dalgarno, 2006; Warburton, Turnbull, & Hough, 2005). Such unproblematic users would not be found in samples of arrestees. Exaggeration of the drug-crime link is bound to result from using data

from arrestee populations, which are, from the theoretical and empirical analyses presented in this paper, highly likely to include an over-representation of problematic drug users compared to their presence in the population of offenders.

Acknowledgement

The data from the 2004 *Offending, Crime and Justice Survey* was retrieved from the UK Data Archive at the University of Essex. It was created by the Home Office Research, Development and Statistics Directorate, National Centre for Social Research and BMRB. The data are Crown Copyright.

References

- Anglin, M.D., & Speckart, G. (1988). Narcotics use and crime: a multisample, multiperiod analysis. *Criminology*, 26, 197-233.
- Banton, M. (1983). Categorical and Statistical Discrimination. *Ethnic and Racial Studies*, 6(3), 269-283.
- Bennett, T. (1998). *Drugs and crime: the results of research on drug testing and interviewing arrestees* London: Home Office Research and Statistics Directorate
- Bennett, T. (2000). *Drugs and crime: the results of the second developmental stage of the NEW-ADAM programme. Home Office Research Study 205*. London: Home Office Research and Statistics Directorate.
- Bennett, T., Holloway, K., & Williams, T. (2001). *Drug use and offending: summary results from the first year of the NEW-ADAM research programme*. London: Home Office Research, Development and Statistics Directorate.
- Bennett, T., & Holloway, K. (2005a). *Understanding drugs, alcohol and crime* Maidenhead: Open University Press
- Bennett, T., & Holloway, K. (2005b). Disaggregating the Relationship Between Drug Misuse and Crime. *The Australian and New Zealand Journal of Criminology*, 38(1), 102-121.
- Blokland, A. (2005). *Crime over the life span: Trajectories of criminal behaviour in Dutch offenders* Leiden: NSCR
- Boreham, R., Fuller, E., Hills, A., & Pudney, S. (2006). *The Arrestee Survey Annual Report: Oct 2003 – Sept 2004. England and Wales*. Home Office Statistical Bulletin 04/06. London: Home Office.
- Budd, T., Sharp, C., Weir, G., Wilson, D., & Owen, N. (2005). *Young People and Crime: Findings from the 2004 Offending, Crime and Justice Survey. Home Office Statistical Bulletin 20/05*. London: Home Office.
- Chambliss, W.J. (1976). The State and Criminal Law. In W.J. Chambliss, & M. Mankoff (Eds.), *Whose Law, What Order? a conflict approach to criminology*. New York: John Wiley & Sons.
- Choongh, S. (1998). Policing as social discipline. *British Journal of Criminology*, 38(4), 623-634.

- Connolly, J. (2006). *Drugs and Crime in Ireland. Overview 3*. Dublin: Health Research Board.
- da Agra, C. (2002). The complex structures, processes and meanings of the drug/crime relationship. In S. Brochu, C. da Agra, & M.-M. Cousineau (Eds.), *Drugs and Crime Deviant Pathways*. Aldershot: Ashgate.
- Dodd, T., Nicholas, S., Povey, D., & Walker, A. (2004). *Crime in England and Wales 2003/2004. Home Office Statistical Bulletin 10/04* London: Home Office
- Duke, K. (2006). Out of crime and into treatment?: The criminalization of contemporary drug policy since *Tackling Drugs Together*. *Drugs: Education, Prevention and Policy*, 13(5), 409-415.
- Goldstein, P. (1985). The drugs-violence nexus: A tripartite framework. *Journal of Drug Issues*, 15, 493-506.
- Harrison, L. (1997). The validity of self-reported drug use in survey research: an overview and critique of research methods. In L. Harrison, & A. Hughes (Eds.), *NIDA Research Monograph 167*. Rockville, Maryland: National Institute of Drug Abuse.
- Hawkins, N. (2004). *Commons Hansard: 18th October 2004, Column 690*. London: The Stationery Office.
- Hayes, P. (2006). Less crime, not more treatment, *ACPO Drugs Conference*. Manchester, 21st November 2006: Association of Chief Police Officers.
- Holloway, K., Bennett, T., & Lower, C. (2004). *Trends in drug use and offending: the results of the New-ADAM Programme 1999–2002. Findings 219*. London: Home Office.
- Home Office (2004). *Modelling Crime Reduction for the Home Office's Strategic Plan. Home Office Online Report 38/04*. London: Home Office.
- Karstedt, S., & Farrall, S. (2006). The Moral Economy of Everyday Crime: Markets, Consumers and Citizens. *British Journal of Criminology*, 46, 1011-1036.
- Lee, J.A. (1981). Some structural aspects of police deviance in relations with minority groups. In C. Shearing (Ed.), *Organizational Police Deviance*. Toronto: Butterworth.
- MacDonald, Z., Tinsley, L., Collingwood, J., Jamieson, P., & Pudney, S. (2005). *Measuring the harm from illegal drugs using the Drug Harm Index. Home Office Online Report 24/05*. London: Home Office.
- MacDonald, Z., Collingwood, J., & Gordon, L. (2006). *Measuring the harm from illegal drugs using the Drug Harm Index – an update. Home Office Online Report 08/06*. London: Home Office.
- Macpherson, W. (1999). *The Stephen Lawrence Inquiry*. London: HMSO.
- McAra, L., & McVie, S. (2005). The usual suspects? Street-life, young people and the police. *Criminal Justice*, 5(1), 5-36.
- Moffitt, T.E. (1993). "Life-course persistent" and "adolescence-limited" antisocial behavior: A developmental taxonomy. *Psychological Review*, 100(674-701).
- NICE (2007a). *Methadone and buprenorphine for the management of opioid dependence. NICE technology appraisal 114*. London: National Institute for Health and Clinical Excellence.
- NICE (2007b). *Naltrexone for the management of opioid dependence. NICE technology appraisal 115*. London: National Institute for Health and Clinical Excellence.
- NICE (2007c). *Opiate detoxification for drug misuse. Draft for consultation*. London: National Institute for Health and Clinical Excellence.

- NICE (2007d). *Psychosocial management of drug misuse. Draft for consultation*. London: National Institute for Health and Clinical Excellence.
- Nolan, J.L. (2002). Separated by an Uncommon Law: Drug Courts in Great Britain and America. In J.L. Nolan (Ed.), *Drug Courts: In Theory and in Practice* New York: Aldine de Gruyter.
- Parent, I., & Brochu, S. (2002). Drug/Crime Pathways Among Cocaine Users. In S. Brochu, C. da Agra, & M.-M. Cousineau (Eds.), *Drugs and Crime Deviant Pathways*. Aldershot: Ashgate.
- Prior, L. (2003). *Using Documents in Social Research* London: Sage
- Quetelet, A. (1842). *A Treatise on Man* Edinburgh: Chambers
- Reiner, R. (2000a). Crime and control in Britain. *Sociology-the Journal of the British Sociological Association*, 34(1), 71-94.
- Reiner, R. (2000b). *The Politics of the Police. Third edition* Oxford: Oxford University Press
- Reuter, P., & Stevens, A. (forthcoming). *An Analysis of UK Drug Policy*. London: UK Drug Policy Commission.
- Russell, J. (1994). *Substance Abuse and Crime (Some Lessons from America). Harkness Fellowship Report*. New York: Commonwealth Fund of New York.
- Seddon, T. (2006). Drugs, crime and social exclusion: Social context and social theory in British drugs-crime research. *British Journal of Criminology*, 46(4), 680-703.
- Shewan, D., & Dalgarno, P. (2006). Evidence for controlled heroin use? Low levels of negative health and social outcomes among non-treatment heroin users in Glasgow (Scotland). *British Journal of Health Psychology*, 10, 33-48.
- Stevens, A. (2006). The evidence-policy link: The case of the Drug Testing and Treatment Order, *Annual Conference of the British Society of Criminology*. Glasgow.
- Stevens, A. (2007). When two dark figures collide: Evidence and discourse on drug-related crime. *Critical Social Policy*, 27(1), 77-99.
- Stimson, G., Hickman, M., & Turnbull, P.J. (1998). Statistics on misuse of drugs have been misused. *British Medical Journal*., 317(7169), 1388.
- Stimson, G. (2000). 'Blair declares war' or The unhealthy state of British drugs policy. *International Journal of Drug Policy*, 11(4), 259-264.
- Thornberry, T.P., & Krohn, M.D. (2000). The self-report method for measuring delinquency and crime. In J.E. Samuels (Ed.), *Measurement and Analysis of Crime and Justice. Criminal Justice 2000. Volume 4*. Washington DC: National Institute of Justice.
- Walker, A., Kershaw, C., & Nicholas, S. (2006). *Crime in England and Wales 2005/06*. London: Home Office.
- Warburton, H., Turnbull, P.J., & Hough, M. (2005). *Occasional and controlled heroin use: Not a problem?* York: Joseph Rowntree Foundation.
- Young, J. (1971). *The Drugtakers: The Social Meaning of Drug Use* London: Paladin
- Young, J. (2004). Voodoo criminology and the numbers game. In J. Ferrell, K. Hayward, W. Morrison, & M. Presdee (Eds.), *Cultural Criminology Unleashed* (pp. 13-27). London: Glasshouse Press.