

Substance .use in Early Adolescence: A Study of The Rates and Patterns of Substance Use among Pupils in Dublin

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INTRODUCTION

In the last decade the use and abuse of substances has become recognised as a major national and international problem. The prevalence of substance use among young people has received considerable attention. While there is no shortage of anecdotal evidence regarding the use of substances among adolescents, it is only recently that research has been conducted in this area in Ireland. The present study aims to update information on trends and patterns of substance use among adolescents in Dublin and to gain information on the differences in rates and patterns of substance use between five European cities.

1.1 Definitions of Adolescent Substance Use

While there seems to be a consensus that the use and abuse of drugs, particularly among adolescents, is a growing problem and one which has important consequences for our society, there is no general agreement about how this problem can be defined and described. Medical conceptualisations of addiction and substance dependency differentiate between non-problematic use of substances and misuse or problematic use. Traditionally this distinction has not been applied to adolescent drug use. This is because there was, and to a certain extent still is, an underlying assumption that all adolescent drug use is deviant and problematic and therefore can be described as drug abuse.

The assumption that all adolescent drug use is problematic is based on both the medical model and the criminal status of drug use. The former defines drugs as physically and psychologically harmful and people who use drugs as 'sick'. The latter defines adolescent use of alcohol and cigarettes and all use of other substances as illegal and therefore deviant. Research generally ignores the more positive reasons for and aspects of drug taking and adopts a problem perspective. This view does not allow for the fact that there are large differences in behavioural outcomes of illicit drug use. Gutierrez et al (1994) has found that infrequent or experimental users actually share more similarities with abstainers than with frequent substance users. The belief that all substance use is

dysfunctional may serve to distract us from focusing on the antecedents to more serious teen substance use and the concurrent problems that accompany the misuse. It also ignores the reality of the user, and their experiences. Adolescents themselves have a more sophisticated view of their own drug use and that of their peers. They recognise that not all drug use is problematic, distinguish between different types of use and often recognise a hierarchy of drugs (e.g. hard and soft drugs). Adolescents may use drugs to substantive ends, for example to increase sociability and to expressive ends (Glassner & Loughlin, 1987). The danger of relaying the message that all drugs are bad through prevention programmes and drug education is that it does not take into account the reality of those it is trying to target. This may result in adolescents rejecting the message of prevention/education.

It is useful to make a distinction between use and misuse of substances as it reflects a more realistic view of adolescent substance use. It also allows for the identification of factors that differentiate between those whose use is problematic and those who use substances in a more positive way.

The assertion that there is such a thing as non-problematic adolescent drug use is a contentious one. It questions the assumption underlying the vast majority of drug research and drug related policy - that all drugs are bad. There is a marked dissonance between policy on the one hand and services on the other. While the emphasis is on repression and abstinence at policy level, many services adopt a harm reduction approach and a goal of non-problematic or controlled use rather than abuse. Recent government documents have shown some recognition of the variety of patterns of drug use and the possibility that all use is not misuse (e.g. Department of the Taoiseach, 1997). Policies, prevention programmes and media campaigns however continue to stress abstinence and seek to prevent *all* drug use. The 'Just Say No' campaign in America demonstrates the flaws in this type of approach - an approach which stems from the belief that there is no such thing as responsible use of substances and that children can be taught never to drink or smoke.

According to Newcomb and Rentier (1988) “as scientists, we must challenge the rather uncritical and unscientific assumption that drug use, in and of itself, is bad and should be prevented, understood or treated” (p. 14). Research has consistently shown that a large proportion of adolescents regularly use alcohol and cigarettes, and that a growing proportion are regular users of illicit substances. Dryfoos (1990) argues that “experimentation with substances must be viewed as one of the developmental task of early adolescents” (p. 45). Only a small number will experience problems associated with their use, or will go on to develop a dependence. Experimentation and a variable pattern of use and cessation have been found to be much more common than heavy or problematic use (Howard, 1997).

While recognising the naivety of the assertion that all drugs are bad it is important not to lose sight of the fact that many adolescents do experience problems associated with dependence on drugs (e.g. increase in tolerance, withdrawal symptoms, and attempts to curtail use). We must be very careful about using terms like ‘normal’ and ‘healthy’ in relation to adolescent substance use, as this implies condonement. The health risk from regular smoking and drinking has been well documented, and even infrequent use of substances can have serious consequences for the physical and emotional well being of an individual. Regular use of substances during adolescence has been found to result in delays in achieving developmental goals, and a pseudo-maturity which ill prepares the individual for the real difficulties of adult life (Newcomb & Rentier, 1988).

What is needed in defining adolescent substance use is a recognition that there are different levels of drug involvement, even in adolescence. The ways in which the concept of adolescent substance use was defined twenty years ago is no longer relevant, as such behaviour has increasingly become part of the normal repertoire of adolescent behaviours. The way in which substance use and abuse is defined is also subject to cultural differences. It depends on a particular society’s norms with respect to the acceptability of recreational use of substances, its definitions of heavy use and its

tolerance for substance related problem behaviour. This illustrates the need to regularly update the way in which use and abuse, experimental and regular use etc. are defined and to clarify what is meant by these terms.

1.2 Research on Adolescent Substance Use in Ireland

Up until relatively recently there was a distinct lack of research in this area in Ireland. The first studies of adolescent illicit drug use in Ireland were conducted in the 1970's and these studies showed low rates of lifetime use of illegal substances among Irish pupils (1.3% of pupils aged under 16 and 4.9% of pupils over 16 years of age) (Nevin et al, 1971). The same type of survey was conducted a decade later and results showed a marked increase when compared to the earlier study (9.0% of those under 16 years and 20.0% of those over 16 years had taken drugs) (Shelley et al, 1982).

Grube and Morgan (1986, 1990) conducted a series of studies in the mid to late 80's in order to estimate the prevalence of smoking, drinking and use of drugs. In a nation-wide sample of pupils aged between 13 and 17 years the authors found that a quarter of pupils were regular smokers and over a third were regular drinkers. It was found that just over one fifth of the sample had tried drugs other than tobacco and alcohol, with marijuana and glue or other inhalants being the most popular.

“The results of the ESRI surveys showed that Irish teenagers had low rates of drug use when compared with teenagers in other countries, with the exception of solvent and inhalant use which was high by international standards (Morgan & Grube, 1989).

Recently there has been a move to large scale surveys which compare data gathered in a similar way in different countries. This has illustrated the differences that exist between countries - in both the drugs that are available to young people and in rates and patterns of use. The European School Survey Project on Alcohol and other Drugs, or ESPAD (Hibell et al, 1997) is one such study. Surveys were conducted in 26 countries, including Ireland, where a national sample of 1849 fifth year pupils participated in the survey.

74% of pupils had tried smoking cigarettes at least once, while 37% were regular smokers'. Both figures are higher than the average proportion for all countries. The proportion of students who reported drinking alcohol during the last 12 months was 87% - somewhat higher than average for all the countries. Binge drinking (drinking 5 drinks or more in a row) was reported by 23% of Irish students - the highest rate amongst participating countries.

Use of illegal drugs was found to be very common among Irish students: 37% indicated use of cannabis and 16% had used an illicit drug other than cannabis. Again these rates are considerably higher than the average for all participating countries. The most commonly used illegal drugs after cannabis were LSD or other hallucinogens, and ecstasy. 1% of students had used drugs by injection. Looking at frequency of use, 10% of students reported having used cannabis 20 times or more while 19% had used cannabis in the last thirty days.

The age at which pupils had first used substances was examined. Approximately a fifth of pupils reported having started daily smoking by age 13 or younger and the same proportion reported having been drunk at that age. 9% of Irish students had used inhalants at age 13 or less and 7% had used cannabis at this age.

The ESPAD study (Hibell et al, 1997) found that a higher proportion of girls than boys smoked, while boys had higher rates than girls on all measures of alcohol use and drunkenness. A higher proportion of boys than girls had also tried cannabis and any other illicit drug. More boys than girls also reported early onset of use of illicit drugs (13 years or younger). However, when compared to data from the studies conducted in the 1980's, the findings suggest a slight convergence in rates of alcohol and illegal drug use between the sexes.

A 1996 survey which examined use of illicit substances among fourth and fifth year pupils (15-17 year olds) in North Dublin (Murphy, 1996) found that lifetime prevalence of any of four drugs (cannabis, amphetamines, LSD, Ecstasy) was 62.5%. Boys reported a higher rate of drug use compared to girls.

Data from these surveys show a marked increase in the use of substances, both legal and illegal, among the Irish school population. While a similar trend has been observed in other countries, the increase seems to be particularly marked in Ireland. While surveys conducted in the 1980's found that substance use among Irish adolescents was low by international standards, more recent surveys have revealed a change. The ESPAD (Hibell et al, 1997) study found higher rates of use for all substances among Irish pupils when compared to the 25 other European countries that took part in the survey. This was particularly true of illicit drug use.

There are several possible explanations for the increase and the current high rates. Literature on substance use suggests that an increase in rates of use may be associated with increased consumerism (Parker, 1997), economic growth (Osterburg, 1986), changes in parenting patterns, or a decrease in the importance of religion and the opportunities for occupational achievement (Silbereisen, 1995).

Previous studies have found that prevalence of adolescent substance use is significantly higher in Dublin compared to rural areas. While national surveys such as the ESPAD are useful for cross-national comparisons, it is also important to gather localised data. This will increase knowledge of regional differences and allow prevention strategies to be designed to address local needs.

Recent studies of substance use among school populations have investigated use among post Junior Certificate pupils. If we are to gain an understanding of the nature of

¹ lifetime use of 40 times or more

problematic substance use it is essential that we also look at a younger adolescent population. Research points to the fact that children who use alcohol and other drugs before the age of 15 have a greater likelihood of becoming problem alcohol and drug users. The early use of substances has also been found to be associated with worst outcome in terms of both likelihood of dependence and its persistence (Robins, 1992). The use and abuse of substances may be defined differently and be associated in distinct ways depending on the specific age group being studied (Newcomb, 1992). Surveying younger teenagers will tell us whether the normalisation of substance use is confined to older adolescents or whether it has filtered down to a younger age group. It will also discover whether the pattern of poly-drug use and use of the so-called dance drugs (ecstasy, amphetamines and LSD) is to be found among the younger population.

1.3 Theories on Adolescent Drug Use

A large number of theories have been developed since the early 70's in an attempt to better understand drug use and misuse. These theories draw from a variety of disciplines and emphasise different aspects and patterns of drug use. Social learning theory sees the use of substances as a learned behaviour. According to problem behaviour theory substance use in adolescence is an aspect of a general anti-establishment unconventional behaviour. Strain theory sees substance use as resulting from frustrated needs or wants while social control theory links it with weak internalised social controls. One of the shortcomings of the above theories is that they focus on one dimension of drug abuse. Each theory can be said to relate to and have explanatory power for one type or pattern of substance use, but they do not take into account the fact that the non-medical use of substances is a multi-dimensional phenomenon. There are many different types and patterns of drug use which vary for type of drug, place along the use-misuse-dependence continuum and characteristics and circumstance of the user. Each of the patterns and types of use may also be the result of multiple factors, which operate in a number of contexts.

What is needed is a theoretical approach which recognises that “individuals may be influenced by radically different situations, producing different effects on their behaviour” and the fact that “the same behaviour may have totally different causes in different people” (Gorusch, 1983, p. 19). A theory which accurately reflects the heterogeneity of drug use and which can be of use in the design of intervention and prevention programmes needs to take into account the different stages of drug involvement. It cannot be assumed that experimentation and frequent use or initial drug use and drug addiction are subject to the same etiological factors and this is one of the limitations of many models of drug abuse. There is also a need to include socio-cultural factors in any model or theory of drug use. Explanations that emphasise individual characteristics or attributes of personality overlook situational variables such as availability, social norms and laws. These obviously have an important impact on how, and which drugs are used and by whom. What is needed is a ecological or social situational model.

Several authors have proposed a risk-factor approach to understanding teenage drug use (Newcomb et al, 1987; Bry, 1983). It is argued that this approach allows for the fact that there are numerous pathways to substance use that are not captured by a single etiological cause. Any one factor, deviant attitudes for example, is not considered the definitive etiological cause of drug use, but is considered “one factor in a cumulative ecology of influences that are associated with increased drug involvement”. This approach also allows for the fact that different factors may play different roles at various stages of drug involvement and in different populations or subgroups.

1.4 Risk and Protective Factors

Clayton (1992) defines a risk factor as “an individual attribute, individual characteristic, situational condition, or environmental context that increases the probability of drug use or abuse or a transition in level of involvement with drugs”.

Risk factors have been well researched in the United States and available evidence indicates that adolescent substance abuse is the result of multiple factors that are social, intrapersonal, and developmental in nature. Recent studies have divided risk factors into contextual factors and individual/interpersonal factors (e.g. Hawkins and Catalano 1992) This approach expands on the former focus on individual characteristics thus representing a more ecological, multi-dimensional and dynamic approach. Attempts have also been made to distinguish between risk factors associated with different levels of use (Gutierrez et al 1994, Sheier & Newcomb 1991) and to investigate the impact of social and demographic differences on risk factors (Newcomb 1987). In line with the multi-causal approach, research has demonstrated that several risk or protective factors can have an impact on a single outcome and that the influence is cumulative (Bry 1992,1993; Newcomb, 1986).

Among the risk factors identified for adolescent drug use are:

- Low commitment to school
- Cognitive impairment
- Academic failure
- Low religious involvement
- Early persistent problems behaviours
- Poor, inconsistent family management practices
- Family conflict
- Low bonding to family
- Alienation/rebellion
- Family drug behaviour
- Attitudes favourable to drug use
- Sensation seeking
- Attention deficit/hyperactivity
- Low autonomic and central nervous system arousal
- Hormonal factors

- Peer rejection in elementary school
- Association with drug using peers
- Laws and norms
- Availability
- Extreme economic deprivation
- Neighbourhood disorganisation (From Hawkins, Catalano & Miller, 1992)

Recent developmental research has shifted from a focus on risk factors to examine the role of protective factors that moderate the effects of exposure to risk and the identification of factors that contribute to an individual's resiliency. Resilience, according to Rutter (1992), is concerned with individual variations in response to risk factors and protective factors operate by modifying a person's response to a risk situation. Applied to drug use, a focus on resilience would involve identifying the factors that differentiate between early drug users who go on to abuse drugs and those who do not make this transition.

There is a growing body of research which examines the role of protective influences on adolescent substance use (e.g. Scheier et al 1994, Newcomb 1992, Newcomb & Felix-Ortiz 1992). In relation to substance abuse Clayton (1992) defines protective factor as "an individual attribute, individual characteristic, situational condition, or environmental context that inhibits, reduces, or buffers the probability of drug use or abuse or a transition in level of involvement with drugs". This is a promising area as may help us to understand why some people respond to the combination of social and familial risk factors in a more adaptive way than others.

1.5 Aims of Research

The study aims, within an Irish context, to:

- examine prevalence and patterns of use of legal and illegal substances among young adolescents

- examine gender and socio-economic differences in rates and patterns of substance use
- refine the understanding of risk and protective factors associated with drug use and other risky behaviours
- examine factors that differentiate between abstainers (both vulnerable and resistant), experimental and repeated users
- expand the way in which substance use in adolescence has been defined
- strengthen research on drugs in Ireland.

The study was conducted as part of a European collaborative project. The project, called Drug Dependence: Risk and Monitoring (DDRAM), was conducted in five cities:

Newcastle upon Tyne, Dublin, Groningen, Rome and Bremen. The DDRAM project aims to:

- monitor trends in the use of legal and illegal substances and examine associated factors among young people (aged 14 and 15 years) in their second year of secondary education in the five cities
- to gain comparative information on the rates and patterns of substance use among young people in the five cities
- to establish a data base concerning 10 to 12 year olds as the initial stage of a planned longitudinal study of risk and protective factors associated with risk taking behaviour and - to refine the understanding of antecedents of risk behaviours and the identification of young people at risk
- to strengthen research on drugs in Europe

METHOD

2.1 Sample

The sample consisted of 983 second year pupils in 16 schools in the Dublin metropolitan area. The schools were selected using a stratified random sampling technique, with a definite balance being maintained by school type - vocational, secondary in disadvantaged area, secondary in non-disadvantaged area and private school. One special school, a school for travellers, was included in the sample. A balance of gender was also aimed for.

2.2 Response rates

Overall the response from schools was very positive, with only 3 schools deciding not to participate in the survey. Reasons given for non-participation included: concerns about negative publicity and the effect on school reputation, participation in previous research on substance use, and concern that it would make drug taking or delinquent behaviour more acceptable to pupils. In each case a refusing school was replaced from the original sampling list by a school matched on the stratification characteristics.

2.3 Research Instrument

The research instrument used was a self-report questionnaire, a format used in many previous studies of drug-taking. The questionnaire included questions on trends and patterns of substance use, delinquency, risk-taking behaviour, peer-affiliation, free-time activities, family structure, emotional and behavioural problems and adaptation to school.

2.4 Procedure

A letter was sent to parents of all second year pupils in each participating school. The parent letter gave a brief outline of the study, described the questionnaire and gave parents the option of refusing permission for their child to take part in the study (by returning a slip to the school).

The researcher then visited the school and distributed the questionnaires, remaining with the pupils throughout to answer any questions etc. The aims and nature of the survey Were explained to pupils and the fact that the survey was voluntary, confidential and anonymous was emphasised. In most cases teachers were not present during the time it took pupils to complete the questionnaire (9 out of 16 schools). This was not possible in every school due to disciplinary concerns. Pupils were usually given between 60 and 80 to complete the questionnaire.

There was a very positive response to the questionnaire by pupils in all sixteen participating schools. Excluding absentees and questionnaires excluded from analysis because of inconsistencies or other defects (8 questionnaires), 983 students completed the survey.

Results

3.1 The Sample

The sample of 983 questionnaires had a higher proportion of girls than boys, with 570 girls (58% of sample) and 409 boys (42% of sample). The age breakdown of participating pupils can be seen in Table 1.1. The majority of pupils were born in 1982 or 1983, and so were 14 and 15 years of age at the time of the study. The mean age was 14.38.

Table 1.1 Respondents year of birth by gender - percentages'

<i>YEAR</i>	<i>GENDER</i>		
	<i>female</i>	<i>male</i>	<i>total</i>
1981	2 (12)	2 (10)	2 (22)
1982	43 (242)	31 (124)	38 (366)
1983	54 (307)	54 (218)	54 (525)
1984	1 (5)	13 (51)	6 (56)
TOTAL	100 (566)	100 (403)	100 (969)

Note: Valid Cases = 969, Missing cases = 14. Ns in parentheses.

The family structure of participating pupils can be seen in Table 1.2. The majority of pupils (80%) lived in an intact family, which was defined as a family with both natural parents living in the home. 14% lived in a single-parent family and 2% lived in a step-family, which was defined as a family with the mother and the mother's partner, or the father and the father's partner living in the home.

Table 1.2 Respondents family structure

<i>FAMILY</i>	<i>%</i>	<i>N</i>
intact family	80	(787)
step-family	2	(20)
single-parent family	14	(137)
Other	4	(39)
TOTAL	100	(983)

Note: Valid Cases = 983, Missing cases = 0. Ns in parentheses.

Parental employment can be seen in Table 1.3. Just under a third of the sample (32%) had a father in employment and a mother who did not work outside the home. Just

over a quarter (27%) had two parents in full-time employment and just under a quarter (24%) had one parent in full-time employment and one parent in part-time employment.

Table 1.3 Respondents parents employment

<i>PARENTAL EMPLOYMENT</i>	<i>%</i>	<i>N</i>
both work full-time	27	(255)
one full-time, one part-time	24	(225)
both work part-time	3	(26)
father works, mother doesn't	32	(300)
mother works, father doesn't	10	(95)
both unemployed	4	(42)
TOTAL	100	(943)

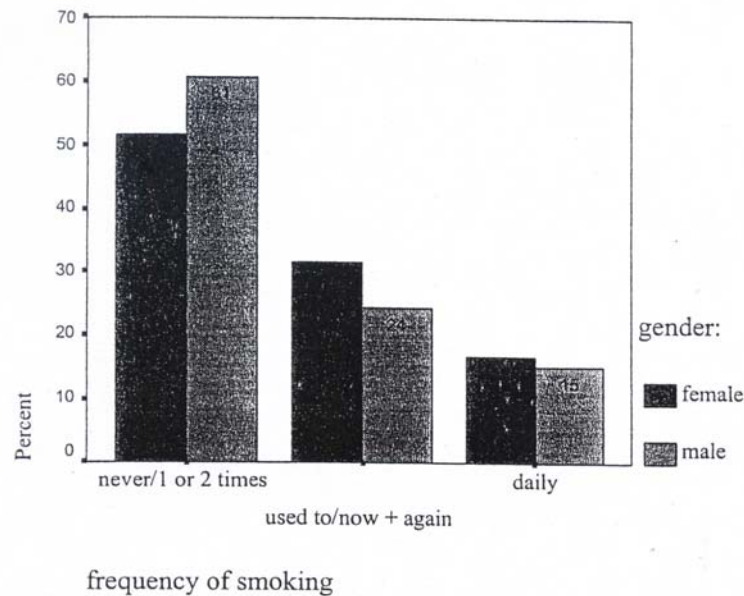
Note: Valid Cases = 943, Missing cases = 40. Ns in parentheses.

Substance Use

3.2 Tobacco

Pupils were asked whether they had ever smoked. A third of the total sample had never smoked cigarettes, 22% had smoked once or twice, 15% used to smoke but had stopped, 9% smoked now and again and 16% smoked cigarettes daily. Respondents were divided into three categories depending on frequency of use of cigarettes: those who never smoked or who had smoked once or twice, those who used to smoke or who smoke now and again and those who smoke daily. Figure 2.1 presents the percentage of responses for each of the three tobacco use categories. There was a significant difference between the proportion of girls and boys who reported that they smoked ($X^2(4) = 19.124, p < .001$). As can be seen from the chart more girls than boys reported that they smoke daily and that they used to smoke or smoke now and again.

Figure 2.1 Reported use of tobacco by gender - percentages.



Pupils who reported that they smoked were asked to state what age they had started smoking. The average age at which pupils first smoked cigarettes was 10.8 years ($SD = 2.1$). The mean age at which boys started smoking (10.4 yrs) was significantly lower than the mean age among girls (11.0 yrs), $t(363) = 3.27$, $p < .001$.

Pupils were also asked to indicate how many cigarettes they smoked on average each day. The mean number of cigarettes smoked was 4.2 ($SD = 5.7$). Although a higher proportion of girls reported smoking than boys, boys smoke more cigarettes on average than girls. The mean number of cigarettes reported by boys was 4.7 compared to a mean of 3.9 cigarettes reported by girls. This difference was not found to be significant, $t(405) = -1.63$, $p > 0.10$. Table 2.1 shows the numbers of cigarettes smoked each day, by category. The differences between girls and boys was found to be significant, $X^2(3) = 9.5$, $p < .05$. As can be seen from the table a much higher proportion of boys than girls reported that they smoke more than 10 cigarettes a day.

Table 2.1 Average number of cigarettes smoked each day among pupils who smoke by gender - percentages

NUMBER OF CIGARETTES	GENDER		
	<i>girls</i>	<i>boys</i>	<i>total</i>
1-2 cigarettes	34 (76)	27 (39)	31 (115)
3-5 cigarettes	27 (59)	27 (40)	27 (99)
6-10 cigarettes	31 (69)	29 (42)	30 (111)
11 + cigarettes	8 (17)	18 (26)	12 (43)
TOTAL	100 (221)	101 (147)	100 (368)

Note: Ns in parentheses, non smokers =321, Missing cases 96

Pupils who smoked were asked to indicate how they usually obtained cigarettes. Of pupils who smoked¹, 61% said that they bought their cigarettes and 60% said that they obtained them from a friend. 43% said that cigarettes were shared around a group of friends, 18% said that they took them from home without their parents permission and 18% said that they obtained them from a brother or sister.

Pupils were asked, if they had ever smoked, to indicate their reasons for smoking. Pupils who had never smoked were asked to indicate their reasons for not smoking. Reasons given for smoking can be seen in Table 2.2, while Table 2.3 shows the reasons given for not smoking.

The majority of smokers said they smoked because they wanted to try (78%). The next most common reasons were 'because my friends smoke' (38%) and 'because it relaxes me' (23%). Some significant gender differences emerged, with a higher proportion of girls citing 'wanted to try' as a reason ($X^2 (1) = 25.3, p > .001$) and a higher proportion of boys saying that they smoked 'because my friends smoke' ($X^2 (1) = 3.9, p > .05$) and 'because it relaxes me' ($X^2 (1) = 7.4, p > .01$).

¹Valid cases = 485, missing cases = 498 of which 247 were non-smokers

Looking at the reasons given for not smoking, the majority of pupils (79%) who did not smoke said it was because 'its bad for the health'. Approximately a third of pupils said it was because they practise a sport (34%) or because their parents forbid it or advise against it (30%). Again some significant gender differences emerged. A higher proportion of boys than girls said they did not smoke because it is bad for the health ($X^2(1) = 3.9, p > .05$) or because they practise a sport ($X^2(1) = 36.9, p > .001$), while a higher proportion of girls than boys said they didn't like the taste ($X^2(1) = 9.7, p > .01$).

Table 2.2 Reasons for smoking by gender - percentages of those who have smoked

REASONS FOR SMOKING	GENDER		
	girls	boys	total
My friends smoke	35 (139)	*43 (104)	38 (243)
Wanted to try	***85 (336)	68 (171)	78 (507)
It relaxes me	19 (77)	**29 (72)	23 (149)
I can't quit	17 (68)	12 (30)	15 (98)
People smoke in the places I usually go	20 (78)	17 (44)	19 (122)

Notes: Valid cases = 650, Missing cases = 336 of which 321 were non-smokers. Ns in parentheses. Total % exceeds 100 since respondents could tick up to three reasons.

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 2.3 Reasons for not smoking by gender - percentages of those who have not smoked

REASONS FOR NOT SMOKING	GENDER		
	girls	boys	total
Its bad for the health	77 (309)	*83 (234)	79 (543)
I don't like the taste	**31 (126)	21 (58)	27 (184)
My parents advise me not to or forbid me to	29 (115)	33 (92)	30 (207)
I practise a sport	25 (101)	***47 (134)	34 (235)
I'm too young	21 (86)	17 (48)	20 (134)
Its too expensive	30 (122)	25 (70)	28 (192)

Notes: Valid cases = 689, Missing cases = 294 of which 201 are smokers. Ns in parentheses. Total % exceeds 100 since respondents could tick up to three reasons.

* $p < .05$ ** $p < .01$ *** $p < .001$

When the pupils who smoked were asked what their parents thought about them smoking, 55% said that their parents did not know that they smoked and 40% said that their parents advise against them smoking.

3.3 Alcohol

25% of pupils reported that they never drink alcohol, 59% reported that they sometimes drink and 16% said that they drink regularly. Figure 3.1 shows that a slightly lower proportion of males than females reported that they never drink and a slightly higher proportion of males reported that they drink sometimes. These differences were not significant, $X^2(2) = 2.1$, $p > 0.1$. There were no gender differences in the proportion reporting that they drink regularly.

Figure 3.1 Reported use of alcohol by gender - percentages

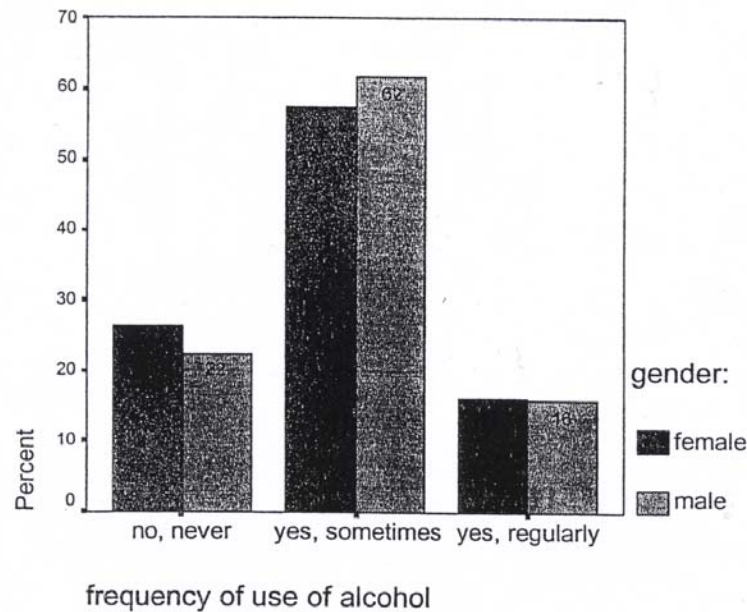


Table 3.1 shows the proportion of pupils who drink the different types of alcoholic drink. The type of drink that pupils drank the most often was alcoholic soft-drinks (75% of those who drink alcohol) and larger, stout or cider (72% of those who drink alcohol). The least common types of alcohol used by pupils were spirits, spirits with mixers and wine. Significant gender differences were found for two of the types of drink listed. A higher proportion of boys than girls reported that they drank larger, stout or cider ($X^2(4) = 13.9$, $p < .01$) and a higher proportion of girls than boys drank alcoholic soft-drinks ($X^2(4) = 19.4$, $p < .001$).

Table 3.1 Frequency of use of different types of alcohol - percentages of those who use alcohol

TYPE OF ALCOHOL USED	FREQUENCY OF USE			
	<i>less than once a month</i>	<i>once a month</i>	<i>at least once a week</i>	<i>daily</i>
Low alcohol beer	31 (181)	18 (105)	7 (40)	1 (5)
larger, stout, cider	32 (187)	22 (130)	17 (120)	1 (5)
wine	30 (163)	11 (61)	4 (22)	1 (4)
alcoholic soft-drinks	36 (210)	26 (153)	12 (71)	1 (7)
spirits with mixers	22 (122)	13 (70)	7 (37)	2 (10)
spirits	17 (95)	11 (61)	6 (35)	2 (11)
other	13 (41)	7 (21)	6 (20)	1 (4)

Notes: Valid cases = 588, Missing cases = 395, of which 236 = non-drinkers. Ns in parentheses.

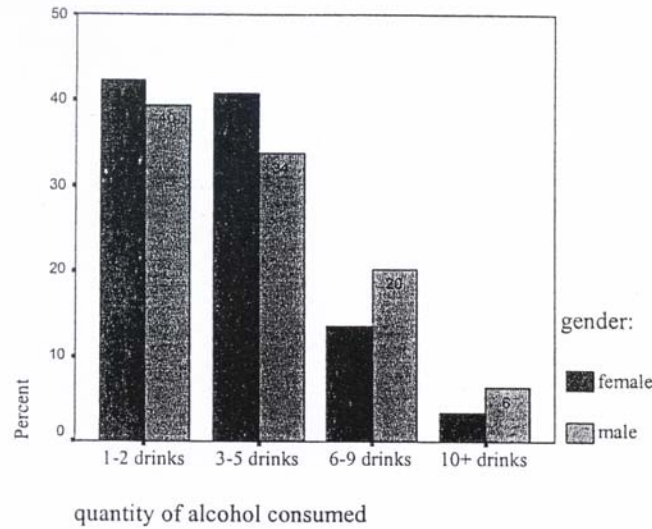
Frequency of pupils alcohol use was investigated². 3% of pupils who drink (2% of total sample) reported daily use of alcohol, 27% (18% of total) reported weekly use, 33% (22% of total) reported monthly use and 37% (25% of total) reported using alcohol less than once a month.

The mean age at which pupils reported that they had their first alcoholic drink was 11.6 years (SD = 6.3). The mean age at which boys started drinking (10.8) was significantly lower than the mean age among girls (12.3), $t(521) = 3.5$, $p < .001$. Half of the boys who drink alcohol reported having had their first drink at 11 years or younger compared to just over a third of girls.

The mean amount of alcohol consumed on an average occasion was 3.6 units (SD = 2.7). Boys reported drinking significantly more on average than girls (mean for boys was 4.0 compared to a mean of 3.4 among girls; $t(588) = -2.9$, $p < .01$). 26% of boys reported that when they drink they consume 6 or more units, compared to 17% of girls (see Figure 3.2).

² Valid cases = 919, Missing cases = 64.

Figure 3.2 Quantity of alcohol usually consumed by gender



Pupils who had used alcohol were asked to indicate their reasons for drinking, while pupils who had not used alcohol were asked to indicate their reasons for not drinking. Results *can* be seen in Table 3.2 and Table 3.3. The most common reason given for drinking was ‘wanted to try’ (61% of pupils who drink alcohol). Half of pupils who drink said that they did so because they like to drink on special occasions while just under half (46%) said it was because they like the taste. A significantly higher proportion of girls than boys cited curiosity as their reason for drinking, $X^2(1) = 25.4$, $p < .001$.

Table 3.2 Reasons given for drinking alcohol by gender - percentages of those who use alcohol

REASONS FOR DRINKING	GENDER		
	girls	boys	total
My friends drink	26 (107)	27 (80)	26 (187)
I wanted to try	*69 (281)	50 (151)	61 (432)
I like the taste	48 (195)	44 (132)	46 (327)
I like the effects	36 (147)	37 (110)	36 (257)
I feel better when I drink	13 (52)	16 (47)	14 (99)
I like to drink alcohol on special occasions	48 (196)	52 (154)	50 (350)
There is alcohol in the places I usually go out	13 (51)	8 (24)	11 (75)

Notes: Valid cases = 709, Missing cases = 274, of which 236 = non-drinkers. Ns in parentheses.

* $p < .001$

The most commonly cited reason for not drinking was the fact that it is bad for the health (45% of pupils who do not drink). Approximately a third of pupils who do not drink gave as reasons that that their parents are against it or forbid it (36%), that they are too young (35%) and that they don't want to be drunk (30%). Looking at gender differences, a significantly higher proportion of girls than boys gave as reasons that they didn't like the taste ($X^2 (1) = 9.1, p < .01$) while a significantly higher proportion of boys than girls cited the fact that their parents advised against it or forbade it ($X^2 (1) = 10.7, p < .001$).

Table 3.3 Reasons given for not drinking alcohol by gender - percentages of those who do not use alcohol

TREASONS GIVEN FOR NOTDRINKING	GENDER		
	girls	boys	total
Its bad for the health	42 (127)	51 (99)	45 (226)
I don't like the taste	*31 (94)	19 (37)	26 (131)
My parents advise me not to or forbid me to	30 (91)	**44 (87)	36 (178)
Its forbidden	11 (33)	11 (21)	11 (54)
I don't want to be drunk	32 (98)	27 (52)	30 (150)
I'm too young	32 (98)	38 (75)	35 (173)
It could change my mood	13 (38)	9 (18)	11 (56)
Its too expensive	28 (81)	20 (40)	24 (121)

Notes: Valid cases = 499, Missing cases = 484. Ns in parentheses.

* $p < .01$ ** $p < .001$

In order to examine the context in which pupils drink alcohol, pupils who used alcohol were asked to indicate where they usually were when they drank. As can be seen from Table 3.4 the most common location for drinking is outside - on the street, in a park, on the beach or other open area (61% of those who drink). The next most common location is in someone else's home, which was reported by over half of pupils who drink alcohol (56%). Approximately a third of those who drink said that they drink in their own home (33%) or at a disco or club (30%). Looking at gender differences, significantly more girls than boys reported that they drank at someone else's home ($X^2 (1) = 6.2, p < .01$) and in pubs ($X^2 (1) = 7.1, p < .01$).

Table 3.4 Usual location of drinking by gender - percentages of those who use alcohol

<i>LOCATION OF DRINKING</i>	GENDER		
	<i>girls</i>	<i>boys</i>	<i>total</i>
At home	32 (131)	34 (104)	33 (235)
At someone else's home	*60 (242)	50 (152)	56 (394)
On street, park, beach	62 (250)	60 (182)	61 (432)
In the pub	*15 (62)	9 (26)	12 (88)
At a disco or club	32 (128)	28 (84)	30 (212)
Restaurant	8 (32)	5 (14)	7 (46)
Other	11 (46)	13 (38)	12 (84)

Notes: Valid cases = 711, Missing cases = 272, of which 236 = non-drinkers. Ns in parentheses.

* $p < .01$

Pupils were asked, if they drank, to indicate how they usually obtained alcohol. The majority of those who use alcohol indicated that they obtained it from a friend (60%)³ Just under a half of pupils (47%) said that they bought it, while 38% said that it was shared around a group of friends. 31% of pupils said that they took it from home, 22% said that they obtained it from a brother or sister, and 17% said they got it from one or both parents.

Pupils were asked to indicate on a five-point scale whether they thought a list of events were likely to occur to them if they drank alcohol. As can be seen from Table 3.5 pupils think that they are more likely to experience positive events after drinking alcohol than negative events. The most common expected outcomes are that an individual would have a lot of fun (83% of sample reported it was likely or very likely) and would feel happy (80% of sample). Almost two thirds of the sample said that it was likely or very likely that they would feel relaxed (65%) and over a half said that it was likely or very likely that they would forget their problems (56%).

Looking at negative outcomes 'do something I would regret' and 'have a hangover' were seen as likely or very likely outcomes by 47% and 44% of the sample respectively. 'Harm to health' and 'feel sick' were seen as likely or very likely by over a third of the sample (39% and 33%). It should be noted, however, that for each of these negative outcomes, with the exception of 'do something I would regret' a similar or higher proportion of the sample saw them as unlikely or very unlikely

³ Valid cases = 630, Missing cases = 353, of which 157 are non-drinkers.

outcomes. Pupils see dependency as the least likely outcome (71% said they thought it was unlikely or very unlikely), followed by getting into trouble with the police (55% said they thought it was unlikely or very unlikely).

Table 3.5 Likely events after alcohol - percentages of likely/very likely and unlikely/very unlikely

<i>EVENTS AFTER ALCOHOL</i>	<i>very unlikely or unlikely</i>	<i>likely or very likely</i>
Feel relaxed	16 (109)	65 (432)
Trouble with police	55 (374)	33 (219)
Harm my health	37 (242)	39 (258)
Feel happy	9 (63)	80 (541)
Forget my problems	29 (196)	56 (373)
Cant stop drinking	71 (467)	17 (109)
Have a hangover	43 (287)	44 (3,93)
Act more friendly/outgoing	12 (78)	74 (494)
Do something I would regret	32 (212)	47 (316)
Have a lot of fun	7 (48)	83 (570)
Feel sick	44 (195)	38 (158)

Notes: Valid cases = 673, Missing cases = 310. Ns in parentheses.

Some gender differences were found in expected outcomes. Getting in trouble with the police was seen as more likely by boys and more unlikely by girls ($X^2 (4) = 14.1$, $p < .01$), while feeling more friendly and outgoing was seen as more likely by girls and more unlikely by boys ($X^2 (4) = 19.3$, $p < .001$). More boys than girls reported feeling sick as a likely outcome ($X^2 (4) = 12.4$, $p < .01$).

Pupils who use alcohol were asked what their parents thought about them drinking alcohol. 57% of those who drink⁴ said that their parents did not know that they drink, while a quarter of the sample said that their parents advise against them drinking. Just under a tenth of pupils (9%) said that their parents think it's all right and the same proportion said their parents say nothing about it.

⁴ Valid cases = 690, Missing cases = 293 of which 236 are non-drinkers.

3.4 Illicit Substances

Respondents were asked whether or not they had used any of eight drugs listed, and those who had used the drug were asked to indicate whether they had used it in the past year or in the past four weeks. Just under a third of the sample (32%) reported use of at least one illicit substance. 17% of the sample had used an illicit substance in the last month and 15% had used an illicit substance in the past year. A significant gender difference was found in rates of use of any illicit substance (27% girls, 38% boys; $X^2 (1) = 12.3$, $p < .001$) and for past month use of any illicit substance (14% girls, 22% boys; $X^2 (1) = 9.5$, $p < .01$).

Figure 4.1 shows reported use for each of the listed drugs. Cannabis was the most commonly used illicit drug, with 29% of pupils having used it either in the last year or in the last month (14% last year, 15% last month). The next most commonly used drug were the solvents (glue, aerosols, butane gas, petrol etc.) which had been used by 14% of pupils (8% last year, 7% last month). All other illicit drugs had been used by 5% or less of the sample. In total 18% of the sample had used an illicit substance other than cannabis, and a significantly higher proportion of boys than girls had done so (22% of boys compared to 16% of girls, $X^2 (1) = 5.0$, $p < .05$).

Figure 4.1 Any use of illicit drugs - percentage of pupils who had used the listed illicit substances

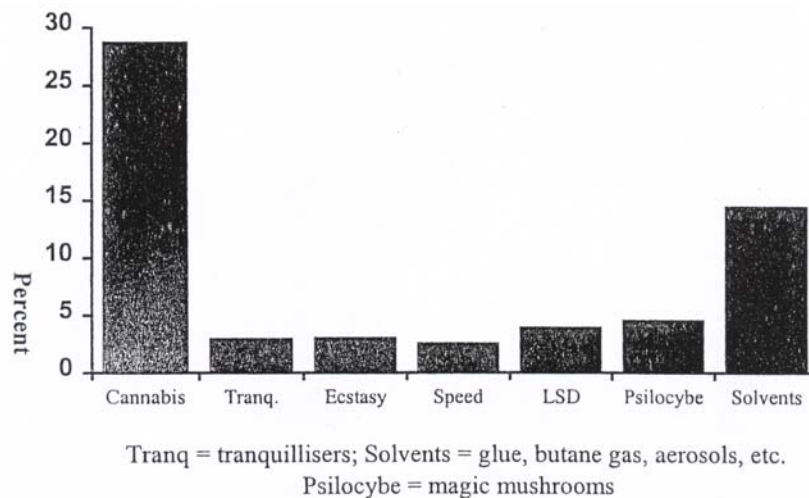


Figure 4.2 shows the proportion of boys and girls who reported having used cannabis in the last four weeks and in the last year. A higher proportion of boys than girls had used cannabis both in the last year and in the last month and this difference was significant ($X^2(2) = 16.5, p < .001$). The prevalence of last month and last year use of solvents among boys and girls can be seen in Figure 4.3. These differences were not significant.

Figure 4.2 Use of cannabis in last month and last year by gender - percentages

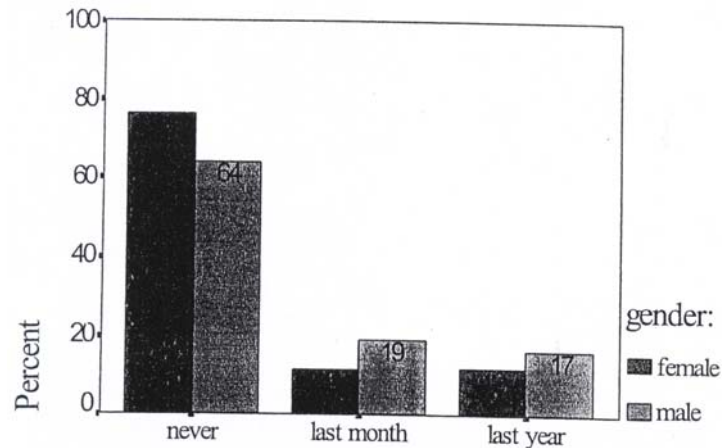
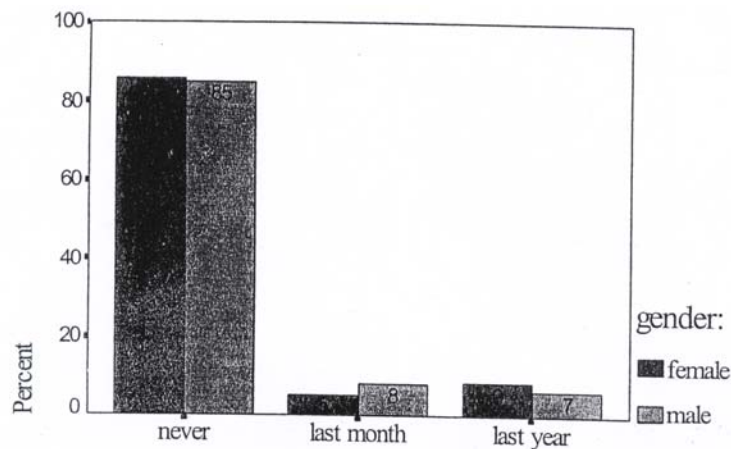


Figure 4.3 Use of inhalants in last month and last year, by gender - percentages.



Looking at gender differences in the use of other illicit substances, significant differences were found in the use of amphetamines (4% of boys had used either

within last month or year compared to 1% of girls, $X^2(2) = 17.7$, $p < .001$), LSD (boys 7%, girls 2%; $X^2(2) = 16.2$, $p > .001$), and magic mushrooms (boys 8%, girls 2%; $X^2(2) = 17.7$, $p < .001$).

Pupils who had used an illicit substance were asked to indicate at what age they had first used the substance. The lowest mean age of onset was reported for glue (12.4 years, $SD = 1.63$) followed by cannabis (12.5 years, $SD = 1.48$), magic mushrooms (12.6 yrs, $SD = 2.4$), LSD (12.8 yrs, $SD = 2.4$), ecstasy and tranquillisers (both 13.3 yrs, $SD = 0.9$ and 0.8) and amphetamines (13.5 years, $SD = 0.7$). Significant gender differences were found in the age of first use of cannabis and amphetamines. Boys had a lower mean age of first use of cannabis (12.2 compared to 12.7; $t(215) = 2.5$, $p < .05$), while girls had a lower mean age of first use of amphetamines (12.8 compared to 13.7; $t(19) = -2.6$, $p < .05$).

Pupils who had used illicit drugs were asked to indicate the reasons why. As can be seen from Table 4.1, the majority of pupils who had used drugs (80%) reported that they had taken drugs because they wanted to try. This was the reason most commonly given, followed by 'I like the effects' (44%) and 'my friends take drugs (30%)'. 'I feel better when I take drugs' and 'there are drugs in the places I go' were both given as reasons by just under a quarter of those pupils who had used drugs (23% each). 17% of pupils who had used drugs gave as a reason that drug taking is a tradition among young people. A significantly higher proportion of girls than boys said that they had used drugs because 'I wanted to try', $X^2(1) = 6.1$, $p < .05$.

Pupils who had never used illicit substances were also asked to indicate the reasons (see Table 4.2). The most commonly cited reason for not taking drugs was the fact that it is bad for the health (79%). Over a half (56%) of those who have not used drugs gave 'risk of dependency' as a reason while 'I don't like the effects' and 'my parents advise me not to or forbid it' were given as reasons by 40% and 39%. Significant gender differences were found for six of the reasons given. A higher proportion of boys than girls said that they did not use drugs because of the effect on health ($X^2(1) = 12.7$, $p < .001$), parental advice ($X^2(1) = 9.8$, $p < .01$) and its illegal status ($X^2(1) = 6.0$, $p < .05$). A higher proportion of girls than boys said that they did

not use drugs because of the risk of dependency ($X^2 (1) = 11.9, p < .001$), the effects ($X^2 (1) = 5.1, p < .05$) and the cost ($X^2 (1) = 5.0, p < .05$).

Table 4.1 Reasons given for taking drugs by gender - percentages of those who use drugs

REASONS GIVEN FOR TAKING DRUGS	GENDER		
	girls	boys	total
I wanted to try	*86 (123)	75 (111)	80 (234)
I like the effects	39 (56)	48 (71)	44 (127)
My friends take drugs	25 (36)	35 (52)	30 (88)
I feel better when I take drugs	25 (36)	22 (32)	23 (68)
There are drugs in the places I usually go out	23 (33)	23 (34)	23 (67)
Its a tradition among young people	17 (24)	17 (25)	17 (49)

Notes: Valid cases = 293, Missing cases = 690, of which 527 = non-drug users. Ns in parentheses.

* $p < .05$

Table 4.2 Reasons given for not taking drugs by gender - percentages of those who do not use drugs

REASONS GIVEN FOR NOT TAKING DRUGS	GENDER		
	girls	boys	total
Its bad for the health	75 (345)	***88 (265)	79 (610)
Risk of dependency	***61 (282)	49 (151)	56 (433)
I don't like the effects	*43 (198)	35 (108)	40 (306)
My parents advise me not to or forbid me to	34 (158)	**46 (141)	39 (299)
Its against the law	29 (131)	*37 (114)	32 (245)
Its too expensive	*21 (96)	15 (45)	18 (141)
It could change my mood	16 (72)	14 (43)	15 (115)
My friends don't take drugs	10 (46)	12 (38)	11 (84)

Notes: Valid cases = 771, Missing cases = 212. Ns in parentheses.

* $p < .05$ ** $p < .01$ *** $p < .001$

The availability of illicit substances was examined. Pupils were asked if they had ever been offered any of a list of illicit drugs. 60% of the total sample had been offered at least one illicit drug. A higher proportion of boys than girls had been offered an illicit substance (66% compared to 56%, $X^2 (1) = 10.2, p < .01$). Cannabis was the most accessible drug, with over half of the respondents having been offered it (54%), followed by ecstasy (30%), solvents (21%), LSD (20%), amphetamines (18%) and

magic mushrooms (13%). Tranquillisers had been offered to 10% of the sample, while 9% reported having been offered substances other than those listed (other substances names by respondents included petrol, tobacco, benzodiazepines (*roche*) and amyl nitrate (*poppers*)).

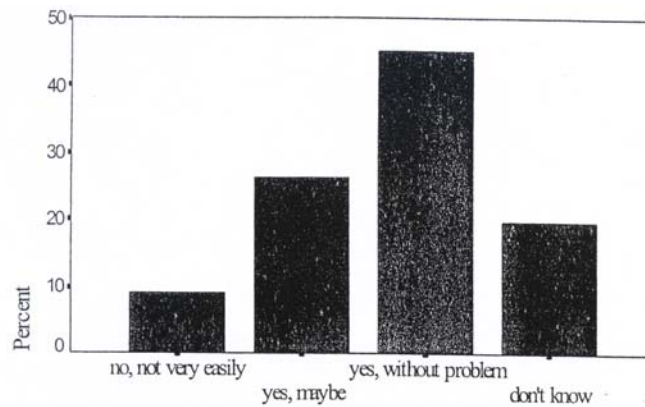
The most common places in which pupils were offered drugs were on the street, at a rave or disco and at a friend's home (see Table 4.3). While for each of the substances 'on the street' was the place where the most pupils had been offered, there were some differences between substances. Cannabis and solvents had been offered to some pupils at a friend's home or at school. For the three party drugs - LSD, amphetamines and ecstasy - the proportion of pupils who were offered them 'at a rave or disco' was similar to the proportion who had been offered them 'on the street'.

Table 4.3 Exposure to illicit drugs - 'Have you ever been offered any of the following substances? If so, where?' - percentages of positive responses

TYPE OF DRUG OFFERED	PLACE WHERE DRUG WAS OFFERED						
	<i>at home</i>	<i>at friends home</i>	<i>bar or pub</i>	<i>on the street</i>	<i>at school</i>	<i>at a rave or disco</i>	<i>other</i>
Cannabis	5	15	3	37	6	16	5
Tranquillisers	0	2	1	5	0	3	0
Ecstasy	2	2	2	16	2	16	2
Amphetamines	1	2	1	9	1	7	1
LSD	2	3	1	11	1	7	1
Magic Mushrooms	2	3	1	6	2	4	1
Glue/Solvents	3	7	1	9	6	3	1
Other	1	2	0	3	1	1	1

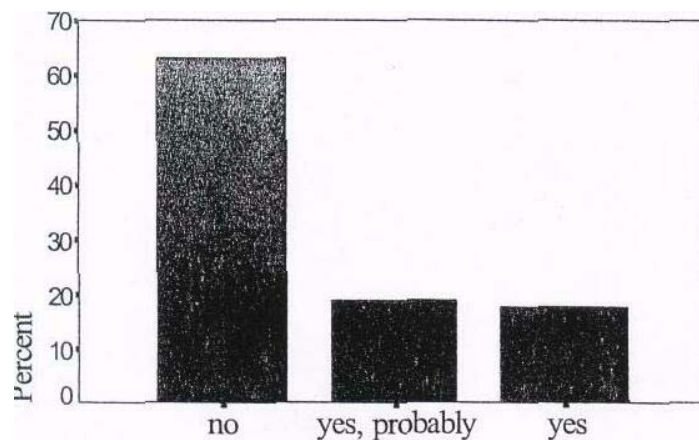
Since school surveys show that cannabis is the illicit substance most commonly used among young people, availability of this drug was examined. Pupils were asked if they would know where to obtain a joint. As can be seen from Figure 4.4 the majority (71%) of respondents reported that they would know where to obtain cannabis. Almost half of the total sample (45%) answered 'yes, without any problems' and just over a quarter answered 'yes, maybe'. One fifth of pupils said that they didn't know and less than a tenth of pupils said that they would not be able to obtain cannabis very easily.

Figure 4.4 Perceived availability of cannabis - ‘would you know where to obtain a joint?’ - percentages



In order to examine vulnerability to illicit drug use pupils were asked if they would accept three listed substances if they were offered to them. When asked if they would accept a joint, if offered, well over half of the sample (63%) answered ‘no’, 19% answered ‘yes, probably’ and 18% answered ‘yes’.

Figure 4.5 Vulnerability to cannabis use - ‘If someone offered you a joint would you accept?’ - percentages



Pupils were also asked if they would accept ecstasy if offered. The majority (94%) of pupils answered ‘no’, 2% answered ‘yes maybe’ and 4% answered ‘yes, probably’. In relation to cocaine, 95% said that they would not accept it, 2% answered ‘yes, maybe’ and 3% answered ‘yes, probably’. Significant gender differences were found for both

cannabis and cocaine, with more boys than girls saying that they would accept the substances, if offered (cannabis: $X^2(2) = 7.6$, $p < .05$, cocaine; $X^2(2) = 6.2$, $p < .05$).

In order to identify pupils who had not used any illegal substances but who were vulnerable to such use, the proportion of pupils who had never used an illicit substance but said that they would accept a substance if offered was examined. 10% of the sample could be described as vulnerable non-users, that is they had never used an illicit substance but said that they would accept either a joint, ecstasy or cocaine if offered. This group represents 15% of pupils who had never used an illicit substance. Of those who reported that they had never used cannabis, 16% said that they would accept a joint if offered (13% 'yes, probably' and 3% 'yes'). This group represents 11% of the total sample.

Pupils who had used cannabis and ecstasy were asked to indicate how they usually obtained the substances (see Table 4.4) and some differences emerged in how the two substances are obtained. In relation to cannabis the most common sources were 'from a friend' (64% of pupils who had used cannabis) and 'shared around a group of friends' (62%). 38% said that they usually buy it and a quarter said that they usually got it from a stranger. 15% said that they usually got it from a brother or sister and 6% said they took it from home without their parents' permission. In relation to ecstasy, friends were again the most common source (59% of pupils who used had obtained 'from a friend' and 15% 'shared around a group of friends'). In comparison to cannabis, a slightly higher proportion of pupils who had used ecstasy reported that they obtained ecstasy from a stranger (39%) or bought it (31%). 10% of ecstasy users said they took it from home without their parents' permission and 8% of users obtained ecstasy from a brother or sister.

Table 4.4 How substances are obtained by type of drug - percentages

<i>HOW SUBSTANCE WAS OBTAINED</i>	<i>DRUG</i>	
	<i>Cannabis</i>	<i>Ecstasy</i>
From a brother or sister	15 (4)	8 (0.3)
From a friend	64 (18)	59 (2.3)
From a stranger	25 (7)	39 (1.5)
It is passed or shared around a group of friends	62 (18)	15 (0.6)
I buy it	38 (11)	31 (1.2)
From (one of) my parents	2 (1)	5 (0.2)
I take it from home without my parents permission	6 (2)	10 (0.4)
Other	3 (1)	3 (0.1)

Note: Percentages exclude those who have never used the substance, while percentages in bracket refer to total sample

Pupils were asked what in their opinion were the effects of a list of substances. The results can be seen in Table 4.5. The most commonly cited effects of cannabis, alcohol and tobacco were relaxation and pleasure. While a high proportion of pupils did not know the effects of ecstasy, cocaine or heroin, among those who did dependency was cited most commonly as the effect of heroin and cocaine, while hallucination and pleasure were the most commonly cited effects of ecstasy.

In order to examine the proportions citing positive and negative effects, pleasure and relaxation were combined as positive effects and pain and dependency were combined as negative effects (see Table 4.6). For alcohol, cannabis and tobacco the positive effects were cited by a higher proportion of pupils than the negative effects. Alcohol was seen in the most favourable light followed closely by cannabis and tobacco. Pupils seemed to have a somewhat neutral attitude toward ecstasy with an equal proportion of pupils citing the negative and the positive effects. For both heroin and cocaine the negative effects were cited more often than the positive effects, with heroin being perceived in a more negative way than cocaine.

Table 4.5 Perceived effects of six substances - percentages

<i>EFFECT</i>	<i>TYPE OF SUBSTANCE</i>					
	<i>joint</i>	<i>alcohol</i>	<i>heroin</i>	<i>cocaine</i>	<i>tobacco</i>	<i>ecstasy</i>
pleasure	50 (37)	60 (55)	28 (14)	31 (15)	32 (26)	40 (24)
pain	4 (3)	4 (3)	38 (20)	28 (13)	5 (5)	27 (16)
relaxation	60 (44)	41 (37)	20 (20)	19 (9)	49 (41)	14 (9)
dependency	12 (9)	13 (12)	43 (23)	40 (19)	24 (20)	24 (15)
modification of mood	22 (16)	31 (28)	33 (17)	35 (17)	7 (6)	39 (23)
hallucination	11 (8)	5 (5)	33 (17)	31 (15)	1 (1)	51 (30)
no effect	2 (2)	4 (3)	1 (.3)	1 (.2)	19 (16)	1 (.3)
don't know	26	8	48	52	17	41

Note: The first percentage refers to the number of responses as a proportion of students who gave an answer regarding effects of the substance (i.e. excluding missing cases and those who answered 'don't know'). The percentage in brackets refers to the number of responses as a proportion of the total, sample.

Table 4.6 Perceived positive and negative effects of six substances - percentages

<i>EFFECT</i>	<i>TYPE OF SUBSTANCE</i>					
	<i>joint</i>	<i>alcohol</i>	<i>heroin</i>	<i>cocaine</i>	<i>tobacco</i>	<i>ecstasy</i>
Positive	59	70	17	16	52	24
Negative	11	14	32	26	23	24

Note: Percentages refer to total sample. Positive effects are pleasure and relaxation while negative effects are dependency and pain.

Looking at gender differences there were significant differences between the proportion of girls and boys citing positive and negative effects for several of the substances. More girls than boys cited the positive effects of alcohol (74% of girls compared to 64% of boys, $X^2(1) = 10.3$, $p < .01$), tobacco (54% of girls compared to 48% of boys, $X^2(1) = 4.0$, $p < .05$), and ecstasy (27% of girls compared to 19% of boys, $X^2(1) = 8.8$, $p < .01$). The only significant gender difference in the proportions citing negative effects was in relation to tobacco. More girls than boys cited the negative effects of tobacco (26% compared to 18%, $X^2(1) = 7.2$, $p < .01$).

In relation to the effects of cannabis, significant differences were found between the pupils who had used and pupils who had never used cannabis. A higher proportion of users of cannabis cited the positive effects compared to those who had not used

cannabis (85% of users compared to 48% of non-users, $X^2 (1) = 108.6$, $p < .001$). There was also a significant difference in relation to the negative effects of cannabis, with a lower proportion of users citing the negative effects compared to those who had not used cannabis (5% of users compared 14% of non-users, $X^2 (1) = 16.4$, $p < .001$).

Looking at the reported effects of alcohol, there was a significant difference between the proportion of abstainers, occasional drinkers and regular drinkers who reported positive effects of alcohol. The lowest proportion of positive effects was reported by those who did not drink while those who drank regularly the highest (abstainers -47%, occasional drinkers - 75%, frequent drinkers - 88%; $X^2 (2) = 86.6$, $p < .0001$).

Significant differences were found between pupils who had used an illicit substance and pupils who had never used an illicit substance in the proportion reporting negative, effects of ecstasy, cocaine and heroin. 35.5% of pupils who had never used illicit substances reported the negative effects of heroin compared to 25.7% of pupils who had used an illicit substance ($X^2 (1) = 9.3$, $p < .01$). The proportion reporting negative effects of ecstasy was also higher amongst those who had never used an illicit substance compared with those who had used an illicit substance (28% compared to 17%; $X^2 (1) = 15.7$, $p < .001$). The same pattern was found for the negative effects of cocaine, with 28% of pupils who had never used an illicit substance reporting the negative effects compared to 21% of pupils who had used an illicit substance ($X^2 (1) = 4.8$, $p < .05$).

Looking at reported effects of tobacco, a significant difference was found between the different categories of smokers. The highest proportion of reported positive effects was found among those who smoke 'now and again' while the lowest proportion was among those who had never smoked (never smoked - 41%, once or twice - 48%, used to smoke but have stopped - 57%, smoke now and again - 66% and daily smokers -63%; $X^2 (4) = 38.6$, $p < .0001$).

3.5 Delinquency

Pupils were asked if they had committed any of a list of 14 delinquent behaviours, ranging from using public transport without paying, to fighting in public. As can be seen in Table 5.1 the most common delinquent behaviours were graffiti (52%), fighting in public (47%) and fare dodging (40%). Just over a third of the sample admitted to shoplifting (36%) and having bothered or threatened someone (36%).

Looking at gender differences, highly significant differences were found for all but two of the behaviours (running away and graffiti, being the exception), with a higher proportion of boys than girls having engaged in the behaviour.

Table 5.1 Delinquent behaviour by gender - percentages

<i>DELINQUENT BEHAVIOUR</i>	<i>GENDER</i>		
	<i>girls</i>	<i>boys</i>	<i>total</i>
Running away	6 (35)	8 (30)	7 (65)
fare dodging	***32 (178)	50 (193)	40 (371)
shoplifting	***29 (160)	45 (172)	36 (332)
vandalism	***30 (166)	50 (193)	3 (359)
graffiti	52 (288)	52 (202)	52 (490)
bothering or threatening someone	***30 (168)	45 (172)	36 (340)
hitting someone	***8 (46)	20 (77)	13 (123)
starting a fire	***8 (40)	25 (89)	14 (129)
breaking and entering	***10 (56)	25 (92)	16 (148)
stolen money from vending machine/telephone box	***9 (47)	17 (64)	12 (111)
stolen from fellow pupil	**13 (68)	21 (77)	16 (145)
fighting in public	***41 (226)	57 (219)	47 (445)
carrying weapon	***10 (54)	39 (148)	22 (202)
throwing stones	***16 (89)	40 (152)	26 (241)

Notes: Number of valid cases varies from 895 to 943. Number of missing cases varies from 40 to 88.

Ns in parentheses.

*p<.05 **p<.01 ***p<.001

The mean number of delinquent behaviours committed by each pupil was 3.2 (SD = 2.81, range = 0 to 11). The mean for boys was significantly higher than the mean for girls (4.1 compared to 2.6, $t(765) = -8.2$, $p < .001$). A break down of the number of crimes committed can be seen in Table 5.2. The proportion of girls who had not committed any offences was more than double the proportion of boys, while the

proportion of boys who had committed 5 or more offences was almost double the proportion of girls.

Table 5.2 Number of delinquent behaviours according to gender - percentages

<i>NUMBER OF DELINQUENT BEHAVIOURS</i>	<i>GENDER</i>		
	<i>girls</i>	<i>boys</i>	<i>total</i>
None	25 (141)	11 (43)	19 (184)
1-2	33 (187)	25 (101)	30 (288)
3-4	21 (121)	24 (97)	22 (218)
5 or more	21 (118)	40 (159)	29 (277)
TOTAL	100 (567)	100 (400)	100 (967)

Notes: Valid cases = 967, Missing cases = 484. *N*s in parentheses.

Pupils were asked if they had ever been caught or arrested by the police⁵. 23% of the sample said that they had and again there was a significant gender difference, with a higher proportion of boys than girls reporting having been caught (32% compared to 17%, $X^2(1) = 30.9$, $p < .001$).

Pupils were also asked what they thought of five different offences (see Table 5.3). Harassment of a girl was the offence most strongly disapproved of and shoplifting was seen as the most acceptable offence by both genders. Significant gender differences were found, however, with a higher proportion of girls than boys disapproving of shoplifting, harassment of a girl, selling drugs or selling stolen goods.

⁵ Number of valid cases = 956, number of missing cases = 27

Table 5.3 Opinion of offences by gender - percentages

TYPE OF OFFENCE	APPROVAL/ DISAPPROVALS	GENDER		
		girls	boys	total
Shoplifting	its ok/don't care	43	58	58
	disapprove	***57	42	42
Harassing a girl	its ok/don't care	6	10	7
	disapprove	*94	90	93
selling drugs	its ok/don't care	18	31	23
	disapprove	***82	69	77
Damaging a phone box, bicycle etc.	its ok/don't care	41	47	43
	disapprove	59	53	57
selling stolen Goods	its ok/don't care	33	46	39
	disapprove	***67	54	61

Notes: Percentages given are a proportion of pupils excluding those who answered 'don't know' (7% of total sample on average) and those who did not answer the question (1% of total sample on average). Disapprove includes those who answered 'disapprove' or 'strongly disapprove'

*p<.05 **p<.01 ***p<.001

3.6 Association between Problem Behaviours

The relation between various forms of problem behaviour was examined. Moderate correlations were found between alcohol and both cannabis use and tobacco use. Moderate correlation was also found between tobacco use and number of delinquent behaviours and between cannabis use and number of delinquent behaviours.

Looking in more detail at the link between delinquent behaviour and various forms of substance use, a significant relationship was found between the number of delinquent behaviours and level of involvement with both alcohol and cannabis.

Table 6.2 and 6.3 shows the percentage of pupils who had engaged in delinquent behaviour according to alcohol and cannabis use. The differences in number of delinquent behaviour according to frequency of alcohol consumption were found to be significant, $X^2(6) = 207.8$, $p < .001$. 28% of those who abstained from alcohol had committed none of the listed delinquent behaviours compared to 13% of infrequent drinkers and 3.5% of frequent drinkers. 65% of pupils who used alcohol on a weekly or daily basis had committed 5 or more of the listed behaviours. The same pattern emerged for cannabis use, with a quarter of non-users having committed none of the listed behaviours compared to 4% of those who had used cannabis. 64% of last

month users had committed 5 or more of the listed behaviours. Again these difference were found to be significant, $X^2(6) = 214.2, p < .001$.

Table 6.2 Number of delinquent behaviours by level of alcohol use - percentages

NUMBER OF DELINQUENT BEHAVIOURS	FREQUENCY OF ALCOHOL USE		
	<i>never/less than once a month</i>	<i>monthly use</i>	<i>weekly or daily use</i>
none	28 (136)	13 (29)	3 (7)
1-2	37 (182)	28 (61)	11 (23)
3-4	21 (104)	28 (60)	21 (41)
5+	14 (69)	31 (68)	65 (129)
TOTAL	100 (491)	100 (218)	100 (200)

Notes: Valid cases = 909, Missing cases = 74. Ns in parentheses.

Table 6.3 Number of delinquent behaviours by level of cannabis use - percentages

NUMBER OF DELINQUENT BEHAVIOURS	FREQUENCY OF ALCOHOL USE		
	<i>never</i>	<i>last year</i>	<i>last month</i>
none	25 (174)	4 (5)	4 (5)
1-2	36 (255)	14 (18)	12 (16)
3-4	23 (162)	23 (29)	20 (28)
5+	16 (116)	59 (76)	64 (87)
TOTAL	100 (707)	100 (128)	100 (136)

Notes: Valid cases = 971, Missing cases = 12. Ns in parentheses.

3.7 School Related Variables

The questionnaire examined several school-related issues. Pupils were asked about how many days of school they had missed in the past month due to illness, truancy or family holiday. Looking at days missed due to illness over one quarter of the sample had not missed any days due to illness (27%), almost a third had missed one to two days and one fifth had missed three to five days and over five days (see Table 7.1).

Compared to the proportion of pupils who missed school due to illness, a smaller proportion of pupils had missed schools due to truancy. Three quarters of the sample had not missed any days due to truancy. 15% had missed one to two days, 4% had missed 3 to 5 days and 6% had missed more than five days (see Table 7.2). A smaller proportion of pupils again had missed school due to family holiday. The vast majority

of pupils (81%) had not missed any days of school, 11% had missed one or two days, 3% had missed 3 to 5 days and 5% had missed more than 5 days.

Looking at gender differences significant differences were found in relation to days missed due to illness and days missed due to truancy. A higher proportion of girls had missed school due to illness ($X^2 (3) = 9.9, p < .05$). For example 24% of girls had missed more than five days compared to 16% of boys (see Table 7.1). On the other hand a higher proportion of boys than girls had missed days of school due to truancy ($X^2 (3) = 9.4, p < .05$). 8% of boys had missed five or more days of school due to truancy compared to 4% of girls (see Table 7.2).

Table 7.1 Days of school missed due to illness by gender - percentages

NUMBER OF DAYS MISSED	GENDER		
	girls	boys	total
none	27 (137)	28 (100)	27 (237)
1-2 days	29 (149)	35 (125)	32 (274)
3-5 days	20 (100)	21 (73)	20 (173)
more than 5 days	24 (123)	16 (56)	21 (179)
TOTAL	100 (509)	100 (354)	100 (863)

Notes: Valid cases = 863, Missing cases = 109. Ns in parentheses.

Table 7.2 Days of school missed due to truancy by gender – percentages

FREQUENCY OF ENJOYING SCHOOL	GENDER		
	girls	boys	total
none	76 (293)	74 (208)	75 (501)
1-2 days	17 (63)	12 (34)	15 (97)
3-5 days	3 (13)	6 (16)	4 (29)
more than 5 days	4 (15)	8 (23)	6 (38)
TOTAL	100 (384)	100 (281)	100 (665)

Notes: Valid cases = 665, Missing cases = 318. Ns in parentheses.

Pupils were asked if they enjoyed school (see Table 7.3). Over half of the sample (58%) said that they sometimes enjoyed school. One fifth said that they often enjoyed it and 5% said that they always enjoyed it. Just under one fifth (17%) said that they never enjoyed it. Significant gender differences were found in responses to this question, with a higher proportion of girls than boys saying that they enjoyed school ($X^2 (3) = 20.3, p < .001$). While a similar proportion said that they enjoyed school

sometimes and always, a higher proportion of girls said that they often enjoyed it (23% compared to 16%) and a higher proportion of boys said that they never enjoyed it (23% compared to 13%).

Table 7.3 “Do you enjoy school?” by gender - percentages.

<i>FREQUENCY OF ENJOYING SCHOOL</i>	<i>GENDER</i>		
	<i>girls</i>	<i>boys</i>	<i>total</i>
never	13 (75)	23 (92)	17 (167)
sometimes	58 (326)	58 (234)	58 (560)
often	24 (132)	15 (63)	20 (195)
always	5 (30)	4 (16)	5 (46)
TOTAL	100 (563)	100 (405)	100 (968)

Notes: Valid cases = 968, Missing cases = 15. Ns in parentheses

When asked how good they were at schoolwork compared to others the same age, ‘over half of the sample (55%) said that they were average (see Table 7.4). Almost a third of the sample (32%) said that they were above average - 6% well above average and 25% above average. 13% of the sample said that they were below average - 5% well below average and 8% below average.

Significant gender differences were found with a higher proportion of boys than girls saying that they were above average ability (43% compared to 24%). Girls were more likely than boys to say that they were of average ability (62% compared to 46%) or below average (14% compared to 12%). These differences were significant, $X^2(4) = 48.0, p < .001$.

Table 7.4 Academic ability by gender – percentages

<i>PERCEIVED ACADEMIC ABILITY</i>	<i>GENDER</i>		
	<i>girls</i>	<i>boys</i>	<i>total</i>
well below average	4 (25)	5 (21)	5 (46)
below average	10 (56)	7 (26)	9 (82)
average	62 (347)	46 (182)	55 (529)
above average	21 (118)	31 (125)	25 (243)
well above average	3 (17)	11 (44)	6 (61)
TOTAL	100 (563)	100 (398)	100 (961)

Notes: Valid cases = 961. Missing cases = 22. Ns in parentheses.

Pupils were also asked what they thought they would be doing at the age of 17 (see Table 7.5). The majority of respondents (85%) said that they would be in school -

71% in general education and 14% in vocational education. One tenth of the sample said that they would be working while 4% said that they would be in some type of training. Less than 1% said that they would be unemployed.

Significant gender differences were found ($X^2 (4) = 25.8, p < .001$). A higher proportion of girls than boys said that they would be in general education at the age of 17, while a higher proportion of boys than girls said that they would be working, in vocational education, or training.

Table 7.5 “What do you think you will be doing when you are 17?” by gender –percentages

<i>EXPECTED ACTIVITIES AT AGE 17</i>	<i>GENDER</i>		
	<i>girls</i>	<i>boys</i>	<i>total</i>
unemployed	1 (3)	*0 (1)	1 (4)
working	7 (34)	14 (44)	10 (78)
training	3 (13)	7 (22)	4 (35)
school (vocational)	11 (52)	17 (53)	14 (105)
school (general)	78 (353)	62 (194)	71 (547)
TOTAL	100 (455)	100 (314)	100 (769)

Notes: Valid cases = 769, Missing cases = 214 of which 101 (12% of total sample) answered that they did not know what they would be doing at the age of 17. The percentages given are the percentages of responses excluding those who did not answer and those who answered ‘don’t know’. *N*s in parentheses.

* Less than 1%.

Two questions were asked about bullying - whether pupils had been bullied during the past school year, and whether they themselves had bullied other pupils (see Table 7.6 and Table 7.7). The majority of pupils (68%) said that they had not been bullied in the past year, while a quarter said that they had been bullied once or twice. 5% said that they had been bullied regularly, 2% said that they had been bullied once a week and 2% said they had been bullied several times a week. When asked about whether they had bullied fellow pupils, again the majority of pupils (72%) said that they had not done this in the past year. Just under a quarter (24%) said that they had bullied other pupils once or twice. 3% said that they bullied other pupils regularly while under 1% reported bullying once a week and several times a week. Significant gender differences were found for both questions on bullying. A higher proportion of boys than girls reported having been bullied ($X^2 (4) = 22.8, p < .001$). 60% of boys had never been bullied compared to 75% of girls. The same pattern was

found with regard to bullying other pupils, with a higher proportion of boys than girls saying that they had bullied other pupils in the last year ($\chi^2(4) = 23.5, p < .001$). 66% of boys said that they had never bullied other pupils compared to 77% of girls.

Table 7.6 Frequency of being bullied or teased in last school year by gender –percentages

<i>FREQUENCY OF BEING BULLIED</i>	<i>GENDER</i>			
	<i>girls</i>		<i>boys</i>	
never	74	(416)	60	(242)
1-2 times	20	(111)	29	(116)
regularly	4	(20)	6	(23)
once a week	1	(7)	2	(10)
several times a week	1	(8)	3	(13)
TOTAL	100	(562)	100	(404)

Notes: Valid cases = 966, Missing cases = 17. Ns in parentheses.

Table 7.7 Frequency of having bullied or teased others in last school year by gender — percentages

<i>FREQUENCY OF BULLYING OTHERS</i>	<i>GENDER</i>			
	<i>girls</i>		<i>boys</i>	
never	77	(430)	66	(265)
1-2 times	22	(122)	27	(108)
regularly	1	(7)	4	(18)
once a week	*0	(1)	1	(4)
several times a week	-0	(2)	2	(7)
TOTAL	100	(562)	100	(402)

Notes: Valid cases = 964, Missing cases = 19. Ns in parentheses.

* Less than 1%.

Pupils were asked to mark which of a list of subjects they would like to be informed or better informed on in school (see Table 7.8). The subjects listed were: nutrition, road traffic accidents, tobacco, alcohol, illegal drugs, sexual relations, AIDS, cancer risks, medication, weight problems, stress, environmental health and other. The subject on which the highest proportion of pupils would like to be informed on was AIDS (73% of the sample). Over half of the sample said that they would like to be informed about sexual relation (65%) and illegal drugs (60%). Half of the sample said that they would like be informed about cancer, while just under half of the sample listed weight and stress (42% and 40%). A third of pupils said they would like to be informed about alcohol and just under a quarter said the same of tobacco (23%).

Under a quarter of the sample said they would like to be informed on the other listed topics (nutrition, traffic, medication, environment and other).

Looking at gender differences, significant differences were found in the proportion of pupils who wanted to be informed on AIDS ($X^2 (1) = 6.9, p < .01$), weight ($X^2 (1) = 126.4, p < .001$), stress ($X^2 (1) = 13.9, p < .001$), cancer ($X^2 (1) = 11.1, p < .001$) and tobacco ($X^2 (1) = 4.1, p < .05$). A higher proportion of girls than boys said they would like to be informed on all these topics with the exception of tobacco which more boys than girls wanted to be informed on. The most striking gender differences was found in relation to weight, with 55% of girls wanting to be informed on it compared to 18% of boys.

Table 7.8 Subjects on which pupils would like to be informed or better informed In school by gender- percentages

SUBJECT	GENDER		
	girls	boys	total
tobacco	20 (114)	26 (1,00)	*23 (214)
alcohol	31 (172)	36 (139)	33 (311)
illegal drugs	58 (327)	62 (239)	60 (566)
sexual relations	64 (360)	65 (252)	65 (612)
AIDS	76 (429)	67 (265)	**73 (694)
cancer	55 (308)	44 (169)	***50 (477)
weight	55 (308)	18 (71)	***40 (379)
stress	47 (265)	35 (386)	***42 (948)

Notes: Valid cases = 948, Missing cases = 35. *Ns* in parentheses.

* $p < .05$ ** $p < .01$ *** $p < .001$

The discussion of smoking, drinking, illicit drugs and AIDS in school was also addressed. Pupils were asked if these subjects had been talked about in school, and if so, whether they were discussed too much, enough or not enough (see Table 7.9).

In relation to tobacco just under half of the sample said that they had talked about it enough in school (41%) while a third of pupils said that they had talked about it but not enough. Just under one fifth (17%) said that it had never been discussed. In relation to drinking, just over one third of pupils said that they had talked about it enough and not enough (36% and 35% respectively). One fifth said that it had never been discussed in class. Almost half of the sample said that they had not discussed illicit drugs enough, while 28% said they this topic had been discussed enough and

17% said that it had never been discussed. The most striking result was in relation to the discussion of AIDS. Almost two thirds of the sample (64%) said that they had never discussed AIDS in class, while just under one third said that it had been discussed but not enough (27%).

Table 7.9 Frequency with which smoking, drinking, illicit drugs and AIDS had been discussed in class by gender – percentages

<i>SUBJECT</i>	<i>GENDER</i>		
	<i>girls</i>	<i>boys</i>	<i>total</i>
SMOKING			
yes, too much	11 (59)	6 (20)	9 (79)
yes, enough	49 (260)	29 (105)	41 (365)
yes, but not enough	33 (174)	33 (119)	33 (298)
never	7 (36)	32 (112)	17 (148)
TOTAL	100 (529)	100 (356)	100 (890)
DRINKING			
yes, too much	11 (56)	5 (18)	8 (74)
yes, enough	42 (219)	27 (98)	36 (317)
yes, but not enough	36 (191)	34 (124)	35 (315)
never	11 (60)	34 (122)	21 (182)
TOTAL	100 (526)	100 (362)	100 (888)
ILLCIT DRUGS			
yes, too much	10 (55)	6 (22)	9 (77)
yes, enough	33 (176)	20 (76)	28 (252)
yes, but not enough	46 (249)	47 (174)	46 (423)
never	11 (57)	27 (102)	17 (159)
TOTAL	100 (526)	100 (374)	100 (911)
AIDS			
yes, too much	3 (15)	1 (4)	2 (19)
yes, enough	7 (38)	6 (22)	7 (60)
yes, but not enough	31 (159)	21 (73)	27 (232)
never	59 (307)	72 (250)	64 (557)
TOTAL	100 (519)	100 (349)	100 (868)

Notes: Smoking: Valid cases = 885, Missing cases = 98. Alcohol: Valid cases = 888, Missing cases = Missing cases 95. Illicit dugs: Valid cases = 911, Missing cases = 72. AIDS: Valid cases = 868, Missing cases = 115.

Ns in parentheses.

Looking at gender differences, significant differences ($p < .001$) were found in relation to tobacco ($X^2(3) = 104.6$, $p < .001$), alcohol ($X^2(3) = 73.3$, $p < .001$), illegal drugs ($X^2(3) = 52.4$, $p < .001$) and to AIDS ($X^2(3) = 15.6$, $p < .001$). The pattern of differences is strikingly similar for responses on smoking, drinking and illicit drugs. For all three subjects a higher proportion of boys than girls had never discussed the subject in class. A similar proportion said that the subjects had been discussed but not enough

and a higher proportion of girls than boys said that the subjects had been discussed either enough or too much. The pattern of difference in relation to AIDS is slightly different, with a higher proportion of girls than boys saying it had not been discussed enough and a higher proportion of boys than girls saying it had never been discussed.

3.8 Differences between Schools

Differences in substance use between the 16 participating schools were examined. The schools were then divided into high, middle and low socio-economic groups, based on catchment area and type of school. Differences between the three socio-economic groups were examined. Finally differences between single gender and mixed gender schools were examined.

Looking first at differences between individual schools, significant differences were found in relation to both legal and illegal drug use. Looking at smoking the proportion of pupils who said they smoked now and again ranged from 10% to 45% and the proportion of daily smokers ranged from 4% to 36%. Frequent use of alcohol (weekly or more frequent use) ranged from 11% of pupils to 31% of pupils, and daily use was found to be particularly high in one school. A significant difference was also found in the prevalence of binge drinking among pupils, which ranged from 18% to 55%. The proportion of pupils reporting last year use of cannabis ranged from 5% to 24% while last month or recent use ranged from 6% to 28%. Last year use of solvents and inhalants ranged from no use to 20% while last month or recent use ranged from no use to 14%. Looking at the use of illicit drugs other than cannabis and solvents, last year use ranged from no use to 15% while last month or recent use ranged from no use to 10%. Significant differences were also found between individual school on measures of availability. The proportion of pupils who had been offered an illicit substance ranged from 32% to 79%. The proportion who said that they would know where to obtain a joint ranged from 52% to 88%.

The results of individual schools show that schools can differ dramatically in the particular substances used by their pupils. In one school pupils had the highest rates of smoking and of binge drinking, but the lowest rates of solvent use. In the school that had the highest rates of solvent use, pupils reported the lowest rates of use of drugs

other than cannabis and solvents. It is also interesting that schools in the same area were found to differ in the pattern of substance use among their pupils. Two schools in the same disadvantaged area participated in the study. While pupils in one school reported the highest rates of drinking and cannabis use the other school reported the lowest rates of smoking, drinking and use of drugs other than cannabis and solvents. Looking at availability, it is interesting that the school that reported the lowest rate of drug offers and the lowest proportion of pupils who would know where to obtain a joint, also reported one of the highest rates of cannabis use.

Looking at differences between schools according to socio-economic status, significant differences were found in relation to smoking, cannabis use, solvent use and drug offers. No significant differences were found in relation to alcohol use. A particular pattern emerged in relation to smoking, with pupils in the high socio-economic schools reporting high rates of infrequent use and pupils in the low socio-economic schools (or schools in disadvantaged areas) reporting high rates of frequent use. Pupils in the middle socio-economic group reported the lowest rates of smoking (see Table 8.1). These differences were found to be significant, $X^2(4) = 21.1, p < .001$.

Table 8.1 Frequency of smoking by socio-economic school group – percentages

<i>FREQUENCY OF SMOKING</i>	<i>SCHOOL TYPE – ECONOMIC GROUP</i>		
	<i>SEC 1 (lowest)</i>	<i>SEC 2 (middle)</i>	<i>SEC 3 (highest)</i>
never/1 or 2 times	55 (220)	59 (231)	49 (88)
used to/now and again	25 (98)	27 (108)	40 (72)
daily	20 (80)	14 (56)	11 (19)
TOTAL	100 (398)	100 (395)	100 (179)

Notes: Valid cases = 972, Missing cases = 11 (special school excluded from analysis). Ns in parentheses.

Looking at cannabis use a slightly different pattern emerged (see Table 8.2). Pupils in schools assigned to lower socio-economic group had the highest rates of both last year and last month use of cannabis. Schools in the middle and high socio-economic groups had similar rates of cannabis use. These differences were found to be significant, $X^2(4) = 9.4, p < .05$.

Significant differences also emerged in relation to inhalant use, $X^2 (4) = 10.6$, $p < .05$. Schools in the low socio-economic group had the highest reported rates of last year use of inhalants, but the highest rates of last month inhalant use were reported in schools assigned to the higher socio-economic group. Reported use was lowest in the middle socio-economic group.

Table 8.2 Frequency of cannabis use by socio-economic school group – percentages

<i>FREQUENCY OF CHANNABIS USE</i>	<i>SCHOOL TYPE – ECONOMIC GROUP</i>		
	<i>SEC 1 (lowest)</i>	<i>SEC 2 (middle)</i>	<i>SEC 3 (highest)</i>
never	68 (271)	76 (300)	77 (137)
last year	16 (62)	11 (42)	13 (24)
last month	16 (65)	13 (53)	10 (18)
TOTAL	100 (398)	100 (395)	100 (179)

Notes: Valid cases = 972, Missing cases = 11 (special school excluded from analysis).

Ns in parentheses.

Table 8.3 Frequency of inhalant use by socio-economic school group – percentages

<i>FREQUENCY OF INHALANT USE</i>	<i>SCHOOL TYPE – ECONOMIC GROUP</i>		
	<i>SEC 1 (lowest)</i>	<i>SEC 2 (middle)</i>	<i>SEC 3 (highest)</i>
never	86 (342)	89 (350)	83 (149)
last year	9 (38)	4 (18)	9 (16)
last month	5 (18)	7 (27)	8 (14)
TOTAL	100 (398)	100 (395)	100 (179)

Notes: Valid cases = 972, Missing cases = 11 (special school excluded from analysis).

Ns in parentheses.

Looking at availability, the highest rate of drug offers was reported by pupils in the schools in the lowest socio-economic group (65% of pupils had been offered at least one illicit substance). Pupils in the highest socio-economic group reported the lowest rates of drug offers (54%) while pupils in the middle socio-economic group reported moderate rates of drug offers (58%). These differences were found to be significant, $X^2 (2) = 8.4$, $p < .05$.

Taking gender into account, some significant differences were found between single gender and mixed gender schools. Differences were found for boys smoking behaviour, with a higher proportion of smokers in mixed schools (daily smoking -25% of boys in mixed schools 12% of boys in single sex schools). The other

differences were for female pupils only. Girls in mixed sex schools reported higher rates of cannabis than girls in single sex schools (33% of girls in mixed schools, 21% of girls in single gender schools). Girls in mixed schools also reported a higher rate of binge drinking (47% of girls in mixed schools, 23% of girls in single sex schools).

3.9 Differences between Cities

Five cities participated in the DDRAM study - Bremen (Germany), Groningen (the Netherlands), Newcastle (England), Rome (Italy) and Dublin. A random sample of schools was obtained in each city, giving a total sample of almost 4,000 pupils. For international comparison, analyses were confined to the 14- and 15-year old pupils.

Smoking:

Smoking ('now and again' or daily) was most common in Bremen, Rome and Dublin -. (Figure 9.1) and least common in Newcastle and Groningen where approaching half the young people sampled had never smoked. Overall, a higher proportion of females than males reported having smoked (Table 9.1). Males, however, reported that they began smoking at a slightly younger mean age (11.5 years for males and 11.8 for females); and 18% of male smokers smoked before their tenth year, compared to 12% of female smokers. Thus, while more females than males smoked, males began at a younger age. This pattern was apparent in all five cities; the lowest age of initiation was in Dublin and the highest in Rome.

Figure 9.1. Pupils use of tobacco by city - percentages

Figure 9.1. Pupils use of tobacco by city – percentages

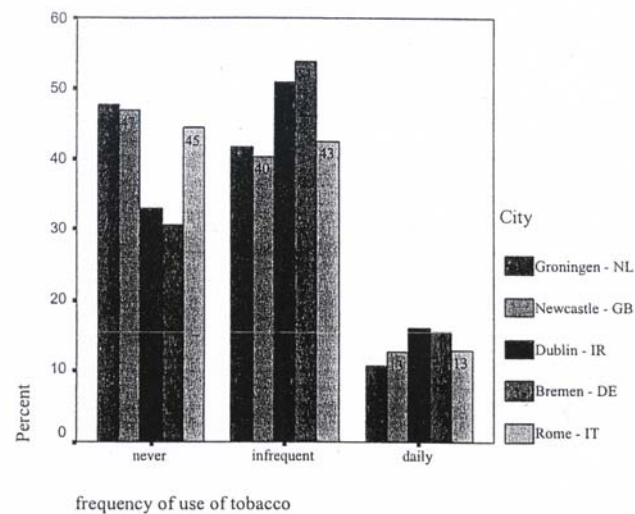


Table 9.1 Percentage of pupils smoking cigarettes by gender and city

<i>SMOKING</i>	<i>Bremen</i>		<i>Newcastle</i>		<i>Dublin</i>		<i>Rome</i>		<i>Groningen</i>		<i>Total</i>	
	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>
never	30	32	41	52	30	38	45	44	43	52	36	44
have tried it	36	41	34	31	35	38	23	31	37	30	33	34
now and again	17	14	10	6	19	8	17	15	10	7	15	9
daily	17	14	15	11	16	16	15	10	10	12	15	12

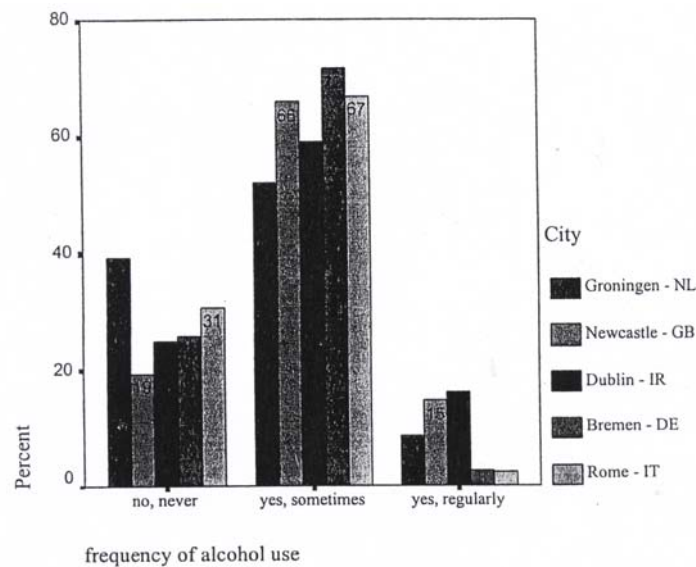
Alcohol:

Overall, approximately a quarter of the young people questioned had never tried alcohol (Table 9.2). Groningen youth reported comparatively low levels of alcohol consumption and Dublin and Newcastle youth reported the highest rates of regular alcohol consumption, and the lowest rates of abstinence (see Figure 9.2). Reported rates of alcohol consumption were approximately equal for males and females (see Table 9.2). The mean age of alcohol initiation was within a narrow range across the five cities: 11.1 to 12 years and marginally lower for males than females: respectively 11.4 and 11.8 years.

Table 9.2 Consumption of alcohol (%) by gender and city

	<i>Bremen</i>		<i>Newcastle</i>		<i>Dublin</i>		<i>Rome</i>		<i>Groningen</i>		<i>Total</i>	
	<i>f</i>	<i>m</i>	<i>f</i>	<i>m</i>	<i>f</i>	<i>m</i>	<i>f</i>	<i>m</i>	<i>f</i>	<i>m</i>	<i>f</i>	<i>m</i>
never	24	29	19	20	27	22	30	31	43	35	27	25
now and again	73	69	67	64	57	62	67	67	51	53	64	64
regularly	3	2	14	16	16	16	2	2	5	12	9	11

Figure 9.2. Frequency of alcohol use by city - percentages



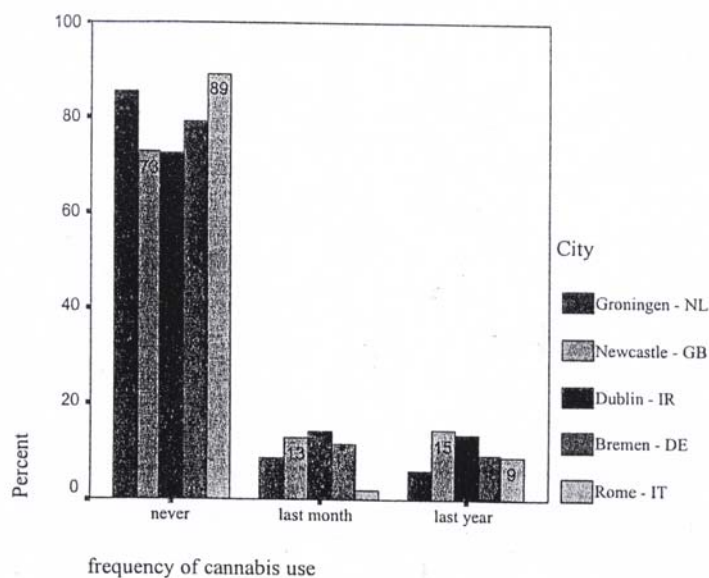
Cannabis use:

Approximately three-quarters of the young people in the survey reported that they had never tried cannabis, 11% had used cannabis in the last year and 11% had used cannabis in the previous 4 weeks. The highest rate of use, and the lowest rate of abstinence from cannabis was reported by Dublin and Newcastle youth; while Rome and Groningen youth reported the lowest use of, and the highest rate of abstinence from cannabis (Figure 9.3).

Males first smoked cannabis at a younger age than females, 12.8 and 13.2 years respectively; and were more likely to have used than females. A third of the male and a fifth of female cannabis users had first used by the age of 12 years. The age of initiation into cannabis use was in a narrow range between 12.6 years (Dublin) and

13.9 years (Rome), with Groningen (12.8 years), Newcastle (12.9years), and Bremen (13.4 years) intermediate.

Figure 9.3. Frequency of use of cannabis by city - percentages



Non-cannabis illicit drug use:

Newcastle and Dublin youth reported the highest rates of non-cannabis illicit drug use. Rome youth reported marginally raised rates of tranquilliser use; Newcastle youth, amphetamines and solvent use, and Dublin youth solvent use. With the latter, exceptions, rates of non-cannabis illicit drug use were low in the five cities (Table, 9.3).

Table 9.3. Percentage of pupils in each city reporting non-cannabis drug use

% who have used	Bremen	Newcastle	Dublin	Rome	Groningen
Tranquillisers	1	3	3	7	-
Ecstasy	3	2	3	1	3
Speed	2	7	3	1	1
LSD	1	4	4	-	-
'magic' mushrooms	1	5	4	X	3
Glue	4	6	13	X	2
Cocaine	X	2	X	X	-
Anabolic steroids	X	1	-	X	-

-: less than 1%, x: not asked

Availability and Drug Uptake:

Some striking differences emerged between the five cities in the perceived availability of illegal substances. The highest percentage of pupils who had been offered at least one illegal substance was found in Dublin, while the lowest rate of drug offers was reported by youth in Groningen and Rome (see Table 9.4). Drug uptake refers to the number of pupils taking drugs as a percentage of the total number offered drugs. This measure offers a way of examining the effect of availability on illicit drug use. As can be seen from Table 9.4 the highest rates of drug uptake were reported by youth in Rome, Bremen and Newcastle, where 57% and 56% of pupils. Youth in Dublin reported the lowest rate of drug uptake, with half of pupils who had been in offer situations reporting use of an illicit substance.

Table 9.4 Percentage of pupils who have been offered an illicit substance and rate of drug uptake by city

	<i>Bremen</i>	<i>Newcastle</i>	<i>Dublin</i>	<i>Rome</i>	<i>Groningen</i>
drug offers	43	44	60	37	35
drug uptake	56	56	50	57	54

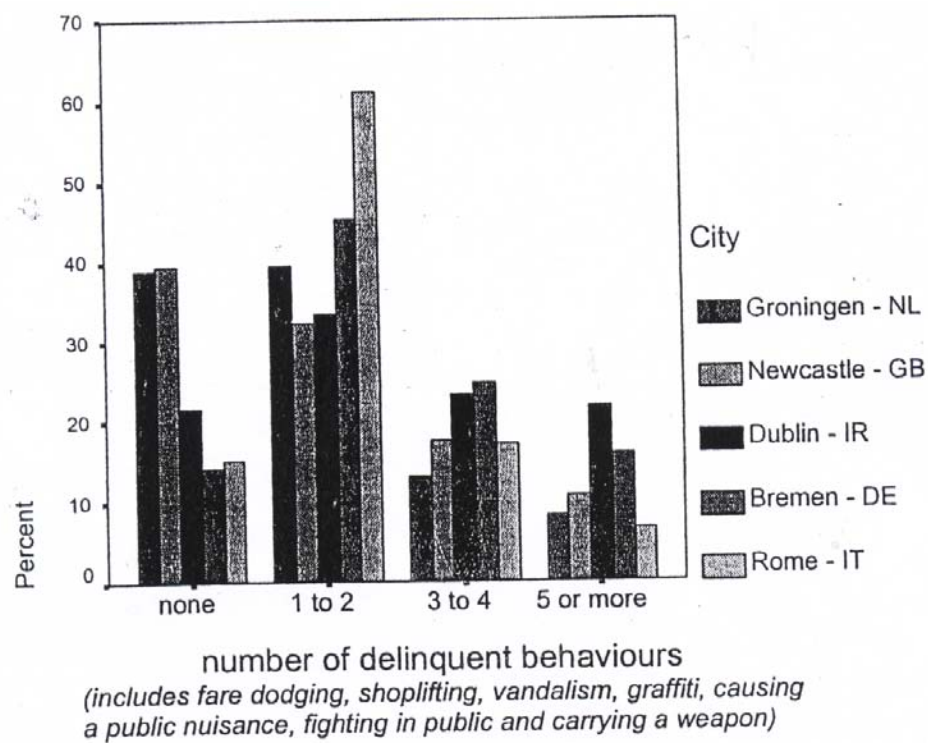
Delinquent Behaviour:

Approximately 80% of pupils in Bremen and Rome, compared to only 19% and 25% in Groningen and Newcastle acknowledged non-payment of fares on public transport (Table 9.4). Fare dodging aside, Dublin youth reported the highest rates of graffiti writing, vandalism, public nuisance, fighting in public and persistent criminality. Rome youths were relatively law-abiding, while reported rates in Groningen, Bremen and Newcastle were intermediate. This pattern is also found in the numbers of crimes committed by youth in each city (Figure 9.4). Youth in Groningen and Newcastle reported the highest rate of having committed none of the delinquent behaviours, youth in Rome had the highest rate of having engaged in only one of the behaviours, while youth in Dublin had the highest rate of having committed 5 or more of the behaviours.

Table 9.5 Percentage of pupils reporting punishable offences in each city –percentages

%	<i>Bremen</i>	<i>Newcastle</i>	<i>Dublin</i>		<i>Groningen</i>
fare dodging	81	25	39	78	19
shoplifting	41	22	34	24	28
vandalism	30	31	37	17	20
graffiti	30	37	52	24	18
public nuisance	19	11	36	13	12
fighting in public	18	33	47	11	25
carrying weapon	28	17	22	8	23

Figure 9.4. Number of delinquent behaviours by cities - percentages



Health education:

The majority of young people reported dissatisfaction with school-based information on AIDS in all five cities, and concerning drugs in Bremen, Rome and Dublin, and alcohol and tobacco in Bremen and Rome (see Table 9.5). Groningen and Newcastle youth (with the striking exception of their experience of AIDS information) reported the least dissatisfaction.

Table 9.6 Percentage of pupils reporting dissatisfaction with school-based information concerning substances by gender by city

% none/ Insufficient	<i>Bremen</i>		<i>Newcastle</i>		<i>Dublin</i>		<i>Rome</i>		<i>Groningen</i>	
	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>
Tobacco	63	58	39	40	37	64	63	64	31	35
Alcohol	75	68	45	47	48	66	79	71	48	48
Drugs	74	67	49	51	57	73	58	61	45	48
AIDS	89	83	72	72	88	90	77	69	39	45

3.10 Summary of Results

CIGARETTES

- Lifetime prevalence was 77%, with 14% of pupils saying that they smoked now^{cr} and again and 16% saying that they smoked daily.
- The average age at which pupils started smoking was 11 years and on average pupils smoked 4 cigarettes a day.
- There was a high proportion of heavy smokers. Amongst pupils who smoked, 30% smoked 6-10 cigarettes a day and 12% smoked more than 10 cigarettes a day.
- A higher proportion of girls smoked than boys, but on average boys began at a slightly younger age and smoked more cigarettes than girls.
- The most commonly given reason for smoking was that they wanted to try followed by ‘my friends smoke’.
- The most commonly given reasons for not smoking were harm to health, followed by involvement in sport and parental disapproval.

ALCOHOL

- A quarter of pupils said that they never drink while 59% said that they sometimes drink and 16% said that they drink regularly.
- The most popular types of drink were ‘alcoholic soft-drinks’ and ‘larger, stout or cider’.
- A quarter of pupils reported using alcohol less than once a month, a quarter reported monthly use, one fifth reported weekly use and 3% reported daily use.
- The average age at which pupils started drinking was 11.6 years and on average pupils reported drinking 3.63 units per occasion.

- Binge drinking (drinking 5 or more drinks in a row) was reported by just over one fifth of the total sample
- There were no significant gender differences for alcohol use.
- The most commonly given reasons for drinking were wanting to try, because they like to drink on special occasions and because they like the taste.
- The most commonly given reasons for not drinking were harm to health, parental disapproval and because they are too young.
- The places where pupils drink the most frequently are on a street, park or beach and in someone else's home.
- The majority of pupils who drink indicated that they usually get alcohol from a friend (60%) while just under a half said that they bought it.
- Having a lot of fun, feeling happy, acting more friendly and outgoing, and feeling relaxed were seen as the most likely consequences of drinking alcohol by the majority of pupils.
- Not being able to stop drinking and getting into trouble with police were seen as the most unlikely consequences by the majority of the sample.

ILLICIT SUBSTANCES

- Just under a third of the sample reported use of at least one illicit substance, with 15% having used in the last year and 17% in the last month.
- Cannabis was the most commonly used substance (just under a third of pupils had used it), followed by inhalants (14% of the pupils had used it).
- All other illicit drugs had been used by 5% or less of the sample, with the order of popularity being magic mushrooms, LSD, ecstasy, tranquillisers and amphetamines.
- The mean age for first use of cannabis was 12.5 years while the mean age for first use of inhalants was 12.4 years.
- Significantly more boys than girls had used any illicit substance, cannabis, amphetamines, magic mushrooms and LSD and boys had a lower mean age at first use of cannabis.
- The most commonly given reasons for using illicit drugs were wanting to try, and 'because I like the effects'.

- The most commonly given reasons for not taking drugs were harm to health and the risk of dependency.
- The most common ways in which pupils obtained illicit substances were from a friend, by it being passed around a group of friends, from a stranger or by buying it.
- <0% of the sample said that they had been offered at least one illicit substance, cannabis being the drug most commonly offered followed by ecstasy.
- The places where pupils were most commonly offered illicit substances was on the street, at a rave or disco and at a friends home.
- The most commonly cited effects of cannabis, alcohol and tobacco were relaxation and pleasure. Dependency was cited most commonly as the effect of heroin and cocaine, while hallucination and pleasure were the most commonly cited effects of ecstasy.
- For alcohol, cannabis and tobacco the positive effects were cited by a higher proportion of pupils than the negative effects. Alcohol was seen in the most favourable light followed closely by cannabis and tobacco.

DELINQUENT BEHAVIOUR

- The most common delinquent behaviours were graffiti and fighting in public, both of which were reported by approximately half of the sample, while just over a third of the sample admitted to shoplifting and having bothered or threatened someone.
- Almost a quarter of the sample had been caught or arrested by the police.
- There were significant gender differences with boys having engaged in a higher number of delinquent behaviours and a higher proportion having been involved with the police.
- There was a significant relationship between substance use and delinquent behaviour, with the number of delinquent behaviours increasing with level of involvement with both alcohol and cannabis.

DIFFERENCES BETWEEN SCHOOLS

- Significant differences were found in the rates of substance use between individual schools, between schools based on socio-economic grouping, and between mixed and single gender schools.

COMPARISON WITH OTHER CITIES

- Of the five cities that participated in the study (Bremen, Groningen, Newcastle, ‘ Rome and Dublin) youth in Dublin had some of the highest rates of substance use and delinquent behaviour.
- Pupils in Dublin reported one of the highest rates of regular smoking, with 16% of young people reporting daily smoking compared with 16% in Bremen, 13% in both Newcastle and Rome, and 11% in Groningen.
- Pupils in Dublin reported the highest rate of regular alcohol consumption, with 16% reporting regular use of alcohol, compared with 15% in Newcastle, 9% in Groningen, 2% in both Bremen and Rome. Dublin youth reported one of the lowest rates of abstinence from alcohol, and reported drinking more on an average * drinking session than young people in the other cities.
- Dublin youth reported the highest rates of cannabis use. 28% of pupils in Dublin reported having used cannabis either in the last year or the last month, compared with 27% in Newcastle, 21% in Bremen, 15% in Groningen and 11% in Rome. Dublin youth also reported the lowest age of first use of cannabis, and one of the highest rates of use of illicit drugs other than cannabis, with use of inhalants being particularly high in comparison to the other cities.
- Compared to the other cities participating in the study, availability of illegal substance was highest in Dublin. 60% of pupils in Dublin had been offered an illicit substance, compared with 44% in Newcastle, 43% in Bremen, 37% in Rome and 35% in Groningen.
- Dublin youth reported the highest rates of graffiti writing, vandalism, public nuisance, fighting in public and persistent criminality. Rates of fighting in public and causing a public nuisance were twice as high as those in the other cities.

DISCUSSION

The study provided an accurate and up to date picture of the levels and patterns of substance use among young adolescents in Dublin. Results show that there is a high level of substance use among 14- and 15-year-old Dublin pupils. This is particularly true of legal substances, with three-quarters of the sample reporting lifetime prevalence of alcohol and tobacco. The pattern of use among approximately half of the sample was of infrequent use, while approximately one fifth reported frequent use of alcohol and tobacco. Use of illicit substances was less common, with approximately a third of the sample reporting having used at least one such substance.

4.1 Increasing Use of Substances in Adolescence

Previous research has pointed to a sharp increase in substance use among adolescents in the last decade and the present study confirms this conjecture. This suggests that the use of substances in adolescence is becoming increasingly common. A recent study of drug use among young people in the North-West England found that 36% of 14 to 15 year olds had used an illicit substance (Measham et al, 1994). The results led the authors to conclude that drug use was becoming 'normalised' among young people. The results of the present study show levels of use of legal substances which are as high and levels of illegal drug use which are only marginally lower than those reported by Measham and her colleagues. The high levels of use are particularly striking in relation to legal substances. For both alcohol and cigarettes the group of pupils who have abstained from use are very much in the minority.

In light of the findings, it is questionable whether the traditional view of adolescent substance use as a deviant behaviour is still relevant. Indeed the rise in rates of use has led

one author to argue that, given an environment that condones and encourages experimentation, it is abstinence rather than use which can be described as deviant behaviour (Foxcroft & Lowe, 1991). Indeed some research has indicated that in certain adolescent populations, experimental users of marijuana and other illicit drugs are in better psychological health than either heavy users or abstinent nonusers (Baumrind & Moselle 1985, Shedler and Block 1990). Among the present sample experimentation rather than frequent use of substances was the most common pattern of use. It is important to make distinctions between the different patterns of use, so that the factors which contribute to frequent use or misuse can be identified.

It is useful to look at how young people themselves perceive substance use. Taking the ‘ use of cannabis as an example, the results show that young people do not see it as a dangerous activity. Indeed the use of cannabis is seen in a more favourable light than the use of cigarettes. This points to the discrepancy between the message adopted by many prevention programmes that ‘all drugs are evil’ and the adolescents own perception of drugs and drug use. In light of both the level of substance use and young people’s perception of such use, there is a clear need for a harm reduction element in prevention strategies.

Pupils perception of the consequences of alcohol use are particularly striking and show that young people have a very positive attitude to alcohol. This points to a possible gap in young peoples knowledge about the potential negative consequences, both short term and long term, of alcohol use. Research has found that young adults who expect alcohol to have a positive effect have heavier patterns of consumption and are more likely to abuse alcohol.

Looking at the reasons given by pupils for their use of tobacco, alcohol or illicit drugs, it is evident that curiosity is one of the main factors behind substance use. In the case of alcohol a high proportion of pupils also said that they drank because they liked to drink

on special occasions and because they like the taste. This indicates an attitude to and experience of alcohol that is not unlike adults. In the case of illicit drugs, a high proportion of users said they used drugs because they liked the effects. These results indicate that young people are motivated less with peer group status and more with what Parker (1995) has described as “rational consumption as part of young peoples approach to their leisure time” (pg. 26). According to Coggans and Watson (1995)

“School-based drug education has frequently failed to take into account the likelihood that many young people use drugs on a recreational basis because they wish to experiment or enjoy the pleasurable aspects of intoxication, not because they lack knowledge, the social skills to ‘say no’ or because they have a poor self image”.

4.2 Availability and Accessibility

The results show that both legal and illegal substances are readily available to the young people surveyed. Despite the law regarding the purchase of alcohol and cigarettes, the majority of pupils who smoked said that they usually bought their cigarettes and just under a half of pupils who drank said that they usually bought the alcohol. This highlights a clear need for the implementation of laws regarding the sale of alcohol and cigarettes to young people. A new national identification card scheme aimed at combating under-age drinking is being implemented in April. Although this is being introduced on a voluntary basis it has been welcomed by the National Off-Licence Association and should go some way to reducing the sale of alcohol to young people aged under 18 years. Other strategies such as server intervention programmes can reduce the sale of alcohol and cigarettes to young people. These programmes involve researchers, drug abuse specialists, local authorities or other concerned citizens working co-operatively with retailers to review and revise their policies and procedures and provide training for personnel. Another possible action would be to increase the minimum legal age for sale of alcohol and

cigarettes. The US Food and Drug Administration recently issued new rules which prohibit the sale of tobacco to anyone under 18 years and require retailers to check photographic identification for everyone under 26. However given the differences in ‘cultural attitudes toward adolescent smoking and drinking (Irish people are relatively complacent, while in America there is a very strong ‘anti smoking’ attitude) and the fact that current age limits are not being implemented, it is unlikely that increasing the legal age would have significant effects.

Looking at availability of illegal substances, the majority of pupils reported that they had been offered an illicit substance and would know where to obtain cannabis. While the street was one of the most common places where pupils had been offered illicit » ‘ substances, the majority of pupils who had used an illicit substance had obtained the substance from a friend or group of friends. This dispels the myth of young people being tempted into drug use by pushers. The reality is that while drugs are readily available on the streets, it is the young people’s friends and peer group who are the most common suppliers.

Considerable efforts have been made in the last few years to curb the supply of illicit substances, through Garda campaigns such as Operation Cleanstreets. While such campaigns have been successful in identifying and prosecuting many drug dealers, it would seem that from a young person’s perspective illicit substance are still readily available. A project called ‘Say No and Phone’ is currently being developed for primary schools by the INTO, the Gardai and the Chambers of Commerce which will encourage children to refuse drugs and give the pushers name to the Gardai. While a project of this kind might reduce the numbers of young people being offered drugs on the streets it does not take into account the fact that the majority of young people who use drugs obtain them from their friends.

There is a need for a new and innovative approach to tackling the issue of availability of illicit substances. The supply of drugs through friends is unlikely to be effected by efforts to clamp down on heroin dealers. It is efforts such as peer education which are more likely to have a positive effect. Morgan, referring to the fact that the main source of supply is friends said “For policy makers this shows clearly that prevention starts with friends and that you cant blame the supply of drugs for the drugs problem”(Irish Times, Nov 8,1997).

The findings show that a number of young people had been offered illegal drugs at a rave or disco, at school and at a friend’s home. One possible way of addressing this issue would be to ensure that there are clear and consistent policies about substance use in the places where young people meet. Schools, youth clubs and discos/clubs should develop , guidelines for how to deal with finding drugs. The National Youth Council of Ireland have produced a handbook which provides possible guidelines for how to deal with a variety of drug related situations and they recognise that some reactions may further alienate the young drug user from the support offered by a youth club. This is also true of school policies, which can be detrimental to young people (e.g. in the circumstance of expulsion from school). Young people themselves might be involved in the formulation of school or club policies regarding substance use or at least be well informed as to what these policies are.

4.3 Delinquent Behaviour

The young people surveyed reported very high rates of delinquent behaviours and contact with police. This points to an urgent need for interventions that address delinquency. The high rates of delinquent behaviours and police contact are in line with information regarding the caseload of the Garda Juvenile Liason scheme. The scheme is designed to divert children who get into trouble with the law from further crime, by working with the child and the child’s family. The scheme dealt with 15,000 cases in 1997 and dealt with

more than 40 cases a day. There have been many suggestions of how to reduce juvenile delinquency. As far back as 1970 the Kennedy report called for interventions which would help parents cope more effectively, such as improved amenities and parenting courses. In 1980 the Task Force on Child Care Services called for projects which could cope with young people barred from ordinary clubs and activities. Efforts to channel children who become involved in delinquency into more productive and socially acceptable activities promise success. One such project, Carline, gives children who have been involved in joy riding a chance to work with cars in a supervised, structured and respectful environment. The provision of child care facilities may also serve to reduce juvenile criminality.

4.4 Age of Pupils

The results are particularly striking given the age of the pupils surveyed. While more recent surveys have looked at substance use among the older school population the present study surveyed pre Junior Certificate pupils. It is interesting to look at differences between the findings of the ESPAD study conducted in 1995 (Hibell et al. 1997) with the present findings. The ESPAD study was conducted with pupils in fifth year of post primary education while the present study surveyed second year pupils. Despite the age gap there were only marginal differences between the rates of use reported in both surveys. The older pupils reporting similar rates of use of cigarettes and alcohol and only slightly higher rates of illicit drug use. These findings show that the widespread use of alcohol and tobacco is not confined to older adolescence. Some clear differences can be identified between the two age groups in the use of illicit drugs. “While there are only small differences in prevalence of cannabis use and solvent use, the use of the so called dance drugs is much more prevalent amongst the older adolescents. Lifetime use of LSD and ecstasy were reported by approximately 1 in 10 of the students participating in the ESPAD study (Hibell et al, 1997). In comparison, less than 5% of the

present sample had used either of these substances. This suggests that the pattern of poly-drug use is more typical in older adolescence.

4.5 Gender Differences

The findings indicate only small differences between boys and girls in the prevalence of substance use. This shows that gender differences in the use of substances are fragmenting. Traditionally the rate of substance use among boys was almost double that among girls. The present study found that only a slightly higher number of boys had used alcohol and illegal drugs, and girls were more likely than boys to smoke. Amongst those who did use a particular substance, however, boys used a larger quantity of the substance and started using at a younger age than girls. In contrast to substance use, there were clear and striking gender differences in relation to delinquent behaviours. Boys reported much higher rates of nearly all of the delinquent behaviours, with approximately half of the male sample reporting many of the behaviours.

4.6 Differences between Schools

Significant differences were found in the rates of substance use between individual schools. That one school could have a third of their pupils smoking daily while another had only 4% daily smokers gives some indication of the extent of these differences. There are a range of factors which may be contributing to these differences: differential availability of drugs in neighbourhoods around the schools, substance use norms within a school, school climate. The findings suggest that it is possible to measure drug exposure and drug taking by school when pupils are 13 or 14 years old and thereby produce a profile of the pupil population in respect of drug issues. This would allow for the implementation of more sophisticated and appropriately targeted preventative strategies.

Significant differences were found between schools based on socio-economic grouping. Schools in the low socio-economic group (schools in disadvantaged areas) had higher rates of frequent smoking, cannabis use and drug offers. Schools in the middle socio-economic group had low rates of smoking and inhalant use and moderate rates of drug offers. Schools in the high socio-economic group had the highest rates of inhalant use and infrequent smoking, moderate rates of cannabis use and low rates of drug offers. Some differences were also found between mixed and single gender schools. The results show that rates of substance use are higher in mixed schools and suggest that this may be due to diminished gender differences. Compared to single gender schools, rates of smoking among boys in mixed schools were closer to those of girls and rates of cannabis and binge drinking among girls were closer to those of boys. These findings further illustrate the need to tailor prevention strategies to the needs of individual schools or school type.

4.7 Differences between Cities

Studies conducted in the 1980's showed that Irish teenagers had low rates of illegal drug use when compared with teenagers in the United States, England, Scotland, France, Spain and West Germany. The exception was found in relation to inhalant and solvent use, which was high among Irish by international standards (Morgan & Grube, 1989). The present study was conducted in five cities in Europe. A comparison of prevalence rates across the five cities shows that rates of use among Irish young people have changed in relation to other countries. While solvent and inhalant use is still higher among young people in Dublin, the use of other illicit substances and the use of alcohol are also high in comparison to the other cities. This is in keeping with the results of a comparative study conducted in 1995 (Hibell et al 1997). The finding that adolescents in Dublin engage in higher levels of substance use than pupils in other cities is particularly interesting in light of national efforts to provide drug education and to interdict drugs, and given the more

liberal policies in place in some of the comparison countries (e.g. the Netherlands). It is crucial that efforts be made to identify factors that contribute to national and regional variations in substance use prevalence.

There are several possible reasons why adolescent substance use has increased in Ireland in comparison to other countries. It has been suggested that substance use rates may be affected by economic factors. The decline in alcohol consumption in some European countries during the 1980's, for example, has been linked to economic recession (Osterburg, 1986). It is possible that the present economic growth in Ireland and the associated rise in disposable income may be linked to the increase in rates of substance use. Over the last decade Irish society has experienced considerable changes in relation to , the structure of the family and parenting style. These factors have also been identified as -' having an effect on prevalence of substance use among young people.

A more obvious factor affecting substance use is the availability and accessibility of substances. Compared to the other cities participating in the study, availability of illegal substance was highest in Dublin. It is particularly interesting that the lowest rate of offer situations was found in Groningen, where use of cannabis has been decriminalised. The uptake rates give some idea of the impact of availability of illegal substance on rates of use. The uptake rate is actually low in Dublin compared to the other cities. This suggests that if the issue of availability were addressed in an effective way, we might see a decrease in the rates of use of substances.

The rates of delinquent behaviour were higher in Dublin than in the other cities involved in the study, particularly in relation to aggressive acts (fighting in public and threatening/bothering someone) and shoplifting.

4.8 Postmodernism and Popular Culture

Parker (1995) has pointed out that the use of illicit drugs has become internalised or integrated into 'official' youth culture and argues that this can be illustrated in the way youth magazines, music, fashion markets and popular language have incorporated drugs. Indeed it seems that drug culture is no longer a subculture but has been assimilated into popular culture. Advertisements are increasingly using drug-related imagery to sell their products. There was concern recently about the popularity of 'heroin chic' in the fashion world. There has also been a spate of books and movies and t.v. shows which depict the drugs lifestyle and these have been popular.

Parker has also pointed to the collapse of distinctions between legal and illegal psychoactive markets and relates this to post modernity. The present study found a strong relation between the use of legal and illegal substances. Legal substances are being marketed using drug-related language and imagery in both advertisements and packaging. Not only are drugs becoming increasingly available, but marketing techniques are becoming more sophisticated. Concern has been recently expressed about the marketing of so called 'party packs', which contain an ecstasy tablet, a small amount of heroin to allow users to come down from the effects of the ecstasy and alcohol.

4.9 Prevention

Various approaches have been adopted in the area of drugs education in Ireland. These have included information giving, affective education, and social and personal development.

Several media campaigns aimed at educating young people about the dangers of drug use have been implemented in the last few years. The Health Promotion Unit recently

launched a series of posters displaying close up images of leg abscess and mouth ulcers in an effort to show young people some of the health risks involved in heroin use. The effectiveness of such campaigns is questionable. According to a recent publication on drug prevention 'evidence from recent surveys suggest that direct communication to young people of information about drugs, even though aimed at alerting them to the dangers, is likely to cause experimentation' (Dom & Murji, 1992). The information used in such campaigns is often at odds with young people's direct or indirect experience of drugs, and young people are likely to reject the overall message because of this.

Looking at school based preventive activities one of the more traditional approaches is to , invite ex-addicts to the school to talk to pupils about the dangers of substance use. The effectiveness of this approach has also been questioned. A report was published in 1974 by the Committee on Drugs Education which expressed a concern about one off scare tactics sessions conducted by outside speakers and concentrating on the negative effects of drugs. It recommended that drugs be incorporated into a wider context and conducted by people whose work with young people is on-going, rather than being provided as a separate activity. Despite this lots of schools are still using one off sessions with ex drug addicts who talk to pupils about the dangers of drug use. The relevance of this type of intervention to the students and to their own experiences of drug use is questionable. It can also serve to strengthen children's stereotypes about drug users, thus creating a distance between their own experience of substance use (whether it be occasional drinking or smoking cannabis) and the experience presented to them by the ex-addict. This in turn may make it more difficult for young people to recognise their own problematic use or to access services. It is likely that in implementing such interventions schools are responding to the wishes of parents. As part of the overall DDRAM study 140 interviews were conducted with parents of pupils in sixth class. Almost a third of parents interviewed said they thought schools should invite ex drug addicts in to talk to pupils. There is a

clear need to educate both parents and teachers about what does and does not work in the area of substance use prevention.

The type of approach currently endorsed by the Department of Education is the use of a lifeskills curriculum. This type of curriculum looks at a range of human behaviours, which could be broadly viewed as having health implications, and deals with alcohol and drug consumption in a way that was nondirective and relativistic. The 'On Your Own Two Feet' programme is an example of such a curriculum. Programmes which use a lifeskills approach and interactive methods have been found to be effective in delaying onset of drug use or inhibiting a move to harder drugs. The scale of success of even the most effective programmes, however, are small (Tobler & Stratton, 1997). This means that a large number of young people go through such programmes and still go on to use drugs. Whether it is realistic to expect lifeskills education, or indeed any education, to stop all young people from trying drugs is questionable.

Prevention programmes need to take into account the reality of the user. This means recognising the extent of young people's use of substances, their attitudes towards substance use and their reasons for use. The information and messages given to young people should be legitimate and relevant to their own experiences of substance use. Given the fact that most young people will have engaged in at least some form of substance use, there is a clear need for primary prevention to be complemented by secondary prevention or harm reduction approaches. The focus of prevention policy in Europe has shifted from drug prevention to addiction prevention. This reflects a growing awareness of the need to change the aim of preventative effort from abstinence to moderation or from the prevention of all substance use to the prevention of the misuse of substance. In order for any intervention to be successful it must have realistic aims. As Dom and Murji (1992) suggest 'aims may be more realistic where they focus on reduction in levels of consumption rather than on prevention of initiation' (p. 4)

Substance use prevention programmes are currently implemented on a voluntary basis in post-primary schools. Recently efforts have been made to move prevention programmes into primary schools. The minister for Education, Mr. Martin, recently announced a drug education programme which will be given to children at primary schools in areas most affected by drug misuse. The “Walk Tall” programme is graded to deal with children from infants to sixth class and has a different emphasis to suit the age of the children. The results of the present study show that many pupils had started to use substances before reaching post-primary school. This highlights the need for substance use prevention programmes in primary school. Such programmes should not be confined to certain areas, but should be implemented across the board. The results of this and other studies show that substance use occurs in all areas. It is clear that some groups of young people may be at increased risk of developing problematic use due to social and environmental factors. However the best way of tackling this issue is to combine a universal drug education programme for the wider young population with specific interventions tailored to the needs of more vulnerable young people.

Since the publication of the first and second reports of the Ministerial Task Force to Reduce the Demand for Drugs, a lot of attention has been focused on the prevention of illegal substance use. Less attention has been paid to the use of legal substances, particularly to the use of cigarettes. Looking at the results of the present study however, it is clear that the prevalence of alcohol and cigarette use is particularly high. The health implications of such widespread use are enormous. Recent studies of tobacco related deaths in the US show that they exceed the total associated with AIDS, motor accidents, homicides, alcohol, illegal drugs, suicides and fires. Despite the danger to health there is ambivalence and a certain amount of complacency in the attitude to adolescent drinking and smoking in Ireland. There is an urgent need for prevention strategies that address the use of legal substances, rather than focusing exclusively on illegal substances.

To date the majority of preventive efforts have taken place in the school setting. The majority of substance use takes place outside of the school, however, and skills learned in the classroom may not generalise to other settings. It is important to extend the settings in which substance use prevention programmes are implemented. Interventions should also take place in the community - in youth clubs, sports clubs and community centres. Since many children are engaged in interactions outside the school system, youth and community workers are ideally placed to play an important role in drugs education. It is therefore vital that the response to the drugs issue is based in the community where generally there are a large number of agencies and organisations to co-ordinate and facilitate the work.

It is also important to adopt strategies that look at factors outside of the individual (macro as well as micro systems). A cultural or systemic approach to substance use prevention focuses on the social situation of the drug user and is based on the assumption that socio-economic factors and behaviour norms influence drug use. It is clear from the results that adolescents are growing up in a culture in which, amongst both users and non-users, substances are seen as readily available and their use is increasingly seen by young people as acceptable and normal behaviour. The systemic approach is particularly appropriate for interventions that take place in the community. Such interventions have many advantages. They can lend support to school based programmes. It has been argued that without such support and involvement from the community, it is unlikely that any school based prevention effort can be completely successful. Community involvement can also lead to a reduction in the physical and social availability of substance, thus influencing 'those aspects of the social and physical environment that impact upon an adolescents decisions regarding smoking, drinking and drug use' (Ratcliffe & Wallack, 1985). It can also promote a normative climate that is supportive of policy and social changes.

One type of community involvement which is becoming more popular is the involvement of parents in substance use prevention efforts. Parental groups can serve an educational function by increasing parental awareness of adolescent smoking, drinking and drug use, by informing parents about the early signs of drug involvement and by educating parents about successful preventive strategies. Parents can also provide support for policies and prevention activities in schools. In educating parents it is important to provide information which is geared towards helping them to understand substance use from a young persons viewpoint. Working with parents and young people together to enhance family relationships prior to the generational conflicts of adolescence could have a real impact on young peoples drug use (McClure & Wilcock, 1998).

One of the downfalls of many prevention and intervention strategies in this country is the lack of evaluation. Where evaluation evidence does exist it is often ignored. Butler (1994) has commented that

“The use of education as a means of prevention appears to have become institutionalised in Ireland, as elsewhere, so that it is carried on almost as though it were an end in itself, with little or no reference to the evidence of the outcome studies” (pg. 137).

It is essential that evaluation is built into any preventative activity or strategy, and that the results of such evaluations are used to ensure that programmes are effective. non-interactive programmes - affected only knowledge. Another area that is often overlooked in the development of prevention programmes is needs analysis. There is a world of difference between understanding needs and knowing how best to meet them on the one hand, and making assumptions about needs and how to meet them on the other. Drug education needs will vary in relation to a range of factors, including age, development of personal and social competencies, attitudes, beliefs and drug related behaviour. Community factors such as local norms, availability and social acceptability of

substance use can also effect the needs of a particular group of young people. Before putting programmes into place it is vital that the needs of a target group are understood and the aims and objectives are clearly defined and realistic.

4.10 Drug Policies

The focus of drugs policy in Ireland over the last decade has shifted from supply reduction to demand reduction. This shift sees issues such as educational prevention programmes and research into the etiology of substance abuse coming to the fore. A recent government document recommended that “in the long term the most effective response [to the drugs crisis] might be to put proper preventive strategies in place” (First Report of the Ministerial Task Force on Measures to Reduce the Demand for Drugs, October 1996). The present multi-modal response, which combines supply reduction efforts, treatment services and prevention strategies would seem to be the most effective way of addressing the problem of substance misuse.

According to Parker (1995) a different approach is adopted in relation to drug policy compared to other policies, in that if a policy is not working the reaction is to put more money into it. This points to an urgent need for continuing evaluation of the efforts being made to curb the demand and supply of drugs. There are now many initiatives in place which attempt to address the problem of drug abuse, including local and national prevention programmes, media campaigns and various treatment services. What is missing is consistent evaluations of these initiatives, and dissemination of the results of such evaluations.

There is also a need for continuing efforts in the area of treatment. While there has been some success in the establishment of community treatment centres, there has been difficulty in winning local acceptability for drug treatment centres in some areas. This

may be due, in part, to pessimism regarding the efficacy of treatment in the area of addiction. However, recent studies have demonstrated the success of addiction treatment (Bryan, 1998), which supports further Government spending in this area.

4.11 Treatment Services

As well as primary and secondary preventive efforts, there is an urgent need for the development of tertiary preventive strategies, or treatment services for adolescents. Given the levels of substance use reported in this and other recent surveys, the emerging patterns of poly-drug use and the increasing sophistication of the illegal drug market, it is likely that numbers of young people experiencing addiction-and other problems associated with drug use will increase. According to the 1996 National Report on Treated Drug Misuse in Ireland “clients presenting for treatment over the seven year period are getting younger” (Moran et al, 1997). In 1996 there were 223 school goers amongst all cases treated for drug misuse in the National Drug Treatment Reporting System, 66% of which were resident in the Eastern Health Board (Moran et al, 1997).

At present there is a paucity of services designed specifically for young drug users. Most services are geared toward older opiate users. Adolescents who are experiencing problems with drug use may be reluctant to access such services because they associate them with the image of the ‘junkie’. A recent report of addiction services in the South inner city pointed to the difficulty in getting young people to access services. One service described a noticeable increase in younger drug users who were testing for HIV but were not using the rest of the services, still not realising they have a problem.

There is an increasing need for user friendly, age, drug and legal appropriate services. Services for adolescents need to cater for problematic use of both opiates and non-opiates. They need to take developmental factors into consideration and recognise that

there are often problems other than those associated with drug misuse: child abuse, neglect or family difficulties. For example, young people presenting for treatment may be the second generation of drug users, having parents or older siblings who were involved in drug use in the early eighties. In order to increase accessibility of services outreach facilities should be provided. In creating and expanding an adolescent service, lessons can be learned from Britain, where some of the policy issues around adolescent drug use have been tackled, and from existing projects. One such project is the Crinan Youth Project, a pilot scheme for teenage heroin addicts which has been in operation for just over a year in Dublin's north inner city. The Young Persons Programmes, which have been developed at three Eastern Health Board addiction centres, are further examples of efforts which have been made to provide services geared specifically to adolescents.

4.12 Summary of Recommendations

- Further measures should be taken to reduce the availability of legal substances to young people, such as the implementation of the national identification card scheme and enforcement of the laws regarding sale of tobacco.
- A new and innovative approach to tackling the issue of availability of illicit substances is needed. Suggestions include the development of set policies and procedures regarding substance use in places where young people meet and peer education.
- Further attention should be focused on delinquent behaviour among young people, for example expanding the work of the Juvenile Liaison scheme.
- Prevention programmes should be developed and assessed which adopt a systemic approach and attempt to address all types of problem behaviour.

- Universal drug education for both primary and postprimary school pupils should be complemented by specific interventions tailored to the needs of more vulnerable groups.
- Drug prevention efforts should include a range of strategic educational goals ranging from primary prevention through to harm reduction.
- Preventive activities should take place in a variety of settings: in youth clubs, sports clubs, community settings as well as schools.
- Current parental substance use education programmes should be expanded, and parents should be encouraged to become involved in prevention activities.
- Needs assessment and evaluation should be built into all prevention activities to ensure effectiveness and efficiency.
- Information about which preventive methods are effective, and which are less effective, should be disseminated to teachers, youth workers and parents.
- Treatment services geared specifically for adolescent users need to be expanded.
- Regular school based surveys are needed to monitor trends in rates and patterns of substance use among adolescents.
- Further research is needed into the following areas: the effect of availability on levels of use, the relationship between substance use and other problem behaviours, and the role of factors such as school climate.
- Surveys should be conducted examining rates and patterns of substance use among those who are not reached by school surveys: absentees, early school leavers and homeless youth.
- More in-depth longitudinal studies would increase understanding of the risk and protective factors associated with substance abuse and the long-term outcomes of engaging in substance use during adolescence.

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