

Note: This is a pre-copy-editing, author-produced PDF of an article accepted for publication in *Child Care in Practice* following peer review. The definitive publisher-authenticated version [McCrystal P, Higgins K and Percy A (2005) Substance Abuse Among 12 and 13 Year Old Young People in Belfast at a High Risk of Developing Problem Drug Use, *Child Care in Practice*, 11(3), 313 – 321] is available online at <http://www.informaworld.com/smpp/title~db=all~content=g713993287>

**Substance Abuse Among 12 and 13 Year Old Young People in Belfast at
a High Risk of Developing Problem Drug Use**

Dr. Patrick McCrystal, Ms. Kathryn Higgins, Mr. Andrew Percy,

(Word count 4394)

Correspondence to:

Dr. Patrick McCrystal
Research Fellow
Institute of Child Care Research
5a Lennoxvale
Belfast BT 9 5BY

E-mail: P.McCrystal@qub.ac.uk
Tel: 028 9027 4613
Fax: 028 9068 7416

November 2004

Substance Abuse Among Young People in Belfast at a High Risk of Developing Problem Drug Use

Abstract

Twenty-nine young people aged 12-13 years considered to be at a high risk of substance abuse primarily because they no longer attend mainstream school participated in the study by completing a questionnaire designed to obtain information on their drug using behaviours. The evidence in this paper suggests that many of them are already at a high risk for problem drug use compared with their peers in mainstream education. This is heightened by the fact they are excluded from school and are not accessing school based prevention programmes delivered to their contemporaries at school. The paper concludes by suggesting that additional resources are needed to fully meet their requirements in relation to identifying and delivering appropriate drug prevention strategies.

Substance Abuse Among 12 and 13 Year Old Young People in Belfast at a High Risk of Developing Problem Drug Use

Introduction

Much of the existing evidence on drug use behaviours of young people has been obtained mainly from studies conducted in school using what Snow et al (2001) refer to as 'normal' students and excluding those no longer attending school. Some young people are more predisposed to certain risk factors placing them at a higher level of risk to problem drug use. The literature in this area has been growing recently (Duncan and McCrystal 2002; Eastwood 2000; Flood-Page et al, 2000; Gouden and Sondhi, 2001; Hayden, 1997; Hayden and Dunn, 2001; Lloyd, 1998; McCrystal et al (*in press*) Melrose, 2000; Nilson 1999; Olser et al, 2002; Powis et al, 1998; Sloboda, 1999; Ware, 1999). Catalano et al (1998) defined high risk to problem drug use as exposure to multiple risk factors, or an elevated level on one particular risk factor such as school exclusion. The study of young people categorised as high risk to substance abuse is important for a number of reasons. Firstly, by definition these young people will be more likely to use drugs than those considered to be at a lower risk, and may also be more likely to become problem drug users. Secondly, in times of budgetary constraints it makes good economic sense to target limited resources to those at highest risk or where the benefits would be greatest (Rutter et al 1998). Finally, the study of high risk young people may provide useful insights into the process of resilience, an essential issue in the study of drug use behaviours amongst young people (Rutter 1990).

Lloyd (1998) identified high risk groups as the homeless, those 'looked after' by local authorities or in foster care, young offenders, children from families with substance-abusing parents or siblings, young people with conduct or depressive disorders school

truants and those excluded from school. These young people consistently report higher levels of substance abuse and antisocial behaviour compared with their contemporaries who are categorised as not being vulnerable or 'at risk' (Adit Commission 1996; Melrose 2000; Miller and Plant 1999; Olser et al, 2002; Powis et al, 1998). This raises the question about the extent to which drug prevention initiatives offered in schools, including drug education, are meeting the needs of all young people, especially those no longer in mainstream schools. Clearly the extent to which they receive drug education appropriate to their needs that has been well researched and evaluated is unclear. For example, simple replication of mainstream school models to this group may not adequately meet their needs. Belcher and Shinutze (1998) believe this is critical, as the presence of risk factors for substance misuse has a cumulative effect and a negative correlation with drug use. For example, the OECD claims that 'two factors predict a four fold likelihood, while four factors predict a ten-fold likelihood of failure, (OECD, 1995, p.5).

This paper investigates drug using behaviours amongst a group of young people excluded from school in early adolescence when aged 12-13 years (during the period corresponding to school year 9). They form the High Risk Booster Sample cohort of the Belfast Youth Development Study (BYDS) which is a longitudinal study of the onset and development of adolescent substance abuse (McCrystal et al 2003a). Many school based studies do not include supplementary samples of the type included in the BYDS suggesting that school based surveys may be underestimating the true level of drug use amongst young people as they tend to report higher levels of substance abuse. One of the reasons many school based studies do not include booster samples of the type included in the BYDS is the difficulty involved with identifying and accessing young people who are no longer attending mainstream schools. Studies which have included a booster sample have reported higher levels of drug use among this group in comparison with

those not categorised as high risk (Leitner et al, 1993). Such findings support the view that school based surveys may underestimate the level of drug use amongst young people more generally. It also raises a question about the extent to which drug prevention initiatives offered in schools, including drug education, are meeting the needs of all young people of school age.

Methodology

The Sample: Forty-two young people excluded from school in the Greater Belfast area at school year 9 (aged 12-13 years) were identified from alternative education projects for inclusion in the study. Twenty-nine (66%) completed a questionnaire under the supervision of the researchers. Three young people refused to be interviewed even though their parents/guardians consented to their participation. Ten (23%) were absent at the prearranged interview time. Only three participants were female. This small number demonstrates one of the difficulties for researchers, i.e. justifying the resources needed to fully investigate this area due to the relatively small numbers of young people excluded from school in early adolescence, which has clearly contributed to the limited literature base on the lives and drug using behaviours of these young people (Duncan and McCrystal, 2002). Whilst there has been increasing interest from academics, practitioners and policy makers in young people excluded from school in recent years (Audit Commission, 1996; Crowley 2002; Eastwood, 2000; Goulden and Sondhi, 2001; Graham and Bowling, 1995; Hayden 1997; Melrose 2000; Osler et al, 2002; Powis et al 1998) the numbers of young people participating in the aforementioned studies ranged from 11 to 103, with a mean of 53. In addition, most studies consisted of participants who were older than those in the present study with only one containing a sample who were all younger (Hayden, 1997). This study therefore provides a contribution to the

limited literature base on the experiences of young people in early adolescence in contrast to a clear trend to study young people at risk of substance abuse in their mid to late teens.

The young people were identified for inclusion in the study for two reasons. Firstly, they are no longer attending mainstream school. Secondly their age, which ranged from 12.9 to 13.9 years with a mean of 13.4 years (median 13.3 years), the literature suggests should make them low risk to problem drug use. These two reasons also enabled the authors to compare data obtained from them with their contemporaries who remain in mainstream school who completed the same questionnaire as part of the BYDS school survey (McCrystal et al, 2002).

The Measuring Instrument

A questionnaire was developed for use in this study. It was designed to measure the drug using behaviours of young people in school year 9 (i.e. 12-13 years). It included questions on drug use, delinquency, family, school, leisure activities (McCrystal et al, 2003b). This was developed from a search of contemporary research literature in the subject area, resulting in a combination of established measures (i.e Stattin and Kerr's (2002) Parental Monitoring instrument) and other measures developed by the research team. The questionnaire was also used in a survey of young people in mainstream school year (McCrystal et al 2002). The young people who completed the questionnaire whilst in mainstream school will be referred to as the school sample (McCrystal et al, 2002) and those excluded from school as the booster sample (as they constitute the High Risk Booster Sample of the BYDS).

Data Collection

The questionnaire was completed by the young people in the alternative education project they attended under the supervision of the researchers with co-operation of participating alternative education providers. It took approximately 45 minutes to complete. Data was also collected from 4438 young people in year 9 attending 43 schools in the Greater Belfast area using the same questionnaire.

Data Analysis

Each completed measuring instrument was coded and inputted onto the SPSS software. Several categories of questions were created from the full list of questionnaire items. For example, measures of commitment to school and motivation to do well there were developed from 13 school questions. The leisure activities of the young people were investigated by asking a range of questions about the amount of time they spent doing activities at home (e.g. listening to cds, doing homework); with their friends (e.g. hang around on the street); and other outside activities (e.g. going to a sports club or team). Gender differences are not reported due to the small proportion of females in the sample.

RESULTS

The findings presented in Table 1 show relatively high levels of lifetime (e.g. have you ever tried cannabis) drug use amongst the young people surveyed. Almost all have smoked a cigarette and drank alcohol, two thirds have been intoxicated. A similar number have tried cannabis and just over one quarter have abused solvents. When compared with the school sample they are two times more likely to have been intoxicated, nearly three times more likely to have abused solvents and more than three times as likely to have tried cannabis, amyl nitrite/butyl nitrite, tranquilizers and other pills. In relation to 'hard' drugs the young people in the booster sample reported low levels of use although one quarter have taken ecstasy and a number have been offered cocaine and heroin but did not use them, suggesting that some may already be exhibiting a measure of protection against drug use.

Table 1: Drug Use and Prevalence Patterns

Drug	Been Offered	Been offered?	Ever Used?	Ever Used
	N	%	n	%
Tobacco	-	-	27	93 (53)
Alcohol	-	-	24	83 (79)
Been Drunk	-	-	19	64 (32)
Solvents	14	48 (23)	8	28 (10)
Cannabis	22	76 (32)	18	62 (20)
Magic Mushrooms	2	7 (6)	2	4 (3)
Ecstasy	10	35 (10)	7	25 (4)
Speed	5	17 (8)	0	0 (4)
LSD	3	10 (6)	0	0 (3)
Cocaine	4	14 (8)	2	7 (3)
Heroin	3	10 (5)	0	0 (2)
Amyl nitrite/butyl nitrite	12	41 (12)	6	21 (6)
Tranquilizers and other Pills	10	35 (10)	6	21 (6)

* Belfast Youth Development Study (BYDS) school survey percentages in brackets (McCrystal et al, 2002)

Frequency of substance use perhaps provides more insight into the drug using behavior of these young people. Three quarters of the booster sample smoke every day, one fifth

drink alcohol at least once a week with the same number reporting being intoxicated as often. Nearly half use cannabis at least once a week. This compares with only ten per cent of the school sample who smoke every day, four per cent of whom drank alcohol at least once per week and report being intoxicated as frequently (McCrystal et al, 2002). The most popular source of substances for the young people was to obtain them themselves by purchasing them from a shop (i.e. licit substances such as cigarettes and alcohol), friends were the next most popular source. The most popular location for using them was outside in the street. For those in the school sample, friends were the popular source for obtaining drugs, outside in street was also the most popular location for using drugs (McCrystal et al, 2002). These findings further support the role of peer groups in drug taking behaviour for all young people, a frequent finding from studies of adolescent drug use. The young people were asked questions about 15 types of delinquent behaviour during the twelve-month prior to the survey. These questions included incidents that would normally be treated as antisocial (i.e. rowdy behaviour in public) and much more serious incidents (i.e. arson, traveling in a stolen car). As a result it may be safer on this occasion to refer to these acts collectively as delinquent behaviour rather than criminal behaviour. The number of delinquent acts committed by the booster sample ranged from 1 to 12 with a mean of 4.7 acts, only one young person did not commit any such acts. Among the school sample the number of delinquent acts committed in the twelve months prior to the study ranged from one to fourteen (out of a total of 154 asked) with a mean of 2.8. A clear positive trend between delinquency and drug use was noted.

A number of aspects of the lives of the young people were examined in relation to their family, school and leisure activities. The level of parental monitoring and supervision received by the young people was measured using Statton and Kerr's (2000) 'Parental Monitoring Instrument'. This was assessed under four categories consisting of disclosure

(e.g. young people proactively offer information to parents ‘do your parents know who you have as friends during your free time?’), solicitation (e.g. parents proactively seek information, ‘how often do your parents talk with your friends if they come to your house?’), control (e.g. parental approval of activities in advance, ‘do you need to ask your parents before you can decide with your friends what you do on a Saturday evening?’) and monitoring (e.g. parents being fully aware of their activities and behaviour ‘do you talk at home about how you are doing in the different subjects at school?’). Responses to Stattin and Kerr's (2000) ‘Parental Monitoring Inventory’ (Table 2) showed a link between high levels of substance abuse, (particularly cannabis, solvent, and alcohol intoxication) and low levels of parental disclosure and solicitation, but the trend was less strong in relation to parental control.

Table 2: Family Monitoring and Drug Taking

Monitoring Level	Tobacco N=27	Alcohol N=24	Drunk N=18	Solvent N=8	Cannabis N=18	Total N=29	BYDS %
Low Disclosure	22	20	16	8	16	22	53
High Disclosure	5	4	2	0	2	7	47
Low Solicitation	15	14	12	4	11	18	53
High Solicitation	11	10	6	4	7	11	47
Low Control	14	12	9	6	9	16	47
High Control	13	12	9	5	9	13	53
Low Monitoring	17	15	13	6	13	19	44
High Monitoring	10	9	5	2	5	10	56

* Belfast Youth Development Study (BYDS) School Based Survey (McCrystal et al 2002)

Table 3 shows that most young people in the booster sample reported low levels of commitment to school (e.g. ‘I think going to school is a waste of time’), and low levels of motivation (i.e. level of educational aspiration, such as wishing to take GSCE or A level examination or go to university) to do well there. For example those reporting low

commitment to school were four times more likely to have abused solvents compared with young people in the school sample, and twice as likely to have used cannabis compared with those in mainstream education (McCrystal et al, 2003a). This trend was similar for motivation to do well at school.

Table 3: School Factors by Drug Taking

School Factor	Tobacco N=27	Alcohol N=24	Drunk N=18	Solvent N=8	Cannabis N=18	Total N=29	BYDS % n
Low Commitment	16	15	13	5	11	18	54
High Commitment	11	9	5	3	7	11	46
Low Motivation	23	20	15	7	14	18	50
High Motivation	4	4	3	1	4	11	50

* Belfast Youth Development Study (BYDS) School Based Survey (McCrystal et al 2002)

Most young people reported high levels of outside (of home) activity and low levels of home activity, with most also reporting high levels of friends based activity. This contrasted with the school sample who reported substantially higher levels of home activities and lower levels of outside activities (McCrystal et al, 2002). More than two thirds of the young people in the booster sample reported that they go out each evening of the week and a further three go out at least five nights per week. These young people accounted for almost all drug use and alcohol intoxication. This compared with just one third of those in the school sample who go out every evening (McCrystal et al, 2002).

In relation their financial situation and spending power, all but three young people reported receiving pocket money from a parent/guardian on a weekly basis (mean =£11.11) with thirteen saying they receive additional income from working (mean = £13.92 per week) a factor sometimes associated with higher levels of drug use in adolescence (Greenberger et al, 1981; Mortimer et al, 1992; Steinberg et al, 1982). They

have more money to spend than those in the school survey (mean pocket money = £7.13 and mean earning of £4.75 from working).

Discussion

Despite the claim that young people aged 12-13 years may be considered low risk (because of their age) to substance misuse than those in later adolescence (Manning et al, 2001; Smit et al, 2002), those participating in the present study reported high levels of drug use and delinquency, and exhibited factors associated with increased levels of risk to drug use. As a group, the young people are already exhibiting risk factors (i.e. detachment from school, and receiving low parental monitoring) for adolescent drug use at a relatively young age. A number of them are already exhibiting the early signs of problem drug use, for example cannabis use at least once per week. Many of this group will not return to school with the associated disadvantages linked to school exclusion before entering adult life. For example, they already lead a lifestyle that leaves them at risk to further social disaffection and detachment from mainstream society generally which can further exacerbate their journey into a lifestyle of antisocial behaviour, further marginalisation and possible social exclusion. These findings are supported by the recent MORI Youth Survey (2004) which confirmed the link between school exclusion, offending and drug use amongst young people. For some this may already have begun.

An important role in drug prevention strategies is to address risk factors in order to reduce the likelihood of them occurring. A number of the young people participating in his study have been offered drugs but did not use them (Table 1), suggesting they may be exhibiting a measure of protection to drug use. In fact they are more likely to be offered drugs than those still attending school. The survey approach of this study did not enable us to further explore this issue. The findings of this study have also enabled the

identification of the full range of 'hard' drugs being offered to young people at age 12/13 years, and some insights into their contrasting lifestyle compared to their contemporaries in mainstream school.

The young people in the study are receiving some educational and social support relative to their assessed needs through attendance at alternative education projects but will not receive the drugs education that is now part of the school curriculum in Northern Ireland (DENI, 2002). The development of prevention programmes designed to meet their specific needs and delivered within the support network offered to them are of particular importance. There are however a number of problems in the delivery of such programmes. These include effective identification of those most in need and ensuring they access drug prevention programmes. Perhaps more importantly is a full understanding of the drug using behaviours and lifestyles of young people at this age who are categorised as at a high risk of developing problem drug use. It is clear that without investing resources in this area our knowledge base on the drug using behaviors of this group will remain limited.

In conclusion, the findings in this study suggest an increasingly difficult period ahead for a group of young people already at risk of future problem drug use, who are also at a high risk of becoming marginalised within society. The limited literature base that currently exists on the drug using behaviours of this particular group demands attention. Such attention will assist the development of appropriate strategies for drug prevention for young people at 'risk' of problem drug use. The present study has also highlighted and overcome some of the methodological difficulties faced by researchers in order to successfully achieve this (at least in relation to school excludees). In doing so it also highlights good research practice that could become an inherent part of studying young people at a high risk of drug use.

References

Audit Commission (1996). *Misspent Youth: Young People and Crime*. London: Audit Commission.

Belcher, H.M.E. & Shinutzky, H.E. (1998). Substance abuse in children. Prediction, protection, and prevention. *Archives of Pediatric and Adolescent Medicine*, 152, pp. 952-60.

Catalano, R.F., Haggerty, K.P., Gainey, R. R., Hoppe, M.J., and Brewer, D.D. (1998). Effectiveness of prevention with youth at high risk of drug abuse. In W.J. Bukoski and R.I. Evans (eds). *Cost benefit/Cost effectiveness Research of Drug Prevention: Implication for Programming and Policy*. Rockville: NIDA Research Monograph 176.

Crowley, (1998). *A Criminal Waste: A Study of Child Offenders Eligible for Secure Training Centres*. London: The Children's Society.

Department of Education for Northern Ireland (2002). *Pastoral Care in Northern Ireland*. Bangor: DENI.

Duncan, L and McCrystal, P. (2002). School Exclusion and Adolescent Drug Use In Northern Ireland: A Problem Being Addressed? *Child Care in Practice*, 8, 3 176-186.

Eastwood, C. (2000). Who is 'out of school'. *Child Care in Practice*, 6, 1, pp. 9-26.

Flood-Page, C., Campbell, S., Harrington,V., and Miller, J. (2000). *Youth Crime: findings from the 1998/99 Youth Lifestyles Survey*. Home Office Research Study 209. London: Home Office.

Goulden, C. and Sondhi, A. (2001). *At the margins: drug use by vulnerable young people in the*

1998/99 Youth Lifestyles Survey. London: Home Office Research Study 228.

Graham, J. and Bowling, B. (1995). *Young people and crime*. Home Office Research Study 145. London: Home Office.

Greenberger, E., Steinberg, L.D. and Vaux, A. (1981). Adolescents who work: health and behavioural consequences of job stress. *Developmental Psychology*, 17(6), 691-701.

Hawkins, J.D., Catalano, R.F., and Miller, J. Y., (1992). Risk and Protective Factors for Alcohol and Other Drug Problems in Adolescence and early Adulthood: Implications for Substance Abuse Prevention. *Psychological Bulletin*, 112, 64-105.

Hawkins, J.D., Catalano, R.F., and Arthur, M. (2002). Promoting science-based prevention in communities. *Addictive Behaviours*, 27, 951-976.

Hayden, C. (1997). *Excluded from Primary School: Debates, Evidence Responses*. Buckingham: Open University Press.

Hayden, C. and Dunn, S. (2001). *Outside looking in. Children and families experiences of exclusion from school*. London: The Children's Society.

Leitner, , M., Shapland, J., and Wiles, P. (1993). *Drug Usage and Drugs Prevention*. London: HMSO.

Manning, V., Best, D., Rawaf, S., Rowley, J., Floyd, K., and Strang, J. (2001). Drug use in adolescence: the relationship between opportunity, initial use and continuation of use of four illicit drugs in a cohort of 14-16 year olds in South London. *Drugs: education, prevention, and policy*, 8, 397-405.

McCrystal, P, Higgins K. and Percy, A. and Thornton, M. (2002). *Youth Development Study. Research Update for Schools Issue 2: Autumn 2002*. Belfast: Institute for Child Care Research.

McCrystal, P, Higgins K. and Percy, A. and Thornton, M. (2003a). Emerging patterns in Adolescent drug use in Northern Ireland: The Belfast Youth Development Study 2002. *Child Care in Practice*, 9, 1, 73-83.

McCrystal, P., Higgins K. and Percy, A. (2003b). *Youth Development Study: Technical Report 2002*. Belfast: Institute of Child Care Research Queens University Belfast.

McCrystal, P, Higgins K. and Percy, A. and Thornton, M. (*in press*). Adolescent drug use and school exclusion in greater Belfast. *Drugs: education policy and prevention*.

Melrose, M. (2000). *Fixing it? Young People, Drugs and Disadvantage*. Dorset: Russell House Publishing.

Miller, P. and Plant, M. (1999). Truancy and perceived school performance: an alcohol and drug study of UK teenagers, *Alcohol and Alcoholism*, 34 (6) pp. 886-93.

MORI (2004). *MORI Youth Survey*. London:MORI.

Mortimer, J.T., Finch, M.D., Shanahan, M., and Ryu, S. (1992). Work experience, mental health and behavioural adjustment in adolescence. *Journal of Research on Adolescence*, 2(1), 25-57.

Nilson, M. (1999). Drug use among vulnerable groups of young people: comments. *Drugs: education, prevention and policy*, 6 (12), 203-204.

Osler, A., Street, C., Lall, M., and Vincent, K. (2002). *Not a Problem? Girls and school*

exclusion. York: Joseph Rowntree Foundation.

OECD (1995). *Our children at risk*. Paris: OECD.

Powis, B., Griffiths, P., Gossop, M. Lloyd, C. and Strang, J. (1998). Drug use and offending behaviour among young people excluded from school, *Drugs: education, prevention and policy*, 5 (3), pp. 245-56.

Rutter, M. Giller, H. and Hagell, A. (1998). *Antisocial Behaviour by Young People*. Cambridge: Cambridge University Press.

Rutter, M. (1990). Psychological resilience and protective mechanisms. In J. Rolf, A.S. Masten, D. Cicchetti, K.H. Neuchterlein, and S. Weitraub. *Risk and Protective Factors*

Sloboda, Z. (1999). Problems for the future? Drug use among vulnerable groups of young people. *rugs: education, prevention and policy*, 6 (1), 195-201.

Smit, F., monshouwer, K., and Verdurman, J. (2002). Polydrug use among secondary school students: combinations, prevalences and risk profiles. *Drugs: education Prevention and Policy*, 9 (4) 355-365.

Snow, P. C., Wallace, S.D. and Munro, G.D. (2001). Drug Education with Special Needs Populations: identifying and understanding the challenges. *Drugs; education, prevention and policy*. 8(3), 261-273.

Stattin, H. and Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, 71 (4), 1072-1085.

Steinberg, L.D., Greenberger, E., Garduquel, L. and McAuliff, S. (1982). High School Students in the Labour Force: Some Costs and Benefits to Schooling and Learning. *Education Evaluation and Policy Analysis*, 4 (3), 363-372.

Ware, S. R. (1999). Editorial: Imprisonment - is this is the only way society can deal with vulnerable and excluded people with alcohol and drug problems. *Drugs: education, prevention and policy*, 6 (1), 5-6.