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Patterns of Referral to the Children's Hearing System for Drug and Alcohol Misuse

Lesley McAra

Number 6
The Edinburgh Study of Youth Transitions and Crime

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Old College
Edinburgh
EH8 9YL

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KEY FINDINGS

Only a small proportion (10 per cent) of children in the Edinburgh Study cohort with a children's hearing record, were ever referred to the reporter on J grounds (for drug or alcohol misuse). However J ground referrals were only one of several routes into the hearings system for children with significant substance misuse problems. A further 3 per cent of those with records were referred for Misuse of Drugs Act offences and in another 11 per cent of cases drug and/or alcohol misuse was raised as a key issue in reports.

Children known to the hearings system for substance misuse and other children with a hearings record were significantly more likely to be living in a single parent household and to come from a socially deprived background than non-record children.

Self-reported substance misuse was significantly higher amongst children known to the hearings system for drug and/or alcohol misuse than amongst other children with a hearings record and non-record children. In official records, alcohol misuse was the most commonly identified problem.

Children known to the system for drug and/or alcohol misuse exhibited high levels of anti-social and disruptive behaviour had problematic family and peer relationships and absconded regularly from school. Parental substance misuse, however, was not identified as a common problem in records.

The earliest substance misuse referrals were made at age 11 and peaked at sweep five (reference period fourth year of secondary education). A high proportion of these children had a long history of involvement with the system, mostly for offending or being beyond the control of a relevant person. Just over a third of referrals with a substance misuse component resulted in a hearing, the most common outcome of which was a home supervision requirement.

Children made subject to compulsory measures of care appear to have only limited access to specialist drug and/or alcohol programmes. Reports indicate that social work interventions focused on: the child's challenging behaviour; truancy; the capacity of parents to control their children; and parent/child relationship breakdown.

Compulsory measures of care may only have a limited impact on substance misuse. Just under two-thirds of those with a hearing had at least one further referral to the hearings system in later years. Moreover drug and/or alcohol misuse was raised as a key issue in the referral process in later years, for just under a half of children made subject to compulsory measures of care.

Very few children in the Edinburgh cohort who regularly drank alcohol or took drugs were known to the hearings system. Level of drug use was only a weak predictor of having a hearings record. Substance misusers most likely to be referred were those who: were not living with two birth parents; came from a socially deprived background; exhibited challenging behaviour in the context of school; and came frequently to the attention of the police (importantly the latter were not always the most persistent and serious offenders).

The findings are supportive of policy initiatives aimed at broadening the range of community-based services, access to which is *not* predominantly controlled by the police, schools or social work. The findings also suggest that sports and leisure programmes which aim to divert youngsters away from the streets and into meaningful, structured activities have an important role to play in preventing or reducing substance misuse amongst children.

INTRODUCTION

The purpose of this paper is to explore patterns of referral to the children's hearings system for drug and/or alcohol misuse. It draws on the findings of the Edinburgh Study of Youth Transitions and Crime (the Edinburgh Study), a longitudinal research programme exploring pathways into and out of offending for a cohort of around 4,300 young people who started secondary school in the City of Edinburgh in 1998. The key aims and methods of the study are summarised below[1].

Aims of the programme

- To investigate the factors leading to involvement in offending and desistance from it
- To examine the striking contrast between males and females in criminal offending
- To explore the above in three contexts:
  - Individual development
  - Interactions with forma l agencies of control
  - The social and physical structures of neighbourhoods
- To develop new theories explaining offending behaviour and contribute to practical policies targeting young people

Overview of methods

- Self report questionnaires (annual sweeps)
- Semi-structured interviews (40 undertaken in sweep 2)
- School, social work, children's hearings records (annual sweeps)
- Teacher questionnaires (1999)
- Police juvenile liaison officer and Scottish criminal records (from 2002)
- Parent survey (2001)
- Geographic information system

Participating schools

- All 23 state secondary schools
- 8 out of 14 independent sector schools
- 9 out of 12 special schools

Response Rates

- Sweep 1 - 96.2% (n=4,300)
- Sweep 2 - 95.6% (n=4229)
- Sweep 3 - 95.2% (n=4296)
- Sweep 4 - 92.6% (n=4144)
- Sweep 5 - 89.1% (n=3856)
- Sweep 6 - 80.5% (n=3525)

Research Team

- David Smith, Lesley McAra
- Susan McVie, Lucy Holmes, Jackie Palmer

Study Funding

- Economic and Social Research Council (1998 - 2002)
- The Scottish Executive (2002- 2005)
- The Nuffield Foundation (2002 - 2006)

[1] See also Smith *et al* (2001) and Smith and McVie (2003) for further details of the Study.

Context

The Scottish children's hearing system

The Scottish children's hearings system is based on a coherent vision of criminal and social justice known as the "Kilbrandon" philosophy. According to this philosophy juvenile offending and other troublesome behaviours (including drug or alcohol misuse) should be regarded as manifestations of deeper social and psychological malaise and/or failures in the normal upbringing process (Kilbrandon 1964). The overall aim of the system is to address the *needs* of the child (except in a small number of cases where the child is considered to present a risk to others). The system deals with the cases of young people aged between 8 and 16 years referred on offence grounds[2] and from birth to age 16 referred on a range of care and protection grounds (although children can be retained in the system up until the age of 18). It is predicated on early and minimal intervention and is intended to avoid criminalizing and stigmatizing young people (see McAra 2002 for a detailed overview of history and development of the system).

One of the characteristic features of the hearings system is the separation of the judgement of evidence from the disposition of a case. The former lies in the hands of the reporter whose principal task is to investigate individual cases and determine whether there is a prima facie case that at least one of the statutory grounds for referral to a hearing have been met (set out in more detail below) *and* that the child is in need of compulsory measures of care. The principal task of the hearing (a lay tribunal) is to consider the measures to be applied. The main disposals available to the hearing are residential or non-residential supervision requirements, both of which ensure statutory social work involvement.

Alcohol and drug misuse referrals

J ground referrals for alcohol or drug misuse, constitute only a small proportion of referrals to the reporter (on average around 2 per cent of referrals per annum – see SCRA 2004). As with other non-offence referrals, however, the number of J ground referrals has risen over time. Between 2000 and 2003, for example, referrals for misuse of drug or alcohol rose by 46 per cent from 1,272 referrals in 2000/01 to 1,854 referrals by 2002/3 (SCRA 2004). This rise in referrals may be attributable to a real increase in the prevalence of substance misuse amongst children in Scotland (see McVie and Bradshaw 2005, CJSW 2001). The *Scottish Adolescent Lifestyle and Substance Use Survey* (2003) for example found that the proportion of boys who reported having a drink in the past week increased from 30 to 46 per cent between 1990 and 2002, with an even greater increase amongst girls (from 25 to 47 per cent of those surveyed) (Currie *et al* 2003). The same research found that drug consumption amongst 15 year olds had risen over time, with around a third of 15 year olds consuming illegal drugs in 2002 as compared with around a fifth in the late 1980s (see McVie and Bradshaw 2005 for an overview).

[2] Offenders between the ages of 16 and 17 are normally dealt with in the adult criminal justice system. However the courts do have the power to remit these cases to the children's hearings system for advice and/or disposal. If the young person is currently subject to a children's hearings supervision requirement (these can be extended up until the age of 18), then the case must be referred to the children's hearings system for advice.

Grounds of referral to the reporter	
The child:	
A	Is beyond the control of any relevant person;
B	Is falling into bad associations or is exposed to moral danger;
C	Is likely to suffer unnecessarily or be impaired seriously in his (sic) health or development due to lack of parental care;
D	Is a child in respect of whom any of the offences mentioned in Schedule 1 of the Criminal Procedure (Scotland) Act 1995 have been committed;
E	Is or is likely to become a member of the same household as a child in respect of whom any of the above Schedule 1 offences have been committed;
F	Is or is likely to become a member of the same household as a person who has committed any of the above offences;
G	Is or is likely to become a member of the same household as a person in respect of whom an offence under sections 1 to 3 of the Criminal Law (Consolidation) (Scotland) Act 1995 (incest and intercourse with a child by a step-parent or person in position of trust) has been committed by a member of that household;
H	Has failed to attend school regularly without reasonable excuse;
I	Has committed an offence;
J	Has misused alcohol or any drug whether or not a controlled drug within the meaning of the Misuse of Drugs Act 1971;
K	Has misused a volatile substance by deliberately inhaling its vapour other than for medicinal purposes;
L	Is being provided with accommodation by a local authority under section 25 or is the subject of a parental responsibilities order obtained under section 86 of this Act and in either case his behaviour is such that special measures are necessary for his adequate supervision in his interest or the interests of others.

What works in reducing and preventing substance misuse

Research in other jurisdictions has found that young alcohol and drugs misusers who are known to youth justice agencies, present with a complex set of needs and adverse social circumstances not all of which are *directly* linked to the substance misuse, for example: parental neglect and relationship difficulties; poor school attendance; high levels of offending; mental and/or physical health problems; and other problems associated with social deprivation (see Beckett *et al* 2004, Hough 1996). The effectiveness of interventions for such children may be measured in a number of different ways including whether the intervention has: reduced or eradicated the level of substance misuse; minimised the physical harms associated with addiction; improved the psychological wellbeing of the young person; improved their family and social relationships; and encouraged the uptake of other health and social services (see Burniston *et al* 2002).

It is of course impossible in the context of this short introduction, to do full justice to the now broad research literature on what works in reducing drug or alcohol misuse. However reviews of research report encouraging results for a range of different types of intervention, in particular: cognitive behavioural programmes (especially those focused on relapse prevention, see Peters 1992, Strang *et al* 1993); family therapy (see Stanton and Shadish 1997); therapeutic communities[3] (despite high drop out rates, youngsters who complete such programmes have better outcomes than comparison groups, see CJSW 2001); and other forms of structured and/or "culturally sensitive" counselling (see Hough 1996, Morehouse and Tobler 2000). By contrast health education counsel-

[3] This includes both residential and "community-based group" homes. Interventions can last between 6 months and two years and may include support to enhance the young person's problem solving and coping skills and to develop their social networks (see Burniston *et al* 2002 for overview of research).

ling, general rather than specialist drug treatment and school-based programmes have been found to be relatively ineffective at reducing substance misuse, although the latter type of programmes have been found to impact positively on the social problems presented by young substance misusers and school attendance (see Burniston *et al* 2002 for an overview).

Services for children with drug and alcohol problems: Scottish policy developments

Current Scottish Executive policy for dealing with the problems associated with drug and alcohol misuse (amongst both adults and young people) was set in train by two key documents: *Tackling Drugs in Scotland: Action in Partnership* (Scottish Office 1999) and *Plan for Action on Alcohol Misuse* (Scottish Executive 2002a). Both documents were aimed at improving the quality of service planning and delivery (under the auspices of local drug action teams and alcohol action teams), with a particular focus on an integrated and multi-agency approach to prevention, education and treatment.

In tandem with these initiatives, there has also been an overhaul in the organisation and management of youth justice services in Scotland, with an increased focus on the provision of specialist (rather than generic) services aimed at tackling the problems presented by persistent offenders. Diminishing and preventing substance misuse amongst child offenders is a key part of the new strategy. Indeed "Objective 2" of the national standards for Scotland's youth justice services (published in 2002), requires youth justice teams to develop a repertoire of community-based programmes for offenders, which should include alcohol and drugs programmes (Scottish Executive 2002b).

One consequence of these developments is that a wide range of agencies are now involved in the provision of services and support for children with, or at risk of developing, substance misuse problems including: schools and community education services; social work (in particular children and families teams; criminal justice teams and services for looked after children); health services; voluntary sector agencies (such as NCH Scotland); and community based arts and leisure activities aimed at diverting youngsters away from the streets and into meaningful structured activity (for example the action plan for youth football launched in 2004 and the "twilight basketball" project run by Scottish Sports Futures).

Within the city of Edinburgh itself, the City Council in partnership with the Edinburgh Drug Action team published plans in 2001 for the development of a multi-agency care, treatment and rehabilitation service for young people and their families using or affected by drug or alcohol misuse. This was to include outreach, prevention and support services for vulnerable young people in certain specified areas of high social deprivation within the city. A key aim was also to develop fast track intervention and diversion programmes for young substance misusers referred to the children's reporter (Edinburgh City Council 2001).

Despite all of this activity however, the evidence would suggest that service provision for the under 16 age group remains fairly patchy (particularly in rural areas). Similarly there is limited evidence of effective inter-agency working across the youth justice system and related agencies (see McAra 2004). Research undertaken by Burniston *et al* (2002) for example found that there was little consistency of approach to the provision

of drug services across Scotland, with major variations in respect of programme aims and methods and limited contact between agencies. Key shortcomings identified were the absence of specialist residential rehabilitation placements (although it was possible for Scottish children to be given placements in England) and the failure to develop a sufficient quantity of gender specific services and services tailored to the needs of ethnic minority groups (Burniston *et al* 2002). At the time of writing, it is not yet clear whether such shortcomings have been *fully* addressed.

Key arguments

As this paper aims to demonstrate, the findings of the Edinburgh Study are broadly supportive of previous research in the field. Children who are known to the hearings system for drug and/or alcohol misuse, present with a complex set of problematic behaviours and a wide range of needs. Such children often have a long history of involvement with the hearings system (particularly for offending), suggesting that, in the shorter term, compulsory measures of care are not always successful at tackling the factors which prompt referral to the system.

Those that are known to the hearings system are only a small minority of those who are regularly drinking and taking drugs. Social deprivation and living in a single parent household are key predictors of having a hearings record, even when controlling for offending and a range other peer and school related variables.

The hearings system by itself can do little to remedy the social adversities which form the backdrop to many of these young people's lives and yet it is these very adversities which appear to drive the referral process. There is consequently a danger that substance misusers from socially deprived backgrounds will get sucked into a cycle of repeat (and possibly ineffective forms of) referral whilst the needs of their more affluent counterparts may be overlooked.

Structure of report

The first part of the paper examines the nature and pattern of referrals to the children's hearings system for drug and/or alcohol misuse amongst the Edinburgh Study cohort over the first six sweeps of the study. The second part examines in more detail the record status of self-reported drug and alcohol misusers in the cohort and explores the factors which best predict whether a youngster with substance misuse problems will become known to the children's hearings system. The paper concludes with a brief review of the policy implications of the findings. All of the variables used in analysis are specified in detail at Appendix 1.

PART 1: DRUG AND ALCOHOL REFERRALS

This section of the paper draws on hearings record data from the first six sweeps of the study and social work and self-report questionnaire data from sweeps one to four. It begins with an overview of the demographic profile and levels of self-reported substance misuse amongst children in the cohort known to the hearings system for drug and/or alcohol misuse (the drug/alcohol referral group, n=208), as compared with other record and non-record children. This is followed by a more detailed examination of the history and patterns of referral to the system for the drug/alcohol referral group, and the nature and outcome of social work intervention undertaken with those made subject to compulsory measures of care.

Profile of drug/alcohol referrals

By sweep six of the Edinburgh study a total of 873 children (19 per cent of all children surveyed) had a children's hearings record. Of these only 84 (10 per cent of those with a hearings record) had been referred on J grounds on one or more occasions. However the findings indicate that J ground referrals are only one of several routes into the hearings system for children with significant drug or alcohol misuse problems[4]. A further 25 children (3 per cent of those with a record) were referred on I grounds for Misuse of Drugs Act offences which included possession of drugs. Moreover, an additional 99 children, referred on a wide range of grounds (including offence grounds) were identified in reports as having a significant drug and/or alcohol problem (as summarised in table 1 below).

Table 1: Drug and alcohol referrals

	Children with Hearings Record (n=873) %
J Ground drug/alcohol referral (n=84)	10
I Ground Misuse of Drugs Act (possession) (n=25)	3
Drugs/alcohol raised as issue in reports (n=99)	11
Other record (n=665)	76

Although children known to the system for drug and/or alcohol misuse were referred on a variety of different grounds, analysis shows that these children constitute a fairly homogeneous group. While these children are similar to other youngsters in the cohort with a hearings record in respect of a range of key demographic variables, they *differ* significantly in respect of their levels of self-reported substance misuse. Importantly both the alcohol/drug referral group and other children with a hearings record differ significantly from the young people in the cohort who have never had a hearings referral, across almost all measures.

[4] Children with a substance misuse problem can of course be referred to the hearings on K grounds – for misuse of a volatile substance. K ground referrals are very rare, constituting less than half a per cent of referrals to the reporter in any one year (see SCRA 2004). Only six children within the Edinburgh cohort were ever referred on K grounds and all of these come within the scope of the drug and alcohol referral groups in table 1.

Gender and family background

As indicated in table 2, a significantly higher proportion (p<.001) of children with hearings records were male as compared with non-record children in the cohort, although the proportion of males amongst the drug/alcohol referral group was slightly lower than that for other record children (54 per cent as compared with 57 per cent).

Table 2: Gender differences

	Male %	Female %
Drug/Alc Referral	54	46
Sig. diff.	NS	
Other record	57	43
Sig. diff.	***	
Non-record	50	50

Significance tests between groups using Pearson chi-square test: ***p<.001; NS - Non-significant

Both the drug/alcohol referral and other record groups were also significantly *less* likely (p<.001) to be living with two birth parents than non-record children at every study sweep (as summarised in table 3). At sweep two for example just under three fifths (59 per cent) of drug and alcohol referrals were living in a non-two birth parent family as compared with only a quarter of non record children. By sweep four this had risen to 71 per cent of drug and alcohol referrals as compared with just 30 per cent of non-record children. Indeed at this sweep there was for the first time a significant difference (p<.05) between the drug/alcohol referral group and the other record children in terms of family structure. The difference can be accounted for by a higher proportion of looked after children in the drug/alcohol referral group.

The most common form of non-two birth parent family structure, however, was a single parent household. Here again there were significant differences between all record children and non record children. At sweep two, for example, just under two-fifths (38 per cent) of those in the drug/alcohol referral group were living in a single parent household rising to 46 per cent of respondents by sweep four, as contrasted with only 14 per cent of non-record children at sweep two rising to just 19 per cent at sweep four.

Table 3: Family structure

	Sweep 2		Sweep 4	
	Non 2 birth parent %	Single parent %	Non 2 birth parent %	Single parent %
Drug/alc. referral	59	38	71	46
Sig. diff.	NS	NS	*	NS
Other record	56	32	62	39
Sig. diff.	***	***	***	***
Non-record	25	14	30	19

Significance tests between groups using Pearson chi-square test: *** p<.001; * p <.05; NS - Non-significant

Social deprivation

As with the findings of other research on the children's hearings system (see Waterhouse *et al* 1999), the drug/alcohol referral group and other record children were also significantly more likely (p<.001) than non-record children to come from a socially deprived background, as measured by parental socio-economic status (manual or both parents unemployed) and mean volume of neighbourhood deprivation (as summarised in tables 4 and 5). See Appendix 1 for a more detailed explanation of these variables.

Table 4: Socio-economic status

	Manual/Unemployed %	**Non-Manual** %
Drug/alc. referral	73	27
Sig. diff.	NS	
Other record	76	24
Sig. diff.	***	
Non-record	38	62

Significance tests between groups using Pearson chi-square test: ***p<.001; NS - Non-significant

Table 5: Neighbourhood Deprivation

	Neighbourhood Deprivation Score Mean
Drug/alc. Referral	5.2
Sig. diff.	NS
Other record	5.6
Sig. diff.	***
Non-record	2.9

Significance tests between groups using t-tests: ***p<.001; NS - Non-significant

Self-reported substance misuse

While the demographic variables indicate a number of similarities between drug and alcohol referrals and other record children, the findings relating to self-reported substance misuse highlight key differences (see table 6).

Self-reported substance misuse is significantly higher (p<.001) amongst the drug and alcohol referral group than amongst any other group of children. At sweep two for example, just under a fifth (18 per cent) of the drug and alcohol referral group reported that they drank weekly as compared with only 8 per cent of other record children and 6 per cent of non-record children. For those responding at sweep four, around a half of those with a drug or alcohol referral reported that they drank weekly as compared with a third of other record children and around a fifth of non record children.

The differences in respect of drugs misuse are also striking. At sweep two just under a quarter of the drug/alcohol referral respondents reported taking any kind of drug in the past year as compared with 14 per cent of other record children and just 5 per cent of non record children. By sweep four, however, almost three-quarters of drug and alcohol referral respondents reported taking at least one of the drugs covered by the ques-

tionnaire as compared with two-fifths of the other record children and only a quarter of non-record children.

Table 6: Self reported drug and alcohol use

	Drink alcohol weekly %		**Any drugs taken in last year %**	
	Sweep 2	**Sweep 4**	**Sweep 2**	**Sweep 4**
Drug/alc. Referral	18	52	24	74
Sig. diff.	***	***	**	***
Other record	8	34	14	40
Sig. diff.	*	***	***	***
Non-record	6	22	5	25

Significance tests between groups using Pearson chi-square test: *** p<.001; **p <.01; * p <.05

These findings could be taken to mean that the hearings system has accurately identified a group of highly problematic substance misusers. However caution is required when interpreting these results. It may be that those who are caught for drinking and taking drugs may be more willing to self-report such behaviour than children who have never been caught. Further research would be required to confirm this.

Alcohol and drug referral group: patterns of referral, interventions and outcomes

Having set out the demographic and self-reported substance misuse profile of the drug/alcohol referral group, the paper now turns to a more detailed examination of patterns of referral, interventions and outcomes.

Age of first drug/alcohol related referral and range of grounds of referral

As indicated in figure 1, the earliest substance misuse referrals were made at age 11 (two children referred) with numbers rising dramatically between sweeps three and four (from 23 to 80), peaking at sweep five (with 81 children referred, reference period fourth year of secondary education). The number of referrals at sweep six drops sharply, but this is largely due to the fact that most cohort members had reached their 16th birthday and therefore no longer came under the tutelage of the hearings system.

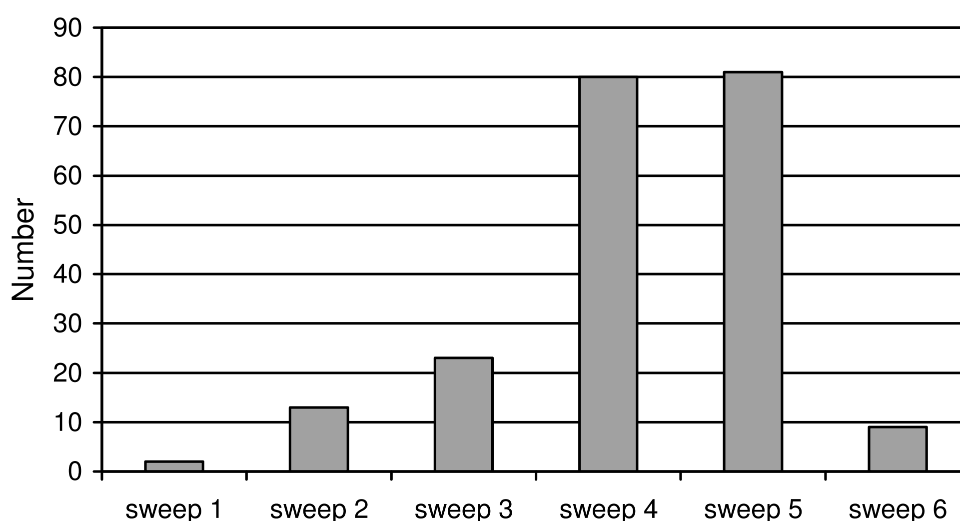


Figure 1: Number of children referred for drug/alcohol misuse

Table 7 sets out the grounds for referral that were recorded for each cohort member at the earliest sweep that they were identified as having a drug or alcohol problem (i.e. the child was referred either on J grounds, for Misuse of Drugs Act offences or where alcohol or drug issues were mentioned in reports). Importantly, a high proportion of children presented with more than one ground of referral during this sweep. Of the 84 youngsters referred on J grounds, for example, 53 were referred on additional grounds during the year of the first J ground referral.

The table highlights the strong link that is evident between substance misuse and grounds of referral relating to disruptive and/or offending behaviour. In three fifths (60 per cent) of the drug and alcohol referral cases the grounds for referral included an offence (I ground) component and in just under two fifths of cases (38 per cent) an A ground component (the child was beyond the control of a relevant person). Grounds relating to victimisation of the child or lack of parental care were far less common. Indeed none of the children were referred on F or G grounds (residence in the same house as victim or perpetrator of schedule 1 offence or sex offender). Given these findings, it is not surprising that the principal agency involved in the referral process for all children in the drug/alcohol referral group was the police.

Table 7: Variety of grounds of referral

Grounds of referral during first sweep with a substance misuse component	Variety of referral (n=208) %
A (Beyond control relevant person)	38
B (Moral danger)	8
C (Lack of parental care)	6
D (Victim of a schedule 1 offence)	13
E (Same household as victim of a schedule 1 offence)	1
F (Same household as perpetrator of a schedule 1 offence)	-
G (Same household as sex offender)	-
H (Non attendance at school)	14
I (Offending)	60
J (Drug or alcohol misuse)	40
K (Use of volatile substance)	2
L (Beyond local authority control)	3

Notes: Numbers add up to more than 100 as some children had more than one ground of referral.
Table relates to variety, not volume, of referral in year of drug/alcohol referral. Some children had more than one referral in the relevant year for each of these grounds.

History of referral

Most of the children known to the hearings system for drug or alcohol misuse had a long history of involvement with the system, with only 45 (22 per cent) cases being one-off referrals. Over two-thirds of the children (140) had an extensive pattern of referral *prior* to the first alcohol/drug misuse referral, mostly on offence grounds. Similarly over two-fifths (90) had a *later* referral, again mostly for offending or being beyond the control of a relevant person. Importantly, only eight children (9 per cent of those with later referrals) had further J ground referrals and only two (2 per cent) had a K ground referral. A key difference between early and later referrals is that lack of parental care and being a victim of a schedule 1 offence feature more prominently in early referrals (as summarised in table 8).

Table 8: Referral history

	Referrals prior to first drug/alcohol referral (n=140) %	Referrals post first drug/alcohol referral (n=90) %
A (Beyond control relevant person)	36	29
B (Moral danger)	9	14
C (Lack parental care)	31	13
D (Victim of a schedule 1 offence)	38	12
E (Same household as victim of a schedule 1 offence)	8	1
F (Same household as perpetrator of a schedule 1 offence)	-	-
G (Same household as sex offender)	-	-
H (Non attendance at school)	19	18
I (Offending)	69	64
J (Drug or alcohol misuse)	-	9
K (Use of volatile substance)	-	2
L (Beyond local authority control)	-	-

Notes: Columns add up to more than 100 as some children had more than one ground of referral.
Table relates to variety, not volume, of referral in the years prior to and post the first J ground referral.
Some children had more than one referral in the relevant years for each of these grounds.

Nature of substance misuse identified in reports

Figure 2 shows that a high proportion of the drug and alcohol referral group were identified as having an alcohol problem. In 88 cases (42 per cent) it was the sole substance identified and in a further 41 cases (20 per cent) both drugs and alcohol were identified as key issues. Drug use was the sole problem identified in 65 cases (31 per cent). However, in 14 cases (7 per cent), all J ground referrals, no details were given in the hearings file about the nature of the substance misuse.

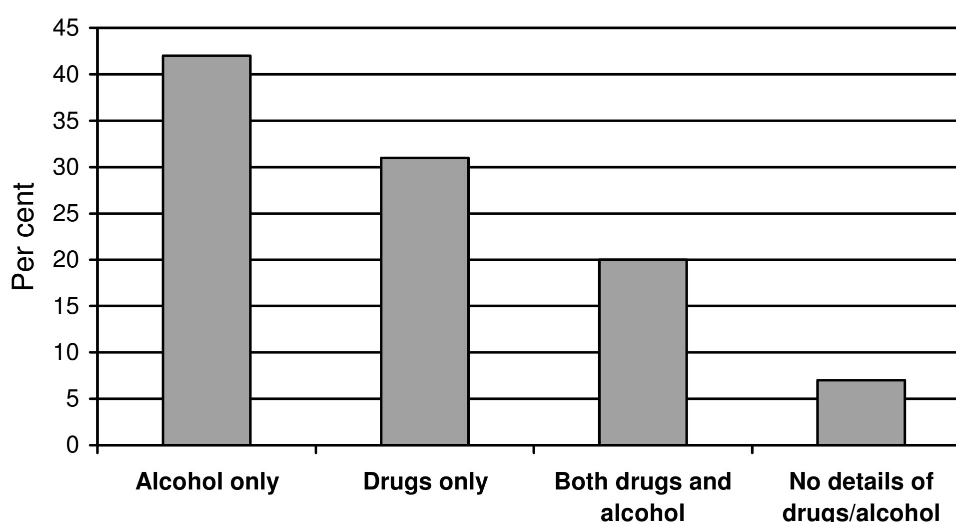


Figure 2: Nature of substance misuse identified in reports (during first sweep with substance misuse component only)

Other issues identified in reports

The findings suggest that children known to the system for drug and/or alcohol misuse present with a wide range of problematic behaviours and adverse circumstances in addition to substance misuse problems[5]. These can be grouped under three headings: child's behaviour/well being; home circumstances and school (as set out in tables 9, 10 and 11[6]).

A common theme in reports was the disruptive and challenging nature of the child's behaviour and relationship difficulties. In around a quarter of cases, for example, anti-social behaviour and aggression/violence were identified as key problems (table 9). Just over a fifth (21 per cent) had a history of absconding from home. Association with peers who offend was also identified as an issue in 18 per cent of cases.

Table 9: Issues relating to child's behaviour/well being (during first sweep with substance misuse component only)

Behaviour/well being issues raised	Drug/alcohol referral group (n=208) %
Anti-social behaviour	25
Aggressive/violent behaviour	23
Out of control/extreme behaviour	16
Emotional problems	17
Sexualised behaviour	6
Suicidal behaviour/thoughts	*
Abscond from home	21
Peer associations (offenders)	18
Easily led/vulnerable	11
Social isolation	4
Physical health issues	4
Mental health issues	7
Sexually abused	5
Physically abused	4

Note: Column does not add up to 100 as some children were assessed as having more than one problem.
*Less than 1%

[5] It should be noted that in a number of the hearings files only a short police report was available, which contained only limited information as to the child's background and/or circumstances. A greater amount of information was generally included in the reports of children who had a longstanding referral history and those with deeper seated problems.

[6] Tables 9, 10 and 11 relate to issues raised in reports during the sweep of the child's first referral with a drug and/or alcohol component.

As indicated in table 10, lack of parental control was identified as a key issue in almost two-fifths of cases. Family relationship breakdown was the second most common home circumstance problem identified, featuring in just under a fifth of cases. Importantly, however, alcohol and drug misuse by parents was *not* raised as a common problem in the files of children referred for alcohol or drug misuse. It was only noted as a key issue in 26 cases.

Table 10: Issues relating to home circumstances (during first sweep with substance misuse component only)

Home/parental issues raised	Drug/alcohol referral group (n=208) %
Lack of parental control	38
Relationship breakdown	18
Parental neglect	13
Parental drug and/or alcohol use	13
Harsh parental discipline	7
Finance	4
Housing	5
Physical health of parent(s)	7
Mental health of parent(s)	7
Domestic violence	6
Parental offending	4

Note: Column does not add up to 100 as some children were assessed as having more than one problem

In respect of school issues, a high proportion of children referred to the system for drug/alcohol misuse were reported to have a history of truanting from school. Around a fifth of these children were assessed as having poor motivation or a poor attitude towards school. Disruptive behaviour in the classroom was also mentioned as a significant problem in a fifth of cases.

Table 11: Issues relating to school (during first sweep with substance misuse component only)

School issues raised	Drug/alcohol referral group (n=208) %
Truancy	40
Exclusion	13
Aggressive/violent at school	15
Disruptive at school	20
Poor motivation/attitude	22
Learning difficulties/special needs	6
Poor relationships peers	10
Poor relationships teachers	7

Note: Column does not add up to 100 as some children were assessed as having more than one problem

Outcomes

Just over a third (75 or 36 per cent) of the drug and alcohol referrals resulted in a hearing, with the number of hearings peaking at sweep four (as shown in figure 3). Most youngsters whose case proceeded to a hearing received a home supervision requirement (39 per cent, see figure 4). Only 12 (16 per cent) were detained in secure care and a further 12 were made subject to other forms of residential care[7]. In a few cases (9 per cent), where the child was already subject to compulsory measures of care in respect of referrals made in *earlier* years, supervision was terminated.

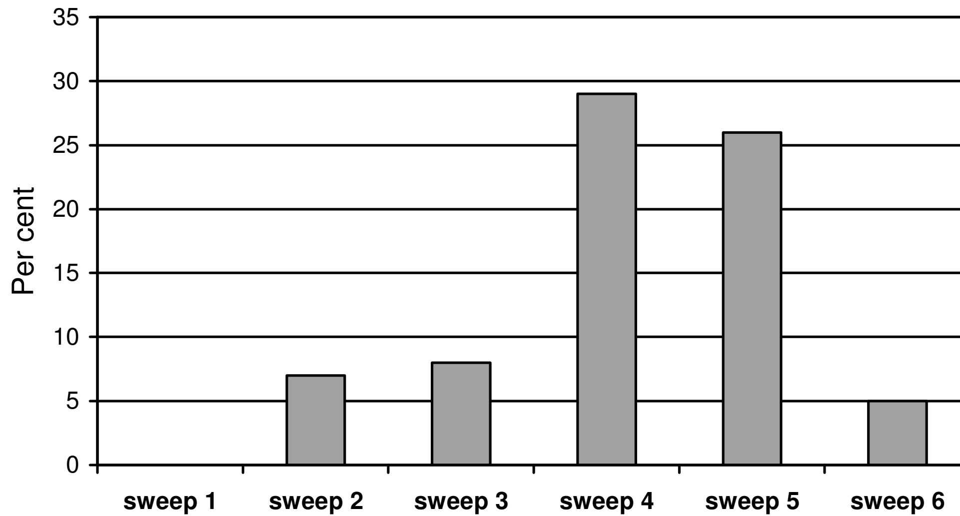
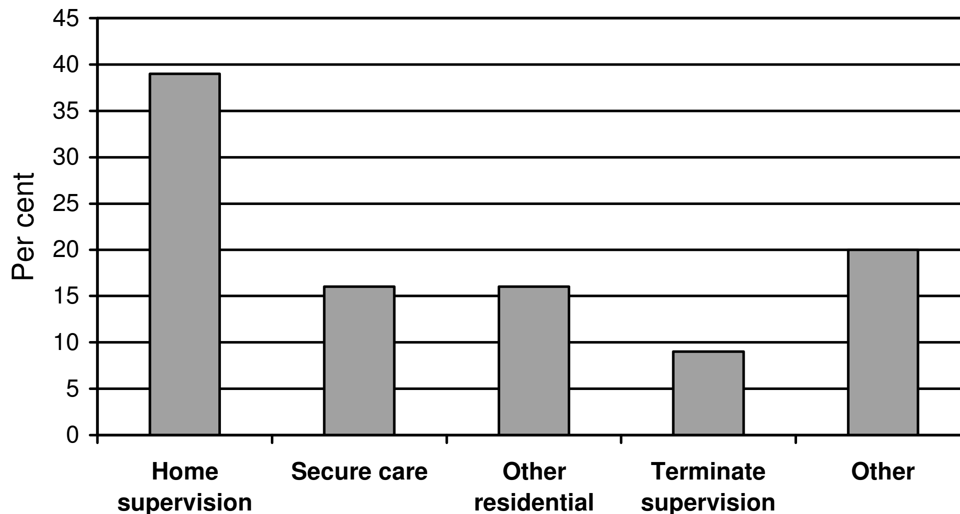


Figure 3: Number of hearings held for drug and alcohol referrals



*Other includes remit by courts and continuations

Figure 4: Outcome of hearings for drug and alcohol referrals

[7] Some children had more than one hearing and received different disposals at each hearing (e.g. some children initially received a home supervision requirement but at a subsequent hearing were transferred to secure care). The outcome recorded in figure 4 is the most *serious* disposal given to the child.

Social work intervention
Tables 12, 13 and 14, respectively, describe the issues noted in social work reports which required to be addressed and the agencies/specialist services (in addition to social work) which were involved in the supervision of the youngsters in the drug and alcohol referral group who were made subject to compulsory measure of care. Social work data was only available for sweeps one to four and should have covered the cases of 44 children. However one case remained unallocated by social work and in a further case relevant information was missing from the social work file (thus n=42).

Table 12: Issues relating to child's behaviour/well being

Behaviour/well being issues raised	**Drug/alcohol referral children with hearing (n=42) %**
Truancy	64
Drugs and/or alcohol	62
Anti-social behaviour	57
Aggressive/violent behaviour	55
Emotional problems	52
Abscond from home and/or care	45
Sexualised behaviour	33
Sexually abused	29
Social isolation	19

Note: Column does not add up to 100 as some children were assessed as having more than one problem

Table 13: Issues relating to home circumstances

Home/parental issues raised	**Drug/alcohol referral children with hearing (n=42) %**
Lack of parental control	71
Relationship breakdown	38
Parental neglect	26
Parental drug and/or alcohol use	26
Harsh parental discipline	26
Housing	19
Finance	17
Parental/family offending	14
Domestic violence	12
Mental health of parent(s)	10
Death of parent(s)	2

Note: Column does not add up to 100 as some children were assessed as having more than one problem

Table 14: Other agencies/specialist services involved in supervision

Agency/specialist service involved	Drug/alcohol referral children with hearing (n=42) %
Youth Strategy Group	52
Education welfare officer and/or educational psychologist	50
Psychiatric care	10
Sexual abuse counselling	10
Other medical care	7
Befriending	7
"Share the Care"	5
"Rural and Urban Training Scheme" (RUTS)	5
Drugs counselling	2

Note: Column does not add up to 100 as some children were referred to more than one agency/service

One of the most striking findings is that in just under two-fifths of cases (38 per cent) no mention was made in the social work file of the child's drug and/or alcohol misuse problem (see table 12) and that specialist drugs counselling was mentioned in only one case (see table 14). This does not necessarily imply that social workers failed to address the child's substance misuse problem. It may simply be that it was not recorded in the file. (Indeed some variations in recording practice were evident from the files and limited information was available about the content of supervision in some cases). Moreover it could be that the child was considered not to have a deep-seated drug and or alcohol problem which required specialist intervention.

(i) Other issues relating to child's behaviour/well being

As indicated in table 12 in over half of the drug and alcohol referral cases a key focus of social work intervention was the child's challenging behaviour (aggression/violence, other forms of anti-social behaviour and/or severe emotional problems). Truancy was a further problem to be addressed in just under two-thirds of cases (64 per cent). Many of the other issues requiring intervention indicate the extreme vulnerability of many of these children. Over two fifths (45 per cent) of the drug and alcohol referrals made subject to compulsory measures of care absconded regularly from either home or care, a third were exhibiting sexualised behaviour and just under a third (29 per cent) had been sexually abused. Moreover around a fifth of cases (19 per cent) were assessed as being socially isolated.

(ii) Issues relating to home circumstances

A very high proportion of these children were also identified as being outwith parental control (71 per cent), with just under two fifths (38 per cent) experiencing relationship breakdown and just over a quarter (26 per cent) suffering from parental neglect and/or harsh discipline (table 13). Parental substance misuse was also noted as a problem to be addressed in the cases of 11 (26 per cent) young people. Given these findings it is not surprising that a core focus of social work supervision in just under half

of the cases (48 per cent) was joint work with families and children (additional to any work undertaken with the individual child him/herself).

(iii) Specialist services
As shown in table 14, a high proportion (52 per cent) of the children made subject to compulsory measures of care, were referred to the Edinburgh City Youth Strategy Group. A core objective of this group is to keep children and young people at home with their families, in their local schools and community, with the aim of tackling truancy and exclusion and reducing the need for attendance at residential schools (see Edinburgh City Council 2004). In half of the cases there was also close collaboration between education welfare officers and/or educational psychologists and social work. A much smaller proportion of the children were referred to a range of (mostly) independent sector led services such as sexual abuse counselling (10 per cent of cases) and "RUTS" (5 per cent of cases, with a major focus on vehicle crime).

Outcome of intervention
Given the small numbers, the lack of detailed information about the content of supervision in a number of cases and the fact that not all children were made subject to the same form of intervention, it is not possible to give a definitive answer as to whether hearings referral and social work intervention helped address/diminish the child's drug and/or alcohol misuse problem. However the information that is available, would suggest that the system may have had only a limited impact. Just under two thirds of those with a hearing (47 or 63 per cent) had at least one further referral to the hearings system in later years. Moreover drug and/or alcohol misuse was raised as a key issue in the referral process in later years for just under half (36 or 48 per cent) of the children made subject to compulsory measures of care.

These findings may indicate the intractable nature of the substance misuse problems presented by some children, limited access to relevant specialist services, or the general inability of the system to impact on the other problems which prompt referral to the reporter. However, the cycle of repeat referral and the fact that early referral predicts later more intensive referral (also found in other studies, see Waterhouse *et al* 1999) does raise questions as regards effectiveness, which would repay further investigation.

PART 2: COMPARING RECORD AND NON-RECORD DRUG AND ALCOHOL MISUSERS

Although the findings show that children with a drug and/or alcohol referral present with a much higher prevalence of self-reported substance misuse than other groups, it is clear from analysis that only a very small proportion of those who report drinking regularly and/or taking drugs are known to the hearings system. As indicated in table 15, of all children at sweep two who reported drinking on a weekly basis and/or that they had taken drugs in the past year, only 18 per cent had a children's hearings record *of any kind* by that sweep. Similarly at sweep four only 21 per cent of self-reported substance misusers had a hearings record *of any kind* by that sweep. It is to the differences between record and non-record self-reported substance misusers that this part of report turns.[8]

Table 15: Record status of substance misusers

	Sweep 2 (n=485)	Sweep 4 (n=1600)
Per cent with a record	18	21
Per cent without a record	82	79

Note: Substance misusers were children who reported that they drank alcohol weekly and/or had taken drugs in the past years at sweep two or four

Drawing on questionnaire data from sweep four, part 2 begins with an overview of the demographic profile of record and non-record substance misusers. It then compares each group across a range of study variables which best approximate the key issues identified in the hearings and social work records of those children known to the system for drug and/or alcohol misuse. This is followed by more detailed exploration of factors which best predict whether a substance misuser will become known to the system.

Profile of record and non-record substance misusers

Gender, family background and neighbourhood deprivation

As indicated in table 16, a slightly higher proportion of substance misusers with a record were male as compared with non-record substance misusers (although this difference did not reach statistical significance). However (in keeping with the findings from part 1) substance misusers with a record were significantly more likely ($p<.001$) than their non-record counterparts to come from a non–two birth parent family, to be living with a single parent and to experience a high level of social deprivation as measured by both parental socio-economic status and mean volume of neighbourhood deprivation.

[8] NB The record group in this part of the paper *differs* from the drug and alcohol referral group in part 1. The record group includes only children who self-reported that they drank weekly and/or took drugs at sweep four and who had a hearings record of *any kind by* that sweep (not just a record which included a substance misuse component). As a consequence any child who was a self-reported substance misuser at sweep four but did not have a hearings record of any kind until sweep five, was included in the non-record group.

Table 16: Gender, family background and neighbourhood deprivation

	With a record	Without a record
Per cent male (NS)	53	50
Per cent not living with 2 birth parents ***	67	38
Per cent living with single parent ***	42	23
Per cent manual/unemployed***	69	39
Mean neighbourhood deprivation***	5.4	2.9

Notes: Gender; family structure and socio-economic status: significance tests between groups using Pearson chi-square test: *** p<.001; NS - Non-significant
Neighbourhood deprivation: significance tests between groups using t-test: ***p<.001

Offending, police contact and victimisation

As shown in table 17, the mean volume of self-reported serious offending was significantly higher (p<.001) amongst record substance misusers than their non-record counterparts. However there was no difference in respect of their propensity to bully others. Similarly while substance misusers with a record were more likely (p<.01) to report victimisation, there were no differences in respect of victimisation from bullying nor adult harassment (although both groups experienced much higher levels of these forms of victimisation than other cohort children).

Furthermore, although experience of adversarial police contact was common amongst both groups, those with a record were significantly more likely (p<.001) to report such contact (89 per cent of those with a record as contrasted with 65 per cent of those without a record).

Table 17: Offending, police contact and victimisation

	With record	Without record
Self reported serious offending (mean volume) ***	8.4	4.2
Bullying others (mean volume) NS	3.5	3.1
Per cent adversarial police contact***	89	65
Victimisation from five specified offences (mean volume)**	3.7	2.7
Victimisation from bullying (mean volume) NS	1.2	1.3
Victimisation from adult harassment (mean volume) NS	2.9	2.8

Notes: Serious offending, bullying others, all victimisation items: significance tests between groups using t-test: ***p<.001; **p<.01; NS – non-significant
Adversarial police contact: significance tests between groups using Pearson chi-square test: *** p<.001

Relationships, peers and routine activities
The findings indicate that both record and non record substance misusers experience low levels of parental supervision and high levels of conflict with parents (no significant difference between groups, see table 18). However those with a record were significantly more likely than their non record counterparts to hang out most evenings (p<.001) and to spend those evenings with friends (p<.01) (providing greater opportunity for getting into trouble as well as getting caught). While record substance misusers were more likely (p<.001) to report that their friends' were involved in a range of offending behaviours, there was no significant difference in terms of friends' reported alcohol or drugs misuse (prevalence of which was *extremely* high: 100 per cent in respect of alcohol and over fourth-fifths in respect of drugs for both groups).

Table 18: Family relationships, peers and routine activities

	With record	Without record
Parental supervision (mean) NS	5.3	5.5
Conflict with parents (mean) NS	4.9	4.3
% Hanging around most evenings***	78	56
Evenings out with friends (mean)**	4.8	4.6
Self-reported friends' offending (mean variety) ***	6.2	5.0
% Friends drink alcohol NS	100	100
% Friends take drugs NS	83	86

Notes: Parental supervision, conflict with parents, evenings out with friends, friends' offending: significance tests between groups using t-test: ***p<.001; **p<.01; NS – non-significant
Hanging out most evenings; friends drink/take drugs: significance tests between groups using Pearson chi-square test: *** p<.001; NS – non-significant

School
Turning finally to school related variables (table 19), whilst both groups were relatively badly behaved at school (self-report), the mean volume of such behaviour was significantly higher (p<.001) amongst the record group. Substance misusers with a record were significantly more likely (p<.001) to truant and to report poorer attachment to school. However there was no difference between the groups in respect of relationships with teachers, with both groups reporting relatively poor relationships as compared with other cohort members.

Table 19: School

	With record	Without record
Truanting (mean volume)***	6.2	3.3
Attachment to school (mean)***	11.6	12.3
Relationships with teachers (mean) NS	10.1	10.1
Bad behaviour at school (mean volume)***	8.6	5.8

Notes: Significance tests between groups using t-test: ***p<.001; NS – non-significant

While the above findings suggest that there are a number of significant differences between record and non-record substance misusers which might go some way to explaining their record status (higher levels of social deprivation, family background, persistent serious offending, hanging out most evenings with friends, disaffection with school and high truancy rates) the analysis presented thus far cannot show the relative predictive power of these variables when simultaneously controlling for each of the others. For this regression analysis is required.

Predicting record status

The method chosen for predicting record status was binary logistic regression. This method is used when the dependent variable is a simple binary variable, in this case "having a record by sweep 4" with a response set of 1 for 'yes' and 0 for 'no'. (NB record status includes any ground of referral, not just referrals with a substance misuse component).

The appropriate independent variables were entered into the model using a forward stepwise procedure, thereby allowing the statistical package to exclude those variables which did not meet the significance criteria[9]. (All continuous variables were standardized). As volume of drug misuse might be expected to increase the likelihood of referral to the hearings system amongst substance misusers, this measure was also included in the model (there is no equivalent measure of alcohol use).

A maximum likelihood paradigm with a p-value for entry into the model of 0.05 (i.e. there is less than 5 in 100 chance that the variables entered might not be predictive of the dependent variable) and for exclusion from the model of 0.1 was used. The results of the analysis are summarised in table 20 below. The lower part of the table sets out the variables excluded during analysis, as not meeting the significance criteria. The upper part shows the final model, including the odds ratio (Exp β), significance and confidence intervals for each of the factors and covariates. The odds ratio is a value which measures the strength of effect of each independent variable in the model on the dependent variable. For the purposes of this paper any independent categorical variable with an odds ratio of more than 2 is considered a strong predictor; those be-

[9] The variables relating to friends' reported offending and drug/alcohol use were not included in the model. Where a child is involved in offending or substance misuse they may report that their friends are involved in similar activities (when they are not) as a form of self-justification. Also the relationship between peer and self-reported offending is complex –children who offend may choose to associate with like-minded children. Likewise some non-delinquent children may become involved in offending because their friends offend.

tween 1.5 and 2 are described as moderate predictors and those less than 1.5 are termed weak predictors. The figures for the continuous variables show how the odds of having a record are increased by a difference of one standard deviation on the scale of the variable.

Table 20: Predicting record status amongst substance misusers at sweep 4 (n=1137)

Variables	Odds ratio	Sig.	95% CI for odds ratio	
			Lower	Upper
Family structure (not 2 birth parents)	2.6	.000	1.8	3.5
Socio-economic status (manual/unemployed)	2.1	.000	1.4	2.9
Adversarial police contact	2.4	.000	1.5	3.8
Truancy (volume)	1.2	.004	1.1	1.4
Neighbourhood deprivation	1.5	.000	1.3	1.7
Bad behaviour at school (volume)	1.2	.013	1.0	1.4
Drug use (volume)	1.2	.001	1.1	1.4
Serious offending (volume)	-	-	-	-
Hanging around (most evenings)	-	-	-	-
Victimisation (variety)	-	-	-	-
Attachment to school	-	-	-	-
Evenings out with friends	-	-	-	-

Notes: those greater than the 0.05 cut off criteria for inclusion in the model are marked -. Odds ratios and confidence intervals are rounded to one decimal point. Significance of each variable improving the model fit measured using -2 log likelihood.

While the final model shows that level of drug use does have some impact on record status amongst regular substance misusers, its influence is relatively weak. One of the strongest predictors of having a hearings record is living in a non two birth parent family (with an odds ratio of 2.6). Social deprivation also features as a moderate to strong predictor as measured by parental socio-economic status and neighbourhood deprivation.

The model also shows that experience of adversarial police contact greatly enhances a substance misusers propensity for referral into the system. This finding is not unexpected given that the police are the main gate keepers to the system for referrals with a substance misuse component. However McAra and McVie (2005) have found that youngsters in the cohort who experience the highest levels of adversarial police contact are not always those who report the most persistent serious offending nor always those who report a high prevalence of substance misuse. Indeed there is some evidence that the police may target specific categories of youngsters, in particular those from lower class backgrounds who hang out.

Although the social work and children's hearings record data (described in part 1) indicate that substance misusers known to the system are poorly motivated and lack attachment to school, the above model indicates that it is the behavioural rather than affective dimension of schooling which has the more important role to play in predicting record status. Youngsters who self report bad behaviour at school and who are frequent truants are significantly more likely to have a record, when controlling for all of the other variables. Attachment to school is non-significant in the final model.

A further striking feature of the model is that serious offending is non-significant. Although a strong link was found between offending and substance misuse in the hearings records of the drug and alcohol referral group (see part 1 above), persistent serious offending does not predict record status amongst substance misusers when controlling for other variables. Similarly although vulnerability from victimisation and negative peer influence were identified in part 1 as key issues for a number of the children in the drug and alcohol referral group, none of these were found to be significant in the final model.

CONCLUSION

In keeping with the findings of earlier research, the children in the Edinburgh cohort with a referral to the hearings system for drug and/or alcohol misuse (either as a formal ground of referral or as a core issue raised in referral reports), tend to exhibit high levels of anti-social and disruptive behaviour, to have problematic family and peer relationships and to abscond regularly from school.

The findings suggest however, that very few children who regularly drink and/or take drugs are known to the system. Substance misusers most likely to be referred (on any ground) are those who exhibit challenging behaviour in the context of *school* and those who frequently come to the attention of the police (not always the most persistent and serious offenders). Importantly, there also appears to be a selection effect in respect of family structure and social deprivation. This effect remains even after controlling for volume of drug use.

A key aim of the hearings system is to take a holistic view of the child and to focus on the child's needs. The welfarist underpinnings of the system make it likely that children living in poverty and from broken families will be perceived to have the greatest need and this may go someway to explaining these patterns of referral. However the types of intervention which social work is able to offer cannot in *themselves* always alleviate the social adversities which these children experience. Moreover there is limited evidence that substance misusers made subject to compulsory measures of care will have ready access to specialist drug or alcohol programmes. Indeed a common pattern is for such children to be re-referred to the system in later years with on-going substance misuse problems. Taken together these findings suggest that certain categories of socially deprived children may become propelled into a repeated cycle of (often ineffective) referral to the hearings system whilst the needs of children from more affluent backgrounds and from two birth parent families may be overlooked.

Importantly the children's hearings system is only one of a number of gateways through which children who misuse drugs or alcohol can gain help and support. That so few substance misusers are known to official agencies, highlights the importance of recent policy initiatives aimed at developing a broader range of community-based services, access to which is not predominantly controlled by the police, schools or social work. Given that so many substance misusers in the cohort spend a great deal of their evening leisure time hanging out in the street with friends, the findings also suggest that diversionary arts and sports programmes (such as the "twilight basketball" project mentioned in the introduction), may have an extremely important role to play in both the prevention and reduction of substance misuse amongst children.

APPENDIX 1: VARIABLES USED IN ANALYSIS

Substance Misuse

Taken any of the following illegal drugs in past year (yes/no): cannabis; glue or gas; ecstacy; cocaine; speed; heroin; LSD; magic mushrooms; downers; poppers; other drugs.

Drink weekly (yes/no)

Anti-Social Behaviour

Volume of serious offending: number of times in past year: joy-riding; carrying a weapon; vandalism; house-breaking; robbery; theft from a motor vehicle; fire-raising. These items are those rated as most serious by respondents to the sweep two questionnaire.

Volume of bullying others: number of times in past year you bullied somebody by: hitting, punching, spitting or throwing stones at them; saying nasty things, slagging them or calling them names; threatening to hurt them; ignoring them on purpose or leaving them out of things.

Victimisation

Volume of victimisation: number of times in past year someone: threatened to hurt you; actually hurt you by hitting, kicking or punching you; actually hurt you with a weapon; stole something of yours; used threat or force to steal or try to steal something from you.

Volume of being bullied: number of times in past year bullied by somebody: hitting, punching, spitting or throwing stones at you; saying nasty things, slagging you or calling you names; threatening to hurt you; ignoring you on purpose or leaving you out of things.

Volume of adult harassment: number of times in past year an adult stared at you so that you felt uncomfortable or uneasy; followed you on foot; followed you by car; tried to get you to go somewhere with them; indecently exposed themselves to you.

Adversarial Police Contact

Whether experienced any of the following forms of adversarial contact in past year (yes/no): told off or told to move on by police; stopped by police and asked questions about something you had done; picked up and taken home by police; picked up and taken to police station; formally warned by the police; charged with committing a crime.

School

Volume of truanting: number of times skipped or skived school in past year

Relationships with teachers: scale (0–15) (where 15 indicates a good relationship). Derived from: how many teachers in the past year: did you get on well with; helped you to learn; treated you fairly; you could ask for help if you had a problem with school work; you could ask for help about a personal problem; treated you like a troublemaker.

Attachment to school: scale (0-16) (where 16 indicates strong attachment). Derived from: how much agree/disagree with the following statements: school is a waste of time; school

teaches me things will help me in later life; working hard at school is important; school will help me get a good job.

Bad behaviour: scale (0–24) (where 24 indicates a high volume of bad behaviour). Derived from how often in the past year did you: arrive late for classes; fight in or outside the class; refuse to do homework or class-work; were cheeky to a teacher; used bad or offensive language; wandered around school during class time; threatened a teacher; hit or kicked a teacher.

Parenting

Parental supervision: scale (0-9) (where 9 indicates a high level of supervision). Derived from: when you went out during the past year how often did your parents know where you were going; who you were going with; what time you would be home; how often did you come home more than an hour late against your parents wishes; stay out overnight without your parents knowing where you were; run away from home for more than one night.

Conflict with parents: scale (0-18) (where 18 indicates a high level of conflict). Derived from six items on how often disagree or argue with parents about: homework; my friends; how tidy my room is; what time I get in; what I do when I go out; money.

Peers and Routine Activities

Hang around most evenings (yes/no)

Evening with friends: scale (0-6): how often spend time with friends in the evening at home or out.

Variety of Friends' Offending: (14 items): travelling without paying correct fare; shop-lifting; noisy/cheeky in public; joy-riding; carrying a weapon; graffiti; vandalism; house-breaking; robbery; steal from school; steal from home; theft from a motor vehicle; fire raising; assault.

Whether friends drunk alcohol in past year (yes/no)

Whether friends taken an illegal drug in the past year (yes/no)

Other Variables

Social class: binary measure classifying parental occupation into non-manual or manual/unemployed.

Family structure: binary measure indicating whether respondent resides with both birth parents or not.

Neighbourhood deprivation: index created using six measures of deprivation from the census according to home postcode (0-13.31: where 13.31 indicates a high level of social deprivation).

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