Social bias in the policing of illicit drug users in the UK and Australia: Findings from a self-report study

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Abstract

This paper uses data from the Global Drug Survey to test the hypothesis that there is social bias in the policing of drug users, in the form of stop and search for drugs. The Global Drug Survey is a self-report, internet survey. In 2012, it included a non-random sample of illicit drug users in the UK (n=5,919) and Australia (n=5,707). We discuss previous research on social bias in policing. We argue that an intersectional approach is necessary in order to analyse patterns of

stop and search for drugs across drug users who have various social statuses. In order to analyse the influence of various patterns of drug use, we create an inductive typology of a wide range of drug use types and temporalities, using latent class analysis. We use these latent classes, frequency of past month drug use and indicators of drug dependency alongside sociodemographic variables in binary logistic regression analyses of the odds of reporting being stopped and searched for drugs in the past year. We use these models to test both consensus and conflict perspectives on the policing of drug users. We find support for both perspectives in both countries. Patterns of drug use do significantly predict the odds of sampled drug users reporting police stop and search, as expected by the consensus perspective. But drug users who were younger, male and of less advantaged social status (as measured by education in the UK sample, and by minority ethnicity, income and unemployment in the Australian sample) also had significantly higher odds of reporting stop and search. This supports the conflict perspective on policing and our hypothesis that there is evidence of social bias in the policing of drug users in the Global Drug Survey sample.

Introduction

It is becoming increasingly clear that procedural legitimacy is important in winning the confidence of citizens in their police services (Bottoms & Tankebe, 2012; Jackson & Bradford, 2009; Mazerolle, Bennett, Davis, Sargeant, & Manning, 2013; Murphy & Cherney, 2011). Such legitimacy is threatened when members of some social groups perceive that they are being treated unfairly by the police. One group whose experience of policingⁱ deserves attention is people who have used illicit drugs. They are estimated to make up 35.9 per cent of the adult population in the UK (Home Office, 2013), and 39.8 per cent in Australia (AIHW, 2011). This paper focuses on their experiences of policing, in the form of stop and search for drugs.

In the UK in recent years, a more specific focus of concern has been on the use of police stop and search powers, under drug legislation, against members of black and minority ethnic communities (EHRC, 2012; Shiner, 2011). Searches for drugs represent the most frequent type of police search in 39 of the 42 police services in England and Wales, and people whose ethnicity is recorded as black are 6.3 times more likely to experience this than people whose ethnicity is recorded as white (Eastwood, Shiner, & Bear, 2013). In

Australia, this issue seems to have attracted less empirical attention. It is interesting, for example, that a 2010 article relied on British research to make the case that expanded stop and search powers - which would have removed the requirement that police had 'reasonable suspicion' that the person was committing an offence - would have discriminatory effects in Western Australia (Crofts & Panther, 2010). A 2012 report on stop and search for the Victoria Government did not break down the socio-demographic characteristics of those searched (OPI, 2012).

Contemporary discussions of the use of stop and search echo long-running debates between mainstream and critical criminologists on the justification and targeting of such police powers. Brian Renauer (2012) refers to this as the contest between consensus and conflict perspectives. The argument centres on whether disproportionality in police contact is justified by underlying patterns of offending, or whether there is evidence of social bias. Social bias in this context means that some social groups experience more adversarial contact with the police than would be expected given their rates of offending. In the UK, this debate is often traced back to the increased concern over immigration as a source of crime that was noted by Stuart Hall and colleagues in Policing the Crisis (Hall, Critcher, Jefferson, Clarke, & Roberts, 1978). This led to a flurry of studies on 'racialised policing' that were usefully summarised by Simon Holdaway (1996). It seems that race has become the 'principal modality' through which both critical criminologists and some black young people themselves understand the distribution of policing (Densley & Stevens, 2014). Many studies have shown that the British police concentrate stop and search on black people, despite an absence of proof that this ethnic group is responsible for higher rates of crime (Bowling & Phillips, 2007).

This focus on race as the potential axis of unfairness in policing displaced an older predilection of critical criminologists. They tended to concentrate on class while this was still considered the transcendent form of social stratification. William Chambliss provides an example of one critical criminologist who was initially pre-occupied by class rather than race (Chambliss, 1976). A more recent, quantitative, Finnish study has provided support for Chambliss' earlier idea that less advantaged socio-economic

groups are more likely to experience adversarial police contact, regardless of their level of actual delinquency. Saarikkomäki and Kivivouri (2013) ran data on 15-16 year olds from a self-report survey through multivariate models which included sociodemographic indicators and indicators of delinquency (including 'use of soft drugs'). They found that, while it was the case that higher levels of delinquency predicted higher levels of police contact, there was also evidence of selection of people with certain socio-demographic characteristics for police contact at levels above that which would be expected from their involvement in delinquency. These characteristics included being male and being of lower socio-economic status. This study did not, however, examine the predictive effects of ethnicity and age.

Race, class, age and gender are not experienced separately. The growing literature on intersectionality (Crenshaw, 1991) directs attention to the overlapping influences of various structural statuses on the experience of policing. In a qualitative study in the Midwestern USA, Dottolo and Stewart (2008) reported their interviewees' perceptions that the police simultaneously use indicators of race (being black), class (being poor), age (being young) and gender (being male) in deciding whom they will target.

There is a danger in research in this area that we focus on one binary distinction at a time: disproportionality is justified by differences in offending or it is not; either disproportionality is associated with ethnicity or it is not. As Harnois and Ifatunji (2010:1008) argue, a 'truly intersectional approach on racial discrimination will require the development of new survey instruments in which differences of gender, class and sexuality are made explicit'. In their study, they find that allowing differences between men and women in rates of 'unfair' contact with the police to enter their analysis of the National Survey of American Life enables a more powerful identification of the latent variable of racial discrimination.

Туре	Cannabis	Club	Hard	Licit		
Substance	Cannabis grass	GBL	Buprenorphine	Alcohol		
	Cannabis oil	GHB	Crack cocaine	Amyl nitrate		
	Cannabis resin	Ketamine	Heroin	Areca nut		
	Cannabis skunk	MDMA pills	Kratom	Caffeine tablets		
		MDMA powder	Krokodil	Dextromethorpan		
			Methadone	Energy drinks		
			Opium	Khat		
				Nitrous Oxide		
				Tobacco		
Туре	Novel Psychoactive Substances (NPS)					
Substance	25B-NBOMe	4-MA	MDAI			
	25C-NBOME	4MEC	MDAT			
	25I-NBOMe	5IAI	Mephedrone			
	2AI	5-Meo-DMT	Methcathinone			
	2С-В	AMT	Methipropamine			
	2C-C	Benzo Fury	Methoxetamine			
	2C-D	BZP	Methylhexaneamine			
	2С-Е	C1C	Methylone			
	2C-I	Camfetamine	MPA			
	2C-T-7	D2PM	MPDV			
	2DPMP	Dimethocaine	Naphyrone			
	4-aco-dmt	DMT	N-Ket			
	4-Fluoroamphetamine	DNP	Pyrazolam			
	4-ho-dipt	Etiozolam Flephedrone 4-	Synthetic cannabis			
	4-ho-mipt	FMC	TFMPP			
		MDA	Tiletamine			
Туре	Non-prescribed	Psychodalia	Inhalants	Stimulants		
Substance	Benzodiazenines	A vahuasca	Lighter fluid	Amphetamine		
	Devamphetamine	Ayanuasea	Detrol	Cocaine powder		
	Onioid nain killers	Ibogaine	Other solvents	Enhedra/Enhedrine		
	(stated use without	ISD	Other solvents	Methamphetamine		
	Prescription)	Magic mushrooms		Weinamphetamme		
	rresemption	Magie indshrooms				
		Morning Glory				
		PCP				
		Peyote				
		Salvia divinorum				
		Woodrose seeds				

Table 1: Drugs included in the Global Drug Survey by type

A lack of attention to intersectionality is not the only problem that bedevils contemporary analysis of social bias in policing. Another major challenge (as posed by Waddington, Stenson and Don (2004)) is the use of unsatisfactory denominators. For example, the report by Eastwood, Shiner and Bear (2013) follows earlier work (Stevens, 2011) in comparing the numbers of stop and searches carried out on members of different ethnic groups to their numbers in the residential population of each area. Waddington and his colleagues argued that it is the population that is available to be searched by being visible on the streets - not the residential population - that should form the denominator in such calculations. Another objection to this is that there may be underlying differences in offending by different ethnic groups which would produce apparently disproportionate policing. The usual response has been to show that drug use is actually lower among black people, as reported to the Crime Survey for England and Wales (CSEW, formerly known as the British Crime Survey). There are at least two problems with this approach. One is that the CSEW is a household survey which may miss out the most frequent drug users (Bennett & Holloway, 2014; Frisher & Forsyth, 2009). The second is that the questions in the CSEW are lacking in detail about the type and frequency of drug use. There are many different potential combinations of use of different substance, with poly-substance use being relatively common among young people who use illicit drugs (Hale & Viner, 2013). If different patterns of drug use attract different police response, then we need to take this into account when analysing potential social bias in the policing of drug users. It is difficult to do this when using a survey, such as the CSEW, which contains relatively limited questions on drug use and only small proportions of illicit drug users in its sample.

In this paper, we attempt to overcome some of the problems in previous studies through analysis is of the experience of police stop and search across people who have various social statuses and multiple patterns of illicit drug use. We ask whether differences in rates of stop and search for drugs can be explained by drug use patterns, by sociodemographic indicators, or by a combination of the two groups of variables. We use our analyses to test the hypothesis that there is evidence of social bias in the policing of drug users. To do so, we take data from self-reported drug users in the UK and Australia and carry out two stages of multivariate analysis. The first stage is a latent class analysis of reported drug use in order to identify groups with different patterns of drug use. These patterns are then used alongside other variables in binary logistic regression analyses of the predictors of stop and search in the second stage.

Methods

The Global Drug Survey

The data for this analysis comes from the Global Drug Survey (GDS). This is an independently funded drug use data exchange hub. It conducts annual anonymous online surveys of drug and alcohol use in partnership with global media partners (the Guardian and Mixmag in the UK and Fairfax Media in Australia) with onward promotion through media partner websites and social networking sites such as Facebook and Twitter. The research tool and methods are based on previous work by the group conducted over the last decade. Discussion of the methods used including their utility, validity and limitations have been discussed in previously published articles (Winstock, Mitcheson, & Marsden, 2010; Winstock & Barratt, 2013a, 2013b; Winstock, Mitcheson, Gillatt, & Cottrell, 2012). The 2012 GDS survey was open to responses between 17 November and 22 December 2012. It attracted a self-selecting, global sample of over 20,000 people. The questionnaire included questions about respondents' socio-demographic characteristics, their drug use, their experiences with the policing of drugs and indicators of drug dependence. The drugs in question included alcohol and tobacco, in addition to a wide range of currently illicit substances. For analysis, the drugs were grouped as shown in table one. The GDS questionnaire is available to view at http://www.webcitation.org/6JhPUmBou. Ethical approval was received from the Joint South London and Maudsley and Institute of Psychiatry NHS Research Ethics Committee

We do not assume that these samples are representative of the larger populations of drug users in these countries. We do present information on patterns of police contact that controls for some relevant demographic characteristics (see tables five and six below). The availability of data on sexual orientation enables us to present novel data on the distribution of police contact for drugs across sexualities. This has been examined qualitatively (Race, 2009), but not (as far as we are aware) quantitatively.

Data on drug use and dependence

We are interested in the pattern of police contact that is associated with patterns of drug use, which may include the type and temporality of drug use, the frequency of drug use and the presence or absence of drug dependence. The type and temporality of drug use was analysed through the latent class analysis reported below. Additional information was available in the survey on the frequency of past month drug use. This was taken from answers to questions that were asked for each drug on 'number of days used in the past month'. The total sum of days of use across all illicit drug types in the past month was calculated for each respondent. Respondents were then split into five groups: no past month use, light use (1- 3 days in past month); moderate use (4-10); frequent use (11-28); and very frequent use (over 28). Dependence on illicit drugs was measured by asking two questions. The first was, 'of all the drugs you have used, are there any that you would like to use less of over the next 12 months?' The second was, 'of all the drugs you have used, are there any that you would like help with to cut down or stop?' The prevalence of reporting any indicator of dependence on illicit drugs is also shown in tables two and three.

		Proportion of the sample	Proportion reporting stop and search for drugs
Age	Mean (SD)	29.0 (10.9)	
Gender***	Female	28.3%	3.0%
	Male	71.7%	11.0%
Ethnicity	White	93.7%	8.4%
	Not white	6.3%	10.7%
Income ^{a***}	Above median	47.5%	5.3%
	Below median	52.5%	11.4%
Employment***	Employed/Student	76.8%	7.7%
	Unemployed	23.2%	11.7%
Highest educational qualification***	Degree or above	43.8%	4.9%
	Below degree	56.2%	12.8%
Sexuality*	Heterosexual	80.3%	8.9%
	Other	19.7%	6.8%
Drug dependence***	Any indicator of drug dependence	22.3%	13.3%
	No indicators of drug dependence	77.7%	7.2%
Drug use class***	Current cannabis only	21.5%	9.2%
	Current club and psychedelic	12.6%	9.4%
	Current poly	15.0%	16.3%
	Occasional poly	17.9%	9.2%
	Former poly	17.7%	4.5%
	Former cannabis	15.2%	3.30%
Drug use frequency in past month***	None (0)	24.4%	2.6%
	Light (1-3)	18.3%	4.4%
	Moderate (4-10)	17.4%	8.0%
	Frequent (11-28)	20.7%	12.3%
	Very frequent (>28)	19.3%	16.6%

Table 2: Characteristics of the UK GDS drug user sample (n=5,919)

a Median income group was less than £14,999 (AUD\$22,100). Asterisks represent the results of cross-tabulation tests for significance of differences in rates of stop and search between the categories reported in the left-hand column. *p<0.05, **p<0.01, ***p<0.001

		Proportion of the sample	Proportion reporting stop and search for drugs in last 12m
Age	Mean (SD)	36.3 (11.6)	
Gender***	Female	33.5%	2.9%
	Male	66.5%	7.2%
Ethnicity*	White	92.8%	5.4%
	Not white	7.2%	8.6%
Income ^{a***}	Above median	48.4%	3.6%
	Below median	51.6%	7.5%
Employment***	Employed/Student	91.5%	5.2%
	Unemployed	8.5%	10.0%
Highest educational qualification***	Degree or above	62.0%	7.3%
	Below degree	38.0%	4.6%
Sexuality	Heterosexual	81.1%	5.4%
	Other	18.9%	6.3%
Illicit drug dependence***	Any indicator of drug dependence	14.3%	9.7%
	No indicators of drug dependence	85.7%	5.0%
Drug use class***	Current cannabis only	9.4%	8.6%
	Current club and psychedelic	11.5%	6.9%
	Current poly	11.1%	14.8%
	Occasional poly	10.4%	8.0%
	Former poly	35.6%	3.2%
	Former cannabis	22.0%	2.1%
Drug use frequency in past month***	None (0)	46.0%	3.0%
	Light (1-3)	20.4%	4.8%
	Moderate (4-10)	12.4%	8.4%
	Frequent (11-28)	10.5%	9.3%
	Very frequent (>28)	10.6%	12.3%

Table 3: Characteristics of the Australian GDS drug user sample (n=5,707)

a Median income was less than AUD\$49,999 (£33,900)

Asterisks represent the results of cross-tabulation tests for significance of differences in rates of stop and search between the categories reported in the left-hand column. p<0.05, p<0.01, p>0.01, p>0.01,

Data on policing

The GDS question on police contact was, 'have you been stopped and searched by the police for drugs in the last 12 months?' Respondents who responded positively to this question were asked, 'did you have drugs on you on any of these occasions' and 'on any of the occasions you were searched whilst in possession of drugs, did the police ever fail to find them?' In the UK, 8.6 per cent of the GDS illicit drug user sample reported having been stopped and searched in the past year. This percentage was 5.7 in Australia (8.9 when weighted by age against the UK sample). Of those who had been stopped, 57.1 per cent in the UK and 37.7 per cent in Australia reported that they had been in possession of drugs when they were stopped. Interestingly, over two thirds of these people (65.7 per cent in the UK and 69.7 per cent in Australia) reported that there had been an occasion when they had been searched while in possession of drugs and the police had failed to find them.

Limitations

The most obvious limitation of this study is the non-random nature of the sample. Respondents to the GDS are a self-selecting sample which cannot to be assumed to be representative of the populations of drug users in these countries, let alone the general populations. Equally obviously, it would be very difficult to create a random sample of illicit drug users, as there is no available sampling frame of this hidden population. In the absence of a truly representative sample, we hope that readers will think of the patterns of policing of drug users that are seen in GDS respondents as interesting indications of social patterns which are occurring among some drug users. Given the way that the GDS is presented to potential respondents (i.e. without mention of policing until the questions appear in the survey as it is answered) we consider it unlikely that experiences of stop and search influence the likelihood that drug users would fill in the survey

Another limitation is the relatively small proportion of the samples that came from ethnic minority groups (see table two and three). This is a problem for a study that hopes to include ethnicity in an intersectional analysis of policing. We would have preferred to have enough members of each ethnic minority in the samples to be able to report results separately for sizeable ethnic groups in the sampled countries. However even when we collapsed more detailed questions into ethnic categories of white, southeast Asian, other Asian, black, other, and mixed - the proportion in each ethnic minority in the sample did not exceed 3.3 per cent in either country (the largest of the minority groups in each country were other, which was 3.3 per cent of the UK sample, and mixed, which was 2.8 per cent of the Australian sample). We are, therefore, constrained to reporting results against the less than ideal dichotomous variable of white/non-white in order not to use sample proportions that are too small for inclusion in the regression analysis. Nevertheless, we think that this does provide some interesting indications of potentially different patterns of policing across the majority and minority ethnicities of both countries. And we invite future researchers to develop methods for more detailed analysis of the experiences of different ethnic groups.

A final limitation discussed here is the absence of data on forms of offending other than drug possession. It may be the case that patterns of other offending may play a part in predicting police contact for drugs. Other studies have found social bias when taking into account such patterns (Medina Ariza, 2013; Stevens, 2008). Our analysis is limited to stops and searches that were reported to be specifically for drugs.

Latent class analysis

This first analytical stage was necessary because we are interested in the influence of the specificities of drug use on patterns of police contact. Within the GDS data as we organised it, there were polytomous indicators of drug use across several types of drugs. These were the eight types of illicit drugs in table one, plus alcohol and tobacco (treated separately), making a total of 10 types. The data also included four time periods (never, lifetime, past year and past month use). Latent class analysis (LCA) was chosen as a method which could reduce the complexity of this huge diversity of potential combinations to a manageable level, while retaining important information on variations in patterns of drug use. LCA enabled the identification of latent classes which shared

similar patterns of both type and temporality of drug use. This analysis was carried out using the statistics package poLCA in R, following the procedures described by Linzer and Lewis (2011).

We ran the LCA analysis on data from each country separately and started models from 50 different starting points in order to reduce the possibility that the chosen model reflects a local maximum rather than the best overall fit. We used the Bayesian Information Criterion (BIC) to choose a model for each country which best combined parsimony with goodness of fit. This repeatedly produced models with nine classes for Australia and seven classes for the UK. We then tested the similarity in these classes between countriesⁱⁱ. This produced the plot seen in figure one.



Metric MDS

Figure 1: Multidimensional scaling of sum of squared differences between UK and Australian classes.

Examination of this plot suggested that there was good congruence between pairs of classes in most cases. For example, Australian class 4 was very similar to UK class 5, and Australian class 1 was similar to UK class 2 (the numbering of classes in LCA is arbitrary). The exception to this was UK class 4, which was close - but did not match exactly - to Australian classes 2, 3 and 9. The profile of these classes was that they all had low probabilities of past month and past year use of illicit drugs other than cannabis, moderate levels of lifetime use of other drug types (levels that differed across drug types between these classes), with stronger probabilities of past month use of alcohol.ⁱⁱⁱ

We created the pairs of classes that are suggested by the plot in figure one, and labelled as per the description in table four. As noted above, we excluded the 'alcohol only' users from stage two of the analysis, as we are specifically interested in the experience of police contact among illicit drug users. All classes showed high probabilities of current alcohol use. They all also showed very low probabilities of inhalant use. The probabilities of drug use noted in the descriptions of the classes in table four are relative, rather than absolute. For example, the probabilities of current use of club drugs were lower than for alcohol use across all classes. But the 'current club and psychedelic' and 'current poly' classes both had relatively higher probabilities of this type of drug use than were calculated for other classes.

In Australia, this group includes classes that are differentiated by having (or not having) relatively high probabilities of former uses of club, psychedelic, stimulant and NPS drugs.

After performing the LCA, we examined the bivariate incidence of stop and search across categories of socio-demographic and drug use variables, as shown in tables two and three above.

Class label	High probability	Low probability
Alcohol only (Aus4, UK5 in figure 1)		Any tobacco or illicit drug
Current cannabis only (Aus6, UK7)	Past month cannabis	Past month other illicit drug
Current club and psychedelic (Aus5, UK1)	Past month club and psychedelic	Past month NPS, any stimulant
Current poly (Aus1, UK2)	Past month all illicit (except inhalants and hard drugs)	
Occasional poly (Aus8, UK6)	Past year use of club, psychedelic, prescription, NPS.	Past month use of NPS, any stimulant
Former cannabis users (Aus7, UK3)	Lifetime use of cannabis	Past year use of cannabis Lifetime use of other illicit
Former poly users (Aus3, 9 & 2, UK4	Ever use of all illicit types	Past year use of any illicit

Table 4: Characteristics of the drug use classes identified in latent class analysis

Logistic regression of stop and search for drugs

In order to examine the pattern of stop and search for drugs across these drug users while taking into account their patterns of drug use and their intersectional social statuses, we ran a series of logistic regression models, including various combinations of the variables in the dataset, following the approach of Saarikkomäki and Kivivouri (2013). The variables included in these models were the same as those reported in tables two and three above, with the category that is omitted from the lists in tables five and six serving as the reference category.

In model 0, each of these variables was entered separately as an independent variable in a bivariate model to test whether it predicted the reporting of having been stopped and searched for drugs. Drug use class and drug use frequency were treated as categorical variables. There is an association between drug use frequency and class, but it should be remembered that the frequency variable was based on use of any illicit drug within the past month, whereas the drug use class was based on a lengthier temporal pattern of use of the range of different drugs. Using both variables maximises the information on drug use patterns which may explain the distribution of stop and search. The associations between drug use frequency and class (and between other variables) were not strong enough to cause concern about multicollinearity.

	Model 0	Model 1	Model 2	Model 3
Independent variables				
Age	0.93***		0.94***	0.94***
Male	4.01***		3.89***	3.26***
Heterosexual	0.75*		0.84	0.93
White ethnicity	0.77		0.68*	0.75
Degree educated	0.35***		0.55***	0.61***
Unemployed	1.59***		0.94	0.96
Income above median	0.43***		0.8	0.81
Any drug dependence	1.97***	1.24*		1.01
Drug use class ^a	***	***		**
Current cannabis only	2.94***	1.55		0.74
Current club and psychedelic	3.00***	1.49		1.1
Current poly	5.62***	1.93**		1.19
Occasional poly	2.91***	1.54		1.35
Former poly	1.35	0.82		1.05
Drug use frequency in past month ^b	***	***		***
Light (1-3)	1.76*	1.34		1.45
Moderate (4-10)	3.28***	2.26***		2.28**
Frequent (11-28)	5.33***	3.55***		3.37***
Very frequent (>28)	7.53***	5.09***		4.72***
Nagelkerke R ²		0.093	0.125	0.178

Table 5: Odds ratios for stop and search in binary logistic regression (UK sample)

*p<0.05, **p<0.01, ***p<0.001

a Reference category is former cannabis users.

b Reference category is no use in past month.

For both these variable, the significance asterisks next to the name of the variable relates to the overall significance of this factor in the analysis, while the subsequent lines compare this category of the variable to the reference category for the variable.

Table 6: Odds ratios for stop and search in binary logistic regression (Australian sample)

	Model 0	Model 1	Model 2	Model 3
Independent variables				
Age	0.95***		0.97***	0.98**
Male	2.56***		2.67***	2.24***
Heterosexual	1.17		1.25	1.19
White ethnicity	0.60**		0.67*	0.67*
Degree educated	0.62***		0.85	0.94
Unemployed	2.02***		1.51*	1.60*
Income above median	0.47***		0.59***	0.63**
Any drug dependence	2.03***	1.05		0.97
Drug use class	***	***		***
Current cannabis only	4.31**	3.38****		1.84*
Current club and psychedelic	3.37***	2.90***		2.69**
Current poly	7.90***	5.00***		3.84***
Occasional poly	3.95***	3.28***		2.59**
Former poly	1.51	1.3		1.3
Drug use frequency in past month ^b	***	**		
Light (1-3)	1.63**	0.96		0.88
Moderate (4-10)	2.95***	1.35		1.17
Frequent (11-28)	3.29***	1.52		1.11
Very frequent (>28)	4.49***	2.12***		1.67*
Nagelkerke R ²		0.084	0.074	0.114

*p<0.05, **p<0.01, ***p<0.001

a Reference category is former cannabis users.

b Reference category is no use in past month.

In model 1, only the indicators of drug use (class, frequency, dependence) were included in a block as potential predictors of stop and search. In model 2, only sociodemographic variables were included in a block as independent variables. In the final model 3, all these variables were entered in one block. The results are shown in tables five and six.

In both country samples, these results provide support for both the consensus and conflict perspectives on the distribution of police stop and search for drugs. Models 0 and 1 show that there is an association in these samples between both the class and frequency of drug use and the likelihood of being stopped and searched for drugs by the

police. In both countries, people who reported any indicators of drug dependence were also at heightened risk of stop and search in model 0. In the UK (but not Australia), this relationship remained significant when the influence of other patterns of drug use were included in model 1.

On the other hand, models 0 and 2 suggest that, in these samples, some sociodemographic indicators were consistently associated with the odds of being stopped and searched when patterns of drug use were not considered. Age and gender were the most consistently powerful predictors. People in more advantaged groups, as measured by income, education and employment were less likely to report being stopped and searched in model 0 in both countries. For income in the UK, and for education and unemployment in Australia, the significance of these indicators of social position was also seen in the presence of other socio-demographic indicators in model 2. In this multivariate model, people who reported being white showed significantly lower odds of being stopped and searched than other ethnicities in both countries.

However, the most powerful of these models in both countries (as measured by the value of Nagelkerke R squared) was model 3, which included both drug use and sociodemographic variables. In this final model, the indicators of drug use class and frequency retained their significance in predicting stop and search in both countries (although they became less individually predictive in the presence of the sociodemographic variables than they had been without them). This supports the idea that there is some operational justification for the distribution of police attention; the police seem to be responding to actual patterns of drug use in their targeting of stop and search for drugs on this sample. However, there were still some groups in both the UK and Australian samples who experienced rates of stop and search that could not be explained by the indicators of drug use patterns alone. In the UK, younger, male and less highly educated drug users experienced significantly higher odds of stop and search than would be expected from the indicators of drug use. In Australia, this disproportionality was significant for drug users who were younger, male, not of white ethnicity, unemployed and of lower income.

Discussion

This type of multivariate analysis of the predictors of police contact might be dismissed by some as 'empiricist haggling' (to use Paul Gilroy's (1983: 144) term). As Lord McPherson's (1999) report into the death of Stephen Lawrence noted, analyses that attempt to 'explain away' the elevated rates of police contact that are faced by members of ethnic minorities are likely to be seen as illegitimate justifications of racism by members of the affected communities. This is one of the dangers of carrying out intersectional analysis through the use of multivariate regression. This technique provides estimates of the independent effect of each variable. But there is no independent experience of being black. Race is always experienced alongside the overlapping inequalities that constitute this social category (Bowling & Phillips, 2002; Holdaway, 1996; Smith & Smith, 1989). In the GDS drug user samples, there were few differences in income, unemployment and education between the white and other ethnicities (although white people reported a significantly higher mean income in Australia). But outside this sample, there are ethnic minorities in both countries who experience significant social exclusion. Their experience of policing will be influenced simultaneously by their ethnicity, income, employment, etc. So it is likely that they will accurately perceive that they are at higher risk of adversarial police contact than white people. This suggestion is supported by the recent findings of Bradford and Jackson (2013) and by ethnographic and participatory work with young people from black and minority ethnic communities (Densley & Stevens, 2014; Sveinsson, 2010).

One often overlooked aspect of police discrimination is the apparent lack of attention that is given to female offending. British self-report studies have also found this effect (Medina Ariza, 2013; Stevens, 2008). In Australia, it has been estimated that 42 per cent of those who used an illicit substance in the previous year are female (AIHW, 2011). However, in 2011-12 women comprised only 32 per cent of all people arrested for drug consumer (possession and use) offences (Australian Crime Commission, 2013). The relative under-representation of women in the numbers of people who are stopped and searched for drugs could be seen as an example of 'statistical discrimination' (Reiner, 2000). This occurs when the police have data – often from the records that they collect - which suggests that a certain social group is more involved in offending. They then use these figures as the basis of their targeting of resources. This has the effect of exaggerating the disparities by both gender and ethnicity; the differences between rates of self-reported offending both by gender and ethnicity is commonly smaller than the disparity that is also seen in police recorded offences in England and Wales (Budd, Sharp, Weir, Wilson, & Owen, 2005). There may be an assumption that women play a passive role in drug markets that is less worthy of policing. Recent ethnographic work in London has confirmed, for example, that police officers tend to see the typical drug offender as a young, black man and therefore to target black males for stop and search (Bear, 2013). This view ignores the fact that women can and often do play active roles in drug markets (Anderson, 2005; Fleetwood, 2014). But, as Harnois and Ifatunji (2010) note, a question about police contact may not be the best one to ask if you are looking for discrimination that negatively affects women.

If we take a broader view of social bias, then we can see that the GDS data does suggest that there may well be discriminatory selection, as well as some proportionate targeting of police stop and search on these samples. This echoes the findings of Renauer (2012) that both consensus and conflict may be operating simultaneously. From a critical perspective, however, there is still work for police managers and politicians to do. The fact that rates of drug use may provide a partial explanation of rates of stop and search does not absolve these representatives of the state of responsibility for the remaining disproportionality that can be explained by social bias. Is it fair that older, richer drug users are protected from the legal consequences of their illicit drug use? What is the likely effect of this unfairness on the legitimacy of both police and political institutions? Analysts of procedural and political legitimacy would suggest that it is likely to undermine the support that citizens give to the institutions of authority. The potential effects of this reduced likelihood of non-coerced compliance with the law have been seen on the streets of the UK several times, in riots that have involved social groups (of all ethnicities) who feel that they have been the target of socially biased policing (Scarman, 1981; The Guardian & LSE, 2012).

There are some interesting findings that are incidental to our main analysis of social bias. It is striking, for example, that the rates of stop and search reported by this group are relatively high compared to rates of arrest for drugs that have been reported in other studies. One previous attempt to estimate this risk in Western Australia in 1993 estimated the annual rate of arrest for cannabis users at 1.25 per cent (Lenton, 2000). A study in the USA suggested that the annual rate of arrest for cannabis users varied from 0.8 per cent to 1.8 per cent between 1982 and 2008 (Nguyen & Reuter, 2012). In the GDS drug users samples, the rate of stop and search exceeded 5.5 per cent in both countries. For people in the three latent classes that reported high probabilities of past month illicit drug use, this rate was, 10.1 per cent in Australia and 11.4 per cent in the UK. Only a minority of stops and searches lead to arrest; 11 per cent in one English study (Miller, Bland, & Quinton, 2000). So one would expect rates of stop and search to be higher than the arrest rates reported in previous studies. Nevertheless, stop and search was still a relatively rare event for current illicit drug users in the GDS sample. As the authors cited in this paragraph have noted, this creates substantial difficulties for the attempt to deter drug use through the policing of drug possession. This may be especially difficult as the GDS samples of drug users reported that they usually avoided detection, even when they were searched while carrying drugs.

Hanging over all this discussion is the question of whether it is even legitimate for there to be a power of stop and search on the basis of suspicion of drug possession. The debate over drug criminalisation is not the subject of this paper, but it should be noted that large proportions of stops and searches in both the UK and Australia would not happen (or would have to find another pretext) if the possession of drugs were not a criminal offence.

Conclusion

This paper has used data from a large, well-established internet survey to examine predictors of stop and search for drugs in non-random samples of self-reported illicit drug users in the UK and Australia. It has pointed out problems in previous studies, including the lack of attention to the intersectional bases of social bias and a lack of

detailed data about drug use patterns. It has attempted to overcome these problems by including a variety of socio-demographic indicators, as well as relatively detailed indicators of the type, temporality and frequency of use of a wide range of illicit drugs. It has used latent class analysis to create an inductive typology of drug use classes across ten groups of drugs and four time phases. It has acknowledged that several limitations remain, perhaps especially the lack of direct generalisability of the findings to the broader populations of drug users. It has found support for both the consensus and conflict perspectives on drug policing. In multivariate logistic regression models, indicators of class and frequency of drug use were significantly predictive of the rate of stop and search for drugs. But so were some socio-demographic indicators. People who were male, younger and of less advantaged socio-economic status (as measured by education in the UK and by minority ethnicity, income and unemployment in Australia) experienced rates of stop and search for drugs which were higher than those that would be expected on the basis of the indicators of drug use alone. There may be other reasons for this apparent social bias which could be explained by further 'empiricist haggling'. However, the data in this study support the hypothesis that there is social bias in the policing of drug users.

This finding represents a challenge to both researchers and policy makers. For researchers, the challenge is to develop datasets and methods that can more fully explain the pattern of policing across different social groups. For policy makers, the challenge is to develop laws, programmes and practices which create a just distribution and implementation of the policing of drug users.

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Endnotes

ⁱ Policing is used here as a term that includes contacts between police services and members of the public. Adversarial police contact is used to describe instances, including moving on, stopping and searching and arresting members of the public. The specific focus of this paper is the use of police stop and search for drugs.

ⁱⁱ For each latent class, there is a set of 40 probabilities estimated by the model (four temporal categories of each of ten drug use variables). For each pair of clusters, we calculated the sum of squared differences between these 40 probabilities. This gives a measure of 'distance' between each pair of classes. Then we used multidimensional scaling to produce a two-dimensional representation of the sixteen classes (9 Australia, 7 UK). This plots the points at positions in 2-D space in such a way that the pairwise distances between the 2-D points are as close as possible to the distances calculated by the sum of squared differences.

ⁱⁱⁱ The binary logistic regression analysis reported here was also carried out including the three Australian classes of former drug users separately in the models. This made only a minor difference to the results (e.g. an increase in Nagelkerke R squared from 0.114 to 0.116 in model 3), with no difference in the pattern of significantly predictive variables. The simpler six class analysis is reported here for ease of interpretation.