



Young People and Cannabis use in Liverpool

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Executive Summary

Introduction

This study investigated cannabis use in young people recruited from Liverpool City Centre aged between 16-25 years and who were not in contact with treatment services. The research methodology was developed following consultation with Liverpool DAAT and Citysafe and aimed to identify patterns of young people's cannabis use and to investigate their knowledge and perceptions of its effects. The study also sought information about awareness and acceptability of local services that respond to cannabis use.

Methodology

A self-report questionnaire was designed. Four sampling methods were used; street based surveys, postal, online and local college groups. Although the format differed between distribution techniques, the content of the questionnaire was identical.

In total, 385 participants were recruited from central Liverpool and completed the cannabis questionnaires, 164 (42.6%) were male and 218 (56.6%) were female; gender was not recorded for three (0.8%) participants. The mean age of all participants in the current study was 18.5 years (SD=2.6) (section 2.2 of *main report*).

Findings

The majority of respondents lived with their parents (n=263; 68.3%) and 61 (15.8%) said they lived with friends.

One hundred and ninety nine (51.7%) participants said they had never used cannabis and 184 (47.8%) had either previously used or were current users (section 3).

Of those who reported using cannabis, most smoked with friends (n=128; 69.6%) and tended to use this drug indoors in locations such as at a friend's

homes (n=41; 22.3%) or in their own home (n=36; 19.6%). Eleven young people said they smoked the drug 'anywhere' and nine respondents claimed to smoke cannabis in the street (section 3).

Young people were asked to report the main reasons why they smoked cannabis. Significantly more respondents replied that they used cannabis *to relax* (n=96, 52.2%) and *to socialise* (n=95, 51.6%) than for any other of the reasons provided (*feel good; forget problems; instead of alcohol; try it; don't know*) (section 3).

The most common type of cannabis used by the sample was believed to be skunk (n=53, 28.8%), and the most frequently reported co-administered drug was alcohol (n=97, 59.1%). Only a small minority of respondents (n=9, 4.9%) stated that they used Class A drugs such as ecstasy and cocaine at the same time as cannabis (section 3).

In the cannabis using sample, 53 (28.8%) young people claimed not to usually buy cannabis themselves, and for those who did, most spent less than £20 per week on this drug. Almost a third of the cannabis users (n=57, 31.0%) that responded to this question said they bought cannabis from a friend rather than dealers that were otherwise unknown to them (section 3.2).

With regards to drug services in Liverpool, 310 (80.5%) of all respondents did not know where to get help with cannabis use if they needed it. In cannabis users only, 142 (77.2%) were unaware where they could seek help if required. When asked if they would attend a service for help with cannabis if they knew one was available, 229 (59.5%) said they would not attend, and for cannabis users only, 129 (70.1%) said they would not attend (section 3.4).

The majority of respondents (n=263; 68.3%) knew that cannabis was a Class C drug. However, one quarter (92, 23.9%) were not clear on the legal status; 55 (14.3%) believed cannabis was currently a Class B drug and 18 (4.7%) respondents thought cannabis was legal (section 3.5).

Overall, attitudes to cannabis use were mostly negative, in that, most respondents believed that cannabis was bad for health, should not be smoked in public places, and that pregnant women and young people under 16 years should not use it. However, this cohort was divided (cannabis users [n=92 52.3%] vs. non-cannabis users [n=112; 58.6%]), as to whether cannabis should be made legal or not (section 3.7).

The main concern about using cannabis cited by young people was mental health problems (n=240, 62.3%); followed by physical health problems (n=183, 47.5%); becoming dependent on the drug (n=189, 49.1%) and getting caught by the police (n = 176; 45.7%), (section 3.8).

Discussion

Results obtained from this study were in accordance with other recent work on cannabis use in the UK. Although not a representative sample of all young Liverpool residents, cannabis prevalence was similar to national averages. Like other samples, users tended to purchase cannabis from friends and avoided traditional dealers. However, it is unknown whether those questioned realised that this distinction is not recognised in law. Whilst there was some inter individual variations highlighted, young people were knowledgeable of the potential harms resulting from cannabis use. As with other drugs, and confirmed by other research with respect to cannabis, users tended to be less worried about these adverse effects occurring to them than non-users. Expectations and experiences of drug use are important determinants of initiation and progression to more regular use. Expectations are also highly indicative of future problems with drugs. One preventative strategy worth exploring is therefore modifying or reinforcing cannabis expectations and increasing the salience of adverse effects. However, it is important for such campaigns to be based on accurate information and be experientially relevant. The particular negative effects reported by young people (e.g. mental illness, dependence) tend to be rare occurrences, and so it would be unwise for drugs service to focus on these. However, as smoking prevention and cessation campaigns have shown, focussing on acute outcomes of use (e.g. cosmetic

changes, effects on social function, education etc), and providing normative data on actual patterns of use, may be a fruitful strategy in young people, who tend to discount long term health problems. Furthermore, the most frequent serious adverse effect of cannabis use that most young people will face is through the legal control of cannabis. Most respondents in the current study knew that cannabis was a Class C drug, but other research suggests that young people lack precise knowledge about particular details of UK drugs laws, and how particular behaviours are interpreted by the law. Some behaviours that may seem relatively minor to young people (e.g. sourcing, purchasing, and distributing cannabis within friendship groups) are viewed more seriously in law.

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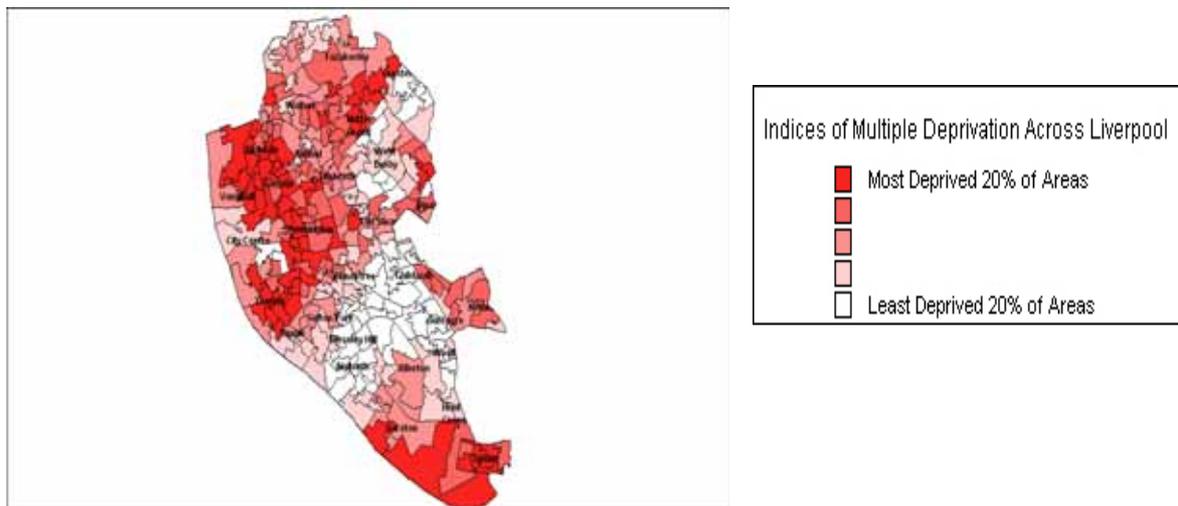
1. Introduction

This study investigated cannabis use in Liverpool residents aged between 16-25 years who had never been in contact with drug treatment services. The research methodology was developed following consultation with Liverpool D(A)AT and Citysafe and aimed to identify patterns of young peoples' cannabis use and to investigate young peoples' knowledge and perceptions of the adverse effects of cannabis. The research also sought information about awareness and acceptability of local services that respond to cannabis use.

Research Geography

Liverpool is situated in the North West of England in the county of Merseyside. It is the second biggest city in the North West with a population of 447, 5000 (The Indices of Deprivation 2004 [May, 2006]). Liverpool has witnessed an increase in population since 2003 and has surpassed the national population rise of 0.6% and the North West of England increase of 0.3%. Liverpool's largest population increase was within the 25-29 age category, increasing by over 15% from 2003, following on from this the 20-24 year old cohort has witnessed an overall growth of 9.9% since 2003.

Figure 1. Indices of Multiple Deprivation across Liverpool



(Source: *Indices of Deprivation 2004; [May, 2006]*)

The Indices of Deprivation 2004 (May, 2006) reported that in England, Liverpool is considered the most deprived local authority. As shown in figure 1, deprivation is widespread and concentrated in hotspots throughout the city of Liverpool with the darker shades representing the most deprived areas and highlighting that 59% of people residing in Liverpool live in the most deprived 10% of the country.

1.1 Young People and the Prevalence of Cannabis use in the UK and Europe

The British Crime Survey 2006/07 (BCS) defines a young person as someone between the ages of 16 and 24 years (Murphy and Roe, 2007). In 2006/07 an estimated 44.7% of young people in England and Wales had used one or more illicit drug, 24.1% had used in the last year and 14.3% in the previous month.

Cannabis is the most prevalent drug and an estimated 8.2% of all 16-59 year olds have used it in the previous year. The next most prevalent drug is cocaine and approximately 2.6% of 16-59 year olds report using it in the last year; this is followed by 1.8% (aged 16-59 years) who had used ecstasy (MDMA) use also in the last year.

In the 16-24 age category the BCS estimated that 2.5 million people (20.9%) have ever used cannabis, over 1.3 million have used cannabis in the last year and 821,000 young people have taken this drug in the last month.

According to Murphy and Roe (2007) there has been a reduction in overall drug use in the UK since 2003/04. This may be due to the gradual decrease in cannabis use from 2002/03. Since reclassification there has been a fall in the number of young people reporting cannabis use in the previous year. In 2003/04 the BCS reported that 25.3% of 16 to 24 year olds had used

cannabis in the last year and this decreased to 23.6% in 2005/06, 21.4% in 2005/06, and to 20.9% in 2006/07 (Murphy and Roe, 2007).

Across Europe, cannabis is the most prevalent drug amongst all age groups (EMCDDA, 2007). Nearly a quarter of all adults in Europe have tried cannabis at some time in their lives and one in 14 have used cannabis in the last year. As highlighted by the EMCDDA (2007) cannabis use among young people is high with different countries reporting between 3% to 49.5% of young adults aged between 15-34 years ever having used cannabis in their lifetime, between 3-20% reporting use in the last year and 1.5% to 15.5% reporting the use of cannabis in the past month.

With younger people aged between 15-24 years, Member State prevalence estimates range from 3% to 44% for lifetime cannabis use. Use of cannabis in the last year for this age group ranged from 4% to 28% and for use in the last month prevalence rates were between 1% and 19% (EMCDDA, 2007). Across European countries, the highest lifetime figures of cannabis use was in Italy and Spain (both 11.2%), and the Czech Rep (9.3%), with the UK (8.7%) occupying fourth position (EMCDDA, 2007). The highest figures across European countries for past month cannabis use, was in Spain (8.7%), followed by Italy (5.8%), and then the UK (5.2%).

The UK reports one of the highest lifetime (38%) and last month (20%) prevalence of cannabis in European school children aged 15/16 and is comparable to equivalent USA populations (36%; 17%), (Hibbell et al., 2004).

1.2 Cannabis use in Liverpool

There are currently no accurate estimates of the prevalence of cannabis in young people in Liverpool. According to the National Drug Treatment

Monitoring System data¹, the number of young people under the age of 25 years in contact with structured drug treatment services in Liverpool between 2005/06 was 292 (Khundakar et al, 2007). Within this sample 54.7% stated that they used cannabis, followed by 30.2% who used cocaine and 24.5% who used heroin. With regards to treatment services, 226 young people were in contact with adult services and 66 were in contact with specialist young people's services. Sources of referral into drug services varied with the most common source being self-referral (28.1%), followed by 'other' (24.4%), the criminal justice system (24.1%), drug services (12.6%) and GP (10.6%). With regards to treatment outcomes, for just over half of this cohort (52.3%) treatment was ongoing, 33.8% had an unplanned discharge and 7.8% successfully completed treatment (Khundakar et al, 2007).

1.3 What is Cannabis?

Cannabis is the general name for products from the plant *cannabis sativa* or *cannabis indica*. It contains over 400 chemicals, 60 of which are responsible for its unique effects. Cannabis is usually found in two forms, the first is herbal (known as *grass*, *weed*, *skunk*), which is the dried flower buds and leaves of cannabis plants. Herbal cannabis includes 'skunk', which has been developed for indoor cultivation. It has attracted much media attention (often being described inaccurately as a 'super weed' or as a new drug) <http://www.idmu.co.uk/skunkfaq.htm>). The second form is resin (also known as *hash*, *black*, *rocky* or *resin*), a product made from cannabis oils and/or pollen in the form of a solid block.

The constituent chemical used to determine the potency of cannabis is Δ^9 tetrahydrocannabinol (THC) and this varies from plant to plant. The other main constituent is cannabidiol (CBD). The intoxicated state experienced by

¹ The National Drug Treatment Monitoring System (NDTMS) relates to the process of collecting, collating and analysing information from and for those involved in the drug treatment sector. (<http://www.nta.nhs.uk/areas/ndtms/>)

users is thought to be a function of the relative concentrations of THC and CBD, with higher levels of CBD generally thought to produce a sedative effect (see Iverson, 2000).

1.4 Potency

In the UK, the potency of cannabis has gained widespread media attention with newspaper reports initially claiming that the average strength of skunk had increased up to 30 fold in recent years. With the emergence of new scientific evidence, the press has downgraded this figure to around double (The Times, 14th November, 2005). Skunk cannabis is a potent strain of cannabis and THC potency levels range from 12% to 14% and (rarely) as high as 20% (King, 2004). 'Home-grown' cannabis is, in general, thought to be stronger than imported cannabis (King, 2004), and is also thought to be the most available preparation to buy (King, 2008). Street level herbal cannabis has shown a slight increase in THC content since 2003, rising slightly in 2005 and then falling again in 2006 (see table 1).

Table 1. Potency Levels of Cannabis Resin and Herbal Cannabis in the UK 2003- 2006

Cannabis Type	2003	2004	2005	2006
Cannabis Resin	9.8	3.4	5.3	3.3
Herbal Cannabis	10.7	12.7	13.5	11.3

(Source: Forensic Science Service Ltd, 2006)

1.5 Subjective Effects of Cannabis

The effects of smoking cannabis broadly include feelings of “euphoria, perceptual alterations, time distortion, and increased hunger and thirst” (Parrott et al, 2005, p92). It can also produce disruptions to short-term memory and attention (Skosnik et al, 2006). As shown in table 2, these subjective effects can be categorised into positive, neutral/negative, and strongly negative groups. According to Parrott et al (2005), the euphoric effects vary considerably according to dose, route of administration (e.g. smoking, bong, pipe), and the environment in which the drug is taken and the personality of the cannabis user.

Table 2. Subjective Effects of Cannabis use

Positive	Neutral/Negative	Strongly negative
Mood Lift	Increased appetite	Nausea
Relaxation	Mental slowness	Respiratory problems
Creative thinking	Physical tiredness	Racing heart
Heightened sensations	Mouth dryness	Anxiety
Pleasant body feelings	Losing train of thought	Agitation
Pain relief		Headaches
Reduced nausea		Paranoia

(Source: Parrott et al., 2005, p92)

1.6 Young People and Cannabis use.

Young people tend to use cannabis for a variety of reasons and in a recent report for the Joseph Rowntree Foundation, which examined cannabis supply and young people, Duffy et al, (2008) reported that of the 182 young people interviewed (age range 11-19 years), the main reasons for taking it was to relax (54%), calm down (32%) and to be more sociable (24%). Young people

were more likely to smoke cannabis with friends than on their own, and spent an average of £20 per week on cannabis. More than half of this sample (93 young people; 51.1%), stated that it was 'very easy' or 'fairly easy' to get hold of cannabis. Forty one young people in this cohort never bought cannabis but instead relied on friends to share their cannabis with them, and 29 of the young people in this study asked friends to purchase cannabis on their behalf. The authors highlighted the importance of social networks for young people to obtain cannabis and engage in cannabis transactions, as only a small minority purchased cannabis from an unknown source, while the majority bought cannabis from 'sellers' who were depicted as 'very good friends'. Furthermore, 21 young people bought cannabis from an acquaintance and 10 respondents bought from family members or friends of the family. According to Duffy et al (2008), the mechanisms used by the young people in this study to purchase cannabis isolated them from more serious criminal drug markets and may have protected young people from exposure to more harmful drugs and their users.

In Melrose et al's (2007) UK study of 97 young heavy cannabis users, aged between 16-25 years, and 30 professionals who worked with young cannabis users, they reported that the main type of cannabis used by their respondents was believed to be skunk (n=63), while a quarter used a combination of resin/skunk/or whatever type of cannabis they could get hold of. Only four of the respondents solely used resin. The average age of first smoking cannabis was 13.7 years and the main reason why they used cannabis was similar to Duffy et al's (2008) sample, in that, they used it to relieve stress, aid relaxation, facilitate peer bonding and on occasion to manage or control their anger. The authors pointed out that practitioners need to be aware and understand the positive benefits young people attribute to using cannabis and to also be aware of their justifications for using cannabis. When respondents were asked if they would attend treatment services or outside agencies in order to get help with their cannabis use, the young people did not believe they had a problem and would therefore not seek treatment. Other respondents believed there was little treatment agencies could do because, unlike attending a

smoking clinic, were they could get nicotine replacement therapy ('patch') to help with cessation, they believed that nothing similar was available to help with stopping the use of cannabis. Moreover, some of the young people believed treatment services were only for 'junkies' or 'crackheads' and would therefore not attend a drug agency. As pointed out by Melrose et al (2007) drug treatment services were originally developed in order to respond to male opiate users and therefore young people still believe or perceive drug services to be solely for problematic² drug users.

The legality of cannabis was in question with Melrose et al's cannabis users with three quarters of the sample believing that it should be legal, with heavy users being more likely than medium to low users to state that cannabis should be made legal. However, participants did state that certain restrictions such as age limits should be put in place if cannabis was ever to be made legal. Professionals who were questioned about the legality of cannabis were divided on this topic as to whether it should be legal or not and stated that most young people were actually confused about the legal status of this drug, mainly due to the abundance of media messages and/or variations in law enforcement practices. Moreover, practitioners also commented that some cannabis users believed it was legal to smoke cannabis at home but not in public places.

Rethink, a national mental health charity recently released findings from their report '*Educating reefer, effective health education and warnings on cannabis*' (2008). In total, 608 people responded to an online survey, 54% were male and 46% were female, with an age range of 16-56 years. The survey found that 61% of respondents thought that cannabis could damage mental health and 22% said it could cause damage to general health. The main reasons for using cannabis reported by this sample was similar to that of Duffy et al., (2008) and Melrose et al's., (2007) studies, in that, 33% of respondents stated that they used cannabis because it aided relaxation and 12% said they used it

² According to the Home Office, a problematic drug user is someone who uses opiates and/or crack cocaine

to be sociable. Once again the legal status of cannabis was examined. Eighty eight percent of those surveyed knew that cannabis was illegal, 75% correctly reported it as a Class C drug, 13% as a Class B drug and 5% believed it to be a Class A drug. Rethink concluded that the legal status of cannabis would have no effect in motivating people to stop using the drug. This was also supported by an earlier study (McSweeney et al., 2007) which found that irrespective of whether cannabis was legal, young people were not worried about getting arrested for possession or for carrying cannabis.

Over half of Rethink's participants believed that more information on cannabis should be made available, with almost one third (32%) of respondents believing that information on cannabis should be delivered by previous cannabis users, 21% thought the internet would be a good mode of delivery, followed by 21% of respondents who said TV. Following on from the impact tobacco warnings have on cigarette packets, Rethink believe that rolling paper packets should also carry warnings on the mental health effects of cannabis.

In Wareing et al's (2007) study of the characteristics and needs of young substance misusers in Liverpool, they found the most commonly used substances used by 18-25 year olds in Liverpool were cannabis and alcohol, followed by cocaine and ecstasy. Over half of the sample (n=15; 57.7%) were cannabis users and 21 (80.8%) had tried it at least once; the average age of first use was 12.5 years. The young people in this study were more likely to smoke cannabis at home (n=9; 60.0%) or at a friends house (n=6; 40.0%) and cited the main risks of using cannabis as depression, memory loss, paranoia, lung cancer and mental health problems. As with Melrose et al's (2007) research, the perception that drug treatment services were only for problematic drug users such as heroin and/or crack users was also evident. The main reason why young people would not attend drug treatment services was because they did not want to engage with problematic drug users and perceived there to be a stigma attached to attending such drug services

1.7 Strategic responses to cannabis in Liverpool

Locally, Citysafe is Liverpool's Crime and Disorder Reduction Partnership and Drug and Alcohol Action Team. In their Safe City-Crime, Disorder, Antisocial Behaviour and Drug Misuse Strategy, 2005-2008 Merseyside police reported a 60% increase in arrests for supplying drugs (617 arrests in 20001/02 to 987 arrests in 2003/04) (Citysafe, 2005).

The Liverpool drug treatment strategy 2007/08's main aim is "making all parts of the drugs treatment system function to optimum levels, effectively, and in collaboration, to improve the service users' perceptions of their individual treatment journey" (NTA, 2006).

Citysafe have introduced a number of initiatives to reduce crime and substance misuse in Liverpool. For example, the 'Tough Choices' initiative encourages arrestees who test positive for drugs to attend sessions with a drugs worker. Citysafe have also introduced 'bus escorts' who identify incidents of drug abuse, moreover, they launched a 'National Tackling Drugs, Changing Lives' initiative and held an awareness day in Liverpool's city centre to highlight the drug services and support available in Liverpool. Citysafe have disseminated 250 drug information packs to services and organisations throughout Liverpool, the packs contained information around drug treatment services, educational material on alcohol and drug misuse (including cannabis) and the type of help and services that is available to young people in Liverpool. Citysafe have also held a range of events which encourage young people to enter into drug treatment services (Citysafe's annual crime and disorder reduction report, 2006/2007).

1.8 Legal Status of Cannabis

The legal status of cannabis has been under debate for some time (Jenkins, 2005; Melrose et al, 2007). Following the advice of the Advisory Council on the Misuse of Drugs (ACMD) cannabis was reclassified from a Class B drug to

a Class C drug in January 2004, this was accompanied by research which investigated knowledge of the law change. For example, five days after the reclassification of cannabis, Verity (2004), evaluated a substance misuse lecture with 163 Medical students at Sheffield University and found that 42% of students believed it was legal to smoke cannabis at home, 18% were under the impression that smoking cannabis in a public place was not an arrestable offence and 41% of the medical students did not know which Class cannabis resin belonged to.

In March 2005, the Government once again asked the ACMD to review the scientific basis of the classification for cannabis with particular emphasis on evidence relating to the mental health of cannabis users, and changes in potency. After a thorough review of the evidence presented the ACMD concluded that “after a detailed scrutiny of the evidence the council does not advise the reclassification of cannabis products to Class B: it recommends they remain with Class C” (ACMD, 2006, p3).

In July 2007, the Government requested (as part of a consultation reviewing its drug strategy) that the ACMD re-examine evidence within the context of reclassifying cannabis back to a Class B drug. The Home Secretary asked the ACMD to assess the medical and social scientific basis of the classification of cannabis and the ACMD will review evidence regarding potency levels of cannabis, mental health, prevalence of cannabis, barriers to achieving full potential (aimed at school children), the gateway theory that cannabis use leads to Class A drug use, production and dealing, public understanding of the legality of cannabis and public opinion regarding the reclassification of cannabis (UKDPC, 2008). Results of the review are scheduled to be published in April 2008.

1.9 Criminal Justice responses to cannabis

There has been an increase in the number of people recorded in possession of cannabis since reclassification 2004/05, although, this has been attributed to an increase in the number people receiving cannabis warnings. Prior to the introduction of cannabis warnings, a person could be arrested or given a caution for possessing cannabis (May, et al, 2007). As noted by the independent United Kingdom Drugs Policy Commission (2008), the year after reclassification, arrests for possession of cannabis fell by approximately one third (estimated to be saving 199,000 police hours). Moreover, when cannabis warnings were introduced the number of those receiving a caution for possession of cannabis also fell from 29,209 in 2003, to 15,214 in 2004.

According to UKDPC (2008) cannabis warning have now mostly replaced cannabis cautions, although May and colleagues (2007) have argued that some police forces could be 'net widening' through seeking out cannabis possession offences to increase crime detection statistics.

However, the Home Office states that if a young person is caught in possession of cannabis they can be arrested and given a reprimand, final warning or be charged depending on how serious the offence is. If the young person has already received a reprimand they will receive a final warning and be charged. Following on from this, should the young person already be in receipt of a final warning they will be referred to a Youth Offending Team (<http://www.homeoffice.gov.uk/drugs/drugs-law/cannabis-reclassification/>).

The Government's updated drugs strategy (2002) which aims to reduce harm caused by illegal drugs has four key strands, 1) to reduce drug related crime 2) reduce the supply of illegal drugs 3) prevent young people becoming drug users and 4) to reduce drug use and drug related harms through treatment and support. The Drug Interventions Program (DIP) is a key element of the strategy introduced to reduce drug related crime. Originally set up in April 2003, the DIP program was rolled out specifically to areas of high crime and in

2005 was rolled out to the rest of England. The main aim of the DIP is to engage with drug users who have been arrested at every phase of the criminal justice system including, arrest, when sentenced, prison (if applicable) and when released from prison. During each phase the DIP tailors services to meet the needs of the arrestee, assists on issues such as housing needs, education and family problems, as well as addressing offending behaviour and the use of drugs.

On a national level, the first annual survey of arrestees took place between 1st October 2003 and 30th September 2004, in 60 custody suites throughout England. Arrestees were aged 17 years plus and in all 7,535 individuals were interviewed. From the sample as a whole, cannabis was the most widely used drug with 48% of men and 36% of women having used in the last month, 41% were aged between 17-24 years (Boreham, et al, 2006). The use of cannabis was most prevalent in the 17-24 age cohort and as age increased the use of cannabis in the last month decreased (17-24 years 57%, versus, over 35 years 28%), there was also a similar pattern for cocaine.

With the introduction of the new ten year drug strategy (2008-2018), which aims to limit the supply of drugs and also the demand for them, government has introduced four new strands within the strategy 1) protecting communities through tackling drug supply, drug-related crime and anti-social behaviour, 2) preventing harm to children, young people and families affected by drug misuse, 3) delivering new approaches to drug treatment and social re-integration, 4) public information campaigns, communications and community engagement (HM Government, 2008)

1.10 Cannabis and Mental Health

Recent research has suggested that cannabis may lead to the development of psychosis and other mental illnesses (e.g. Moore et al., 2007; Semple et al., 2005; Zammit et al., 2002). News headlines such as, *Drug 'doubles mental*

health risk' (BBC News, 1st March, 2005), *One in four at risk of cannabis psychosis* (Times, 12th April, 2005) and *Cannabis 'raises psychosis risk'* (Guardian, Friday, 27th July 2007) have been inspired by such research. For example, one longitudinal study of 50,000 Swedish men conscripted to the Army from 1969 to 1970 found that those who had used cannabis >50 times before the age of 18 had a 6.7 fold increased risk of developing schizophrenia in later life (Zammit et al., 2002). A review of this study and four other similar longitudinal studies concluded that early cannabis use might be a causal factor for schizophrenic-like illness in later life (Semple, et al, 2005). However, the interpretation of studies is often fraught with difficulties and confounding variables. When confounding variables were factored into the Swedish study the increase in risk was reduced from 6.7 to 3.1.

Moore et al's (2007) systematic review, which re-examined 35 cannabis and mental health studies published since the 1960s, found a link between cannabis use and some mental health problems. The review excluded persons with mental illness, or substance use disorders, prison populations and randomised control trials of cannabis for medical use. It was found, that, based on the evidence from these studies; young people who smoked cannabis were up to 41% more likely to develop a psychotic disorder than those who had never tried it. The more cannabis smoked, the greater the risk, with the most frequent users more than twice as likely to have psychotic experience. The authors concluded that there was a dose-response effect, leading to an increased risk of 50–200% in the most frequent users. The authors estimated that the increased risk would mean that 14% of psychotic outcomes in the UK might not have occurred if cannabis was not used.

Hospital Episode Statistics have shown an increase in the number of hospital admissions relating to cannabis induced mental illnesses since 1998, although admissions are at their lowest since 2002/03, and the average age of admission has remained stable (see table 3). According to the UKDPC (2008), while the mean age of admission is 26 to 27 years it may be assumed that the increase in hospital admissions for cannabis related mental illnesses is a

consequence of the peak prevalence of cannabis use during the 1990's or that mental health problems relating to the use of cannabis are only now being accurately recorded and identified.

Table 3. Number of patients admitted to English NHS Hospitals Where the primary diagnosis was 'Mental and Behavioural Disorders due to use of Cannabis'

Year	Admissions	Under 15 years	Mean Age
2006-07	750	23	27
2005-06	946	50	26
2004-05	868	44	26
2003-04	858	54	27
2002-03	713	31	27
2001-02	674	26	26
2000-01	581	23	27
1999-00	598	17	27
1998-99	625	17	26

(Source: UK Drug Policy Commission, 2008)

1.11 Summary and Aims of the Current Study

In summary, cannabis is the most commonly used illicit drug in the UK. There are no prevalence estimates available for general population use of cannabis in Liverpool. Two hundred and ninety two young people under the age of 25 years were reported as being in contact with drug treatment services in 2005/06 and within this sample more than half (54.72%) stated that cannabis was the main drug used. Young people who engage in cannabis use are likely to report using it as a means of relaxing and/or to socialise (e.g. Duffy et al, 2008). In some respects they are a hidden population of drug users, as they are unlikely engage with treatment services as they do not believe they

have a problem with cannabis or feel services have anything to offer them in terms of treatment (e.g. Melrose et al 2007; Wareing et al., 2007).

The aim of this study was to examine patterns of cannabis use in opportunistic samples of young people aged under 25 years in central Liverpool, and to establish perceptions of risk as well as their beliefs and behaviours regarding use of this drug. The findings from this study not only benefit commissioners and service providers but will inform media campaigns developed by Citysafe, with the aim of challenging current thinking around the use of cannabis.

2. Methodology

2.1 Questionnaire Design

A self-report questionnaire was designed to collect information concerning aspects of cannabis use in young people under the age of 25 years. The questionnaire did not address use of other drugs in order to avoid overloading potential respondents with too many questions, and so diminishing the likelihood of completion. Questionnaire content was developed through expert consensus (Section 2.3), and although different recruitment and administration modes were used, content was identical.

2.2 Participants

In total, 385 participants completed the cannabis questionnaires, 164 (42.6%) were male and 218 (56.6%) were female; gender was not recorded for three (0.8%) participants. Respondents were recruited from central Liverpool and the mean age of all participants in the current study was 18.4 (SD=2.6) years, range 14 to 28 years.

Street based survey

A street based survey was employed with an opportunistic sample of young people under the age of 25 years in Liverpool city centre. Young people were approached by experienced researchers and asked to complete the cannabis questionnaire. Participants that consented to complete the questionnaire were provided with a participant information sheet and required to sign a consent form. A total of 104 (27.0%) young people completed the questionnaire in Liverpool city centre (mean age, 19.4, SD=2.2, range 15-28 years).

Postal survey

The city of Liverpool has a number of universities, including Liverpool John Moores University (LJMU) and the University of Liverpool. A sample of Liverpool undergraduate students were asked to complete a postal survey.

Students were recruited on campus, through student unions, and in lectures. An experienced researcher provided details of the study and students were asked to complete the cannabis questionnaire and return it the stamp addressed envelope provided. In all, 38 (9.9%) individuals returned the questionnaire by post (mean age 19.9, SD=3.1, range 14-25 years).

On-line survey

A secure questionnaire was also available on-line via the Bristol on-line Survey (BOS) web-site. An advertisement was broadcast on a local radio station 'Juice FM' requesting young people in Liverpool complete the questionnaire. In all, 37 (9.6%) completed the questionnaire on-line (mean age 22.5, SD=2.8, range 17-27 years)

Local College survey

A local further education college in central Liverpool was contacted and asked to participate in this study. Participating students were asked to complete the same questionnaire as above regarding cannabis use. A total of 206 (53.5%) responded (mean age 16.9, SD=0.9, range 16-21 years)

2.3 Materials

The cannabis questionnaire addressed the following areas which were sub divided into five headings (background information, cannabis using behaviour, money, health and cannabis).

Background information

Respondents were asked to specify their age, gender, and the first part of their postcode. They were then instructed to select from five options their current living conditions (e.g. 'parents', 'friends'). A question relating to past and previous cannabis use was also included. If respondents reported that they had never used cannabis they were still required to answer questions relating to cannabis and health, and services in Liverpool.

Cannabis using behaviour

A series of questions gave respondents the opportunity to provide information on their cannabis using behaviours. An open ended question asked participants to state the overall duration of their cannabis use, along with a question asking about frequency of cannabis use (e.g. several times per month, weekends). A range of other questions enquiring about cannabis using behaviours such as where respondents usually smoked cannabis (e.g. home), what time of the day they smoked (e.g. evening, night-time) and who they smoked it with (e.g. friends, family). Respondents were also asked to provide reason(s) why they chose to smoke cannabis and to state the type of cannabis they usually smoked (e.g. hash, skunk).

Money

Respondents were asked to provide an average of how much money they spent on cannabis (e.g. per day or per week), how much they usually paid for the amount of cannabis they purchased (e.g. eighth) and the type of cannabis purchased (e.g. resin). Respondents were also asked where they normally bought the drug and who from ('friends', 'family', 'dealer', 'grow your own'). Finally participants were asked to choose from a simple yes/no response if they had ever stolen anything or broken the law in order to purchase cannabis.

Health

Participants answered a range of questions about their mental and physical health. They were asked to report any perceived risks involved in using cannabis, and subsequently, presented with seven adverse psychological symptoms (e.g. anxious, paranoid) and asked to tick all that they attributed to their use of cannabis and the frequency that they experienced them (e.g. daily, weekly). All respondents, whether they had used cannabis or not, were asked to select from simple yes/no responses if they had ever experienced a panic attack, had problems sleeping, and if they had respiratory problems. The general health of all respondents was also ascertained and participants were asked to rate this on a five point scale ranging from 1=very good, to 3=average, to 5=very poor.

Services in Liverpool

There are currently a number of young people's services as well as drug and alcohol agencies within the Liverpool area that provide information, help, and treatment for the use of cannabis. Therefore, irrespective of whether or not they used cannabis, respondents were asked if they knew the names of services that provided help for users. Respondents were also asked if they would attend a cannabis service if needed, and if there was anything that would stop them getting help.

Cannabis and the law

It has been suggested that since the re-classification of cannabis from a Class B drug to a Class C drug in January 2004, young people are confused about the legal state of cannabis (Melrose et al, 2007). For that reason, respondents were asked if they knew the legal status of cannabis and were instructed to select from one of four responses (e.g. 'Class A', 'Class B', 'Class C', 'its legal').

Other questions

Participants were asked if any members of their family smoked cannabis and also to give their views on the acceptability of smoking cannabis in a public place, for someone under the age of 16 to smoke cannabis, and for pregnant women to smoke cannabis.

Participants were also asked if they were worried or concerned about effects of smoking cannabis on a range of problems (e.g. mental health problems, getting caught by the police). Finally, respondents were asked if they knew the difference between the various types of cannabis (e.g. skunk, grass, hash).

Severity of Dependence Scale

The Severity of Dependence Scale (SDS) is a short, unidimensional scale (with good validity and reliability) that assesses the degree of dependence on controlled drugs (Gossop et al, 1995). In this study it was used to assess cannabis dependence. According to Gossop and colleagues (1995), who

devised the SDS scale, a score of over three or more is indicative of dependence.

Database Interrogation

National Drug Treatment Monitoring System (NDTMS)

The National Drug Treatment Monitoring System (NDTMS) database, held at the Centre for Public Health (CPH) was interrogated to investigate the number of Liverpool based young people aged 25 years and under, in contact with structured drug treatment in Liverpool. This data was also used to determine the number of young cannabis users whom completed treatment programs.

Drug Interventions Programme (DIP)

The CPH hold data for the Drug Interventions Programme (DIP). The DIP aims to tackle drug related crime by offering holistic treatment and support to individuals entering the criminal justice system with substance use issues. These data were interrogated in order to identify cannabis misusing young people under the age of 25 years within the criminal justice system, with the aim of ascertaining the basic characteristics and offences committed by these young cannabis users.

2.4 Ethical Considerations

This study gained ethical approval from Liverpool John Moores University ethics committee in November 2007. All participants were informed of the purpose of the study and were advised of their right to withdraw from the study at any time. Confidentiality was assured at all times

All young people that participated in this study were provided with a participant information sheet which included the title of the project, the purpose of the study, the type of questions that would be asked and approximately how long it would take to complete the cannabis questionnaire.

2.5 Analysis

Data from all the completed questionnaires were entered into SPSS (v14.0) for storage and subsequent analysis.

3. Results

Summary

- *A total of 385 young people with a mean age of 18.4 years participated in this study.*
- *184 (47.8%) of this sample had ever used cannabis.*
- *Most users lived with their parents and for the majority, parents did not know they used cannabis.*
- *There were varied patterns of use with most users reporting cannabis use for more than three years.*
- *The majority of users smoked cannabis with their friends at night-time at a friend's house or in their own home.*
- *The main reasons cited by users for smoking cannabis was to 'relax' and to 'socialise'.*
- *The majority of users said they would smoke whatever type of cannabis they could get hold of. However, the type of cannabis they preferred to smoke was what they believed to be 'skunk'*

3.1 Use behaviours

In total, 385 participants completed the questionnaire, 164 (42.6%) were male and 218 (56.6%) were female; gender was not recorded for three (0.8%) participants. Respondents were recruited from central Liverpool and a total of 104 (27.0%) young people completed the questionnaire in Liverpool city centre, 38 (9.9%) individuals responded by post, 37 (9.6%) answered the

questionnaire online and 206 (53.5%) young people were recruited from a local further education college in Liverpool. Mean age of all participants in the current study was 18.5 (SD=2.6) years, range 14 to 28 years.

The majority of respondents lived with their parents (n=263, 68.3%), 61(15.8%) lived with friends and 20 (5.2%) lived alone (see table 4).

Table 4. Accommodation

Accommodation Type	N	%
Parents	263	68.3
Friends	61	15.8
Alone	20	5.2
Partner	18	4.7
Other	18	4.7
Family	1	0.3
Missing data	4	1.0
<i>Total</i>	<i>385</i>	<i>100</i>

Cannabis Use

In all, 184 (47.8%) respondents had either previously used or were current cannabis users, 199 (51.7%) had never used cannabis. Two (0.5%) individuals did not record their cannabis use status but continued to complete the non-cannabis user section of the questionnaire and as such results were included in the non-user group.

Length of cannabis use varied between participants and as shown in Table 5, 47 (25.4%) young people had been smoking for three years or more years;

this was followed by 24 (13.1%) users who claimed to be using cannabis from between one to three years and 21 (11.4%) respondents who stated that they had only used cannabis on one occasion.

Table 5. Length of Cannabis use

Length of use	N	%
Once	21	11.4
Occasional use	11	6.0
< 3 months	9	4.9
3-6 months	7	3.8
7-12 months	13	7.0
1-3 years	24	13.1
3+ years	47	25.4
Previous user	7	3.8
Unsure	1	0.5
Missing data	44	23.9
<i>Total</i>	<i>184</i>	<i>100</i>

When asked about frequency of cannabis use seven (31.5%) reported that they were no longer current users and/or had ceased use. Of those that were currently using cannabis, 39 (21.2%) stated they used several times a year and 24 (13.0%) respondents said they smoked cannabis several times per month. Twenty one (11.4%) respondents reported that that they smoked cannabis daily, and nine (4.9%) participants claimed to use several times per day.

Cannabis users were asked if they were aware if their parents knew they smoked the drug. Ninety seven (52.7%) reported that their parents did not know, 53 (28.8%) claimed their parents were aware, and 28 (15.2%) participants were unsure if their parents knew.

When asked who they usually smoked cannabis with, 162 (71.1%) reported friends, whilst 31 (13.6%) usually smoked alone (see table 6).

Table 6. Other people Cannabis is used with (number of mentions).

Cannabis use	N	%
Friends	162	71.1
Family	21	9.2
Alone	31	13.6
Missing Data	14	6.1
<i>Total</i>	<i>228</i>	<i>100</i>

Cannabis users were asked at what time of the day, and where they usually smoked. As shown in table 7, over one third of users stated that they smoked mainly at night (n=115, 41.2%) and 87 (31.2%) reported use during the evening.

Table 7. Time of day Cannabis is used (number of mentions)

Time of day	N	%
Morning	18	6.5
Afternoon	31	11.1
Evening	87	31.2
Night	115	41.2
Various times of day	4	0.7
Missing data	24	8.6
<i>Total</i>	<i>279</i>	<i>100</i>

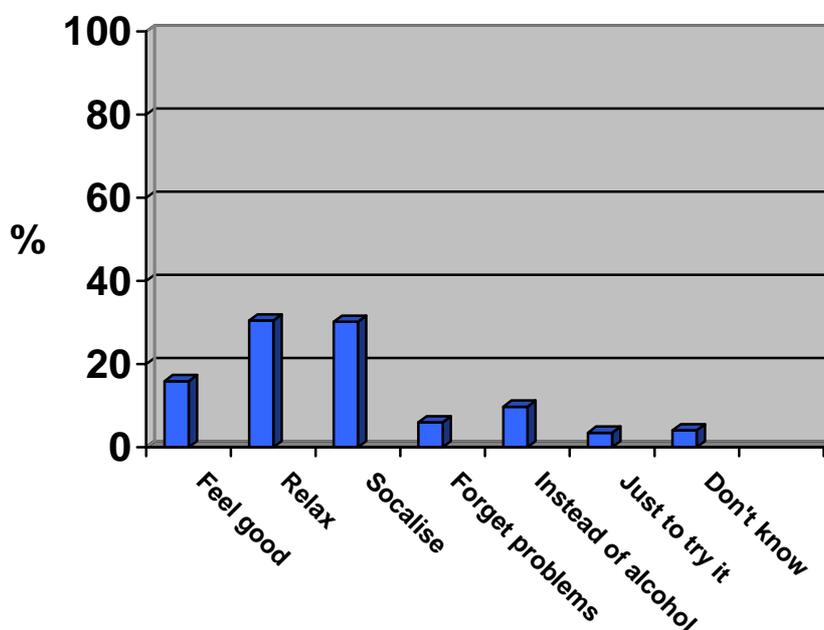
The majority of cannabis users in this study usually smoked in private homes (85; 46.2%). Some cannabis users primarily smoked in other locations, including 32 (17.4%) participants who claimed to smoke in outdoor locations, 12 (6.5%) young people who said they used cannabis at entertainment venues and 11 (6.0%) respondents who stated they smoked cannabis anywhere (see table 8).

Table 8. Location most commonly used to smoke cannabis (number of mentions)

Location	N	%
Private Home	85	46.2
Outdoor locations	32	17.4
Entertainment venues	12	6.5
College/university	3	1.6
Anywhere	11	6.0
Missing Data	41	22.3
<i>Total</i>	<i>184</i>	<i>100</i>

Respondents were asked the reasons why they smoked cannabis and were asked to select from a list of seven possible responses (feel good, relax, socialise, forget problems, instead of using alcohol, just to try it, and don't know). Participants were asked to tick all responses that applied to them (see figure 1). Significantly more cannabis users stated that they used cannabis to relax ($X^2 = 6.00$, $df = 1$, $p < .01$) and to socialise ($X^2 = 3.80$, $df = 1$, $p < .05$) than any other reason for use.

Figure 2. Reasons for Cannabis use



With current media reports indicating an increase in the potency and the use of skunk (e.g. the Independent, 25/03/07), cannabis users were asked to state the type of cannabis they used. As shown in table 9, the majority of young people ($n=80$ 43.5%) said they would smoke whatever type of cannabis that was available. The most common type of cannabis to be used by this cohort was skunk ($n=53$, 28.8%) followed by non-skunk herbal ($n=24$, 13%).

Table 9. Preferred Type of Cannabis

Type of cannabis	N	%
Hash	11	6.0
Skunk	53	28.8
Herbal (non skunk)	24	13.0
Any kind available	80	43.5
Missing Data	16	8.7
<i>Total</i>	<i>184</i>	<i>100</i>

Cannabis users were also asked if they used other illicit drugs at the same time as they smoked cannabis. As shown in table 10, the most commonly co-used substance was alcohol (n=97, 75.8%), although other illicit drugs were reported, including ecstasy and cocaine.

Table 10. Other substances used at the same time as Cannabis (number of mentions).

Drug	N	%
Alcohol	97	75.8
Other illicit drugs	31	24.2
<i>Total</i>	<i>128</i>	<i>100</i>

3.2 Buying Behaviours

Summary

- *Using a standardised measure (SDS), only a small proportion of users (n=18; 9.8%) were considered to be cannabis dependant.*
- *Most of the sample stated that they did not buy cannabis, but for those who did, between £10 and £20 was bought per week*
- *The main source of obtaining cannabis was from friends followed by a dealer.*
- *Most participants knew that cannabis was a Class C drug however; one quarter of those questioned did not know the correct legal status of cannabis (either Class B, or legal).*

As shown in table 11 the majority of cannabis users (n=141, 76.6%) scored three or below on the SDS, indicating non-dependency on cannabis. However, 28 (15.2%) respondents could be considered dependent on according to the SDS measure. There was no correlation between length of use and SDS scores (data not shown).

Table 11. Severity of Dependence Score (SDS)

SDS Score	N	%
≤3	141	76.6
4-6	16	8.7
7-10	12	6.5
Missing data	15	8.2
<i>Total</i>	<i>184</i>	<i>100</i>

The amount of money users spent per week on cannabis ranged from less than £10.00 to £140.00 (see table 12). Seventeen (9.2%) respondents spent £10.00 or less per week and 28 (15.2%) spent £20.00 or less per week on cannabis.

Table 12. Amount of Money Spent on Cannabis per Week

Amount of Money Spend (£) per week	N	%
0	53	28.8
≤10.00	17	9.2
10.01-20.00	11	5.9
20.01-50.00	12	6.5
50.01-100.00	2	1.0
100.01-140.00	2	1.1
Missing Data	87	47.3
<i>Total</i>	<i>184</i>	<i>100</i>

Users were asked who they usually bought cannabis from. Sixty three (33.2%) stated they bought cannabis from friends and 56 (29.5%) used a dealer (see table 13). Eleven (4.3%) participants indicated 'other' sources but gave no further details.

Table 13. Source of Cannabis purchases (number of mentions)

Buy cannabis	N	%
Friends	63	33.2
Family	3	1.6
Dealer	56	29.5
Grow own	3	1.6
Other	11	5.8
Never bought cannabis	4	2.1
Missing Data	50	26.3
<i>Total</i>	<i>190</i>	<i>100</i>

Cannabis users were asked if they had ever broken the law in order to raise money to purchase cannabis; only five (2.7%) young people stated they had committed a crime in order to purchase cannabis.

All respondents were asked if they believed they knew the distinction between different types of cannabis, namely skunk and herbal cannabis (grass, weed). One hundred and forty four (37.4%) did not know the difference between these different types of cannabis, 189 (49.1%) believed they were aware of the difference, and 33 (8.6%) were unsure (N.B. 19 [4.9%] young people did not answer this question). Within the cannabis using group, significantly more users (n=120, 65.2%) believed they knew the difference between skunk and herbal cannabis compared to those who did not (n=47, 25.5%) ($X^2 = 108.48$, $df=2$, $p<.000$). However, because of questionnaire time and space considerations participants were not asked to explain these differences. Therefore it is not possible to identify the accuracy of participants' beliefs

3.3 Health

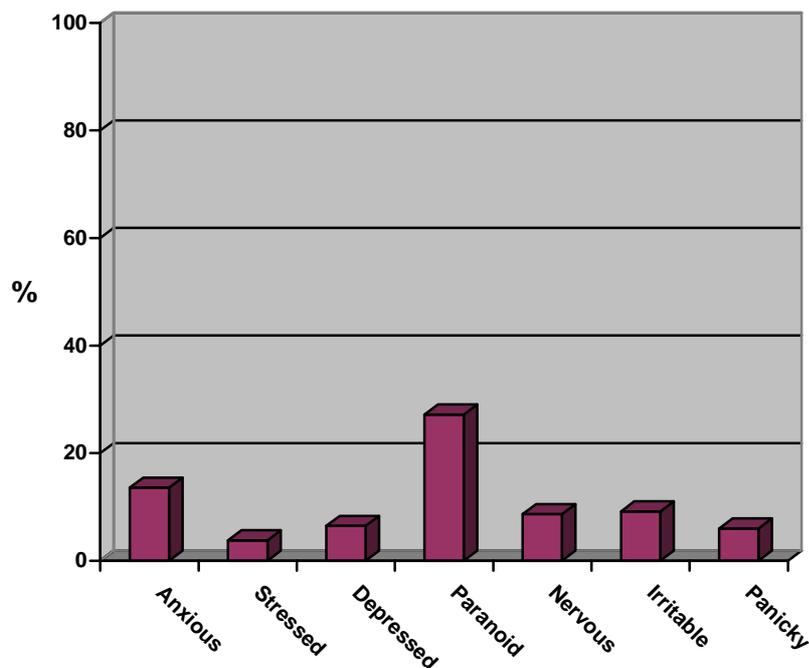
Summary

- *Paranoia and anxiety were the most common concerns reported by users after smoking cannabis.*
- *The majority of users did not know where to go in Liverpool to get help with use if needed.*
- *The widely held view was that young people would not use a cannabis service if available, but no clear barriers were identified that would prevent them from using such a service.*
- *Overall, attitudes to cannabis use were negative, and most respondents believed that cannabis was bad for health, should not be smoked in public places, and that pregnant women and young people under 16 years should not use it.*
- *This cohort was divided as to whether cannabis should be made legal or not.*
- *The main concerns cited by the young people of using cannabis was mental and physical health problems, becoming dependent on cannabis and parents finding out they smoked cannabis*

Psychological symptoms

Respondents were asked if they had ever experienced any psychological symptoms which they attributed to smoking cannabis. Although the majority of individuals who had used cannabis did not, as shown in graph 2, the most common response from cannabis users was that they felt paranoid after use (n = 50; 27.2%). This was followed by 25 (13.6%) who stated that they felt anxious after smoking cannabis.

Figure 3. Self attributed psychological symptoms following Cannabis use



Cannabis users were also asked the frequency in which they experienced these particular symptoms. Table 14 shows that 13 (7.1%) experienced psychological symptoms after cannabis use weekly and 16 (8.7%) stated 'other', mostly occasionally.

Table 14. Frequency of self-attributed psychological symptoms following Cannabis use

Frequency	N	%
Daily	6	3.3
Weekly	13	7.1
Monthly	7	3.8
Other	16	8.7
Never	32	17.4
Missing Data	110	59.8
<i>Total</i>	<i>184</i>	<i>100</i>

All respondents, regardless of whether they used cannabis or not, were asked a series of questions relating to their psychological and physical health, firstly, participants were asked if they had ever experienced a panic attack (not concurrent with cannabis use), 69 (17.9%) reported that they had. There were no significant differences between cannabis users and non-users with regards to experiencing a panic attack.

In all, 89 (23.1%) participants (n = 47, cannabis users) reported they had problems sleeping, and 55 (n=34 cannabis users) individuals believed that they had respiratory problems such as asthma or bronchitis (no distinction was made between diagnosed and perceived problems). There was no significant difference between cannabis users and non-users with regards to respiratory problems. Respondents were also asked to report if they had a cough; 66 (17.1%) participants (n = 32, cannabis users) reported that they did. There were no significant differences between those cannabis users that did have a cough and non-users with a cough.

Finally, all respondents were asked to rate their general health on a five point scale. Young people in both the cannabis group (n=80; 43.5 %) and the non-cannabis group (n=106; 53.3%) considered themselves to be in 'good health'. This frequency did not differ on the basis of user group status ($\chi^2 = 1.792$, NS). More participants in the non-cannabis group (n=45; 22.6%) believed they

were in 'very good health' compared to the cannabis group (n=32; 17.4%), although this difference was not significant ($\chi^2 = 1.125$, NS).

Table 15. General Health of all Respondents.

Health	Cannabis users (N, %)	Non-Cannabis users (N, %)
Very poor	3 (1.6)	2 (1.0)
Poor	13 (7.1)	6 (3.0)
Average	45 (24.5)	30 (24.5)
Good	80 (43.5)	106 (53.3)
Very good	32 (17.4)	45 (22.6)
Missing Data	11 (6.0)	10 (5.0)
<i>Total</i>	<i>184 (100)</i>	<i>199 (100)</i>

3.4 Drug Services in Liverpool

All young people were asked if they knew where to go in Liverpool to get help for cannabis use; 47 (12.2%) reported that they did. Within cannabis users, 42 (22.8%) were aware where to seek help. Respondents were asked the places they would go for help if needed and these are shown in table 16. As shown, of those that specified a source of help, most would consult FRANK (n=11; 24.4%) or their GP (n=8, 19.5%).

Table 16. Sources of help for cannabis (number of mentions)

Service Type	N	%
FRANK	11	24.4
YP Services	7	15.6
GP	9	20.0
Other NHS services	7	15.6
College or University	5	11.1
Friends	4	8.0
Adult drug services	1	2.2
Parents	1	2.2
<i>Total</i>	<i>45</i>	<i>100</i>

Regardless of awareness, only 22 (12.0%) cannabis users said they would attend a cannabis-specific treatment service if available. However, only 27 (7.0%) reported that there were specific barriers that would dissuade them from attending.

Table 17. Barriers to Treatment Services

Barriers to Treatment	Cannabis users N (%)	Non-cannabis users N (%)
No	135 (73.4)	114 (57.3)
Yes	11 (6.0)	15 (7.5)
Don't Know	16 (8.7)	35 (17.6)
Missing Data	22 (12)	35 (17.6)
<i>Total</i>	<i>184 (100)</i>	<i>199 (100)</i>

3.5 Perceptions of Cannabis use

3.5.1 Legal status

Participants were asked to report the legal status of cannabis. Across the whole sample, 263 (68.3%) respondents knew that cannabis was currently a Class C drug, and approximately one quarter (n=92, 23.9%) of the sample incorrectly responded or did not know the legal status of cannabis. Only a small percentage of users thought cannabis was legal (3.3%). Moreover, more cannabis users (n=133; 72.3%) than non-users (n=129; 64.8%) knew the correct legal status of cannabis (see table 18).

Table 18. Legal Status of Cannabis

Class	Cannabis users N (%)	Non-cannabis users N (%)
Class A	6 (3.3)	11 (5.5)
Class B	27 (14.7)	28 (14.1)
Class C	133 (72.3)	129 (64.8)
Legal	6 (3.3)	12 (6.0)
Don't Know	0	2 (1.0)
Missing Data	12 (6.5)	17 (8.5)
<i>Total</i>	<i>184 (100)</i>	<i>199 (100)</i>

3.5.2 Harmful effects

Participants were asked a series of questions relating to their perceptions of cannabis harms. Firstly, they were asked if they believed cannabis was a

dangerous drug in general. Participants were divided on this question with 162 (42.1%) claiming that cannabis was not a dangerous drug, 153 (39.7%) respondents stating that it was and 47 (12.2%) reporting that they did not know. Significantly more non-users stated that cannabis was a dangerous drug ($X^2 = 56.00$, $df = 1$, $p < .05$.)

Respondents were then asked if they knew of any of the risks involved in smoking cannabis and 227 (59.0%) participants said they did not know, 93 (24.2%) believed they did know of the risks involved in using cannabis, 45 (11.7%) of the respondents were unsure of the risks involved in using cannabis.

Respondents were then asked to list these risks. It is important to note that the categorisation of responses involved some element of subjective judgement.

As shown in table 19, five main categories emerged and these were Psychiatric, Psychopathology, Neuro-anatomical, Physical and Cannabis dependence.

Table 19. Perceived Risks of Cannabis use

Risk	Cannabis users N (%)	Non Cannabis users N (%)	Totals N (%)
Psychiatric (e.g. psychosis)	76 (61.7)	47 (38.2)	123 (100)
Psychopathology (e.g. depression)	58 (60.4)	38 (39.5)	96 (100)
Neuroanatomical (e.g. brain damage)	11 (64.7)	6 (35.29)	17 (100)
Physical health (e.g. lung cancer)	18 (60.0)	12 (40.0)	30 (100)
Dependence (e.g. physical and psychological)	5 (45.4)	6 (54.5)	11 (100)

Psychiatric

The majority of young people who responded to this question perceived the greatest risk of using cannabis to be psychiatric and cited such conditions as psychosis or schizophrenia. Significantly more cannabis users (N=76; 61.7%) believed this to be a risk than non-users (n=47; 38.2%) ($X^2 = 6.84$, df=1, p.009).

“Can turn you into a schizophrenic”
(Male, age 16, College group)

“Possible psychosis”
(Male, aged 22 Street based group)

“Something to do with paranoia and mental disorders”
(Female, aged 17, Street Based group)

Psychopathology

Young people in the current study perceived cannabis use to be responsible for a number of psychological disorders such as depression and anxiety and once again significantly ($\chi^2 = 4.167$, $df=1$, $p.041$) more cannabis users ($n=58$; 60.41%) thought this was a greater risk than non-cannabis users ($n=38$; 39.5%)

“There is a link to depression”
(Male, age 24, online group)

“Depression, anxious, can cause serious problems over time”
(Female, age 18, Postal group)

“Panic attacks and depression”
(Female, 17, College group)

Neuroanatomical

With regards to the perceived neuro-anatomical risks, 11 (64.7%) cannabis users compared to 6 (35.2%) non-cannabis users stated that cannabis use could in some way cause damage to the brain and/or brain cells.

“Eats brain cells and makes you mental”
(Female, aged 21, Online group)

“Damage to the brain”
(Male, age 17, Postal group) ***“Reduced brain functions”***
(Male, age 19, Street based group)

Physical Health

The physical health consequences of using cannabis was a risk cited by 18 (60.0%) of cannabis users and 12 (40.0%) of non-users. In particular, young people listed smoking related illness as a danger of using this drug and were

concerned about the various types of cancers associated with smoking and cannabis use.

“Smoking related health risks, lung cancer, emphysema”

(Male, age 19, Online group)

“Mouth, throat, lung cancer”

(Female, age 21, Street based group)

Dependence

Slightly more (n=6; 54.4) non-cannabis users than cannabis users (n=5; 45.5%) believed that cannabis could cause dependence. Some individuals tried to clarify this risk and explained that they perceived cannabis could cause both psychological and physical addiction.

“It makes you apathetic and dependant”

(Female, aged 24, Postal group)

“Causes psychological and physical addiction”

(Male, age 16, College group)

3.6 Cannabis use in Families

Parental Cannabis use

Parental drug use was also investigated and respondents were required to state if they thought their parents smoked cannabis. While a large proportion of non-cannabis users stated that their parents did not engage in cannabis use (n=158; 79.4%), 25 (12.6%) stated that their parents did smoke cannabis and six (3.0%) non-users were unsure if their parents were cannabis users.

Within the cannabis user group, 75 (40.8%) believed parents engaged in cannabis use whilst 92 (50.0%) did not. Six (3.3%) cannabis users did not know if their parents used cannabis.

Family Cannabis use

Respondents were also asked to list the various members of their family they knew smoked cannabis. As shown in table 20, more parents of cannabis users (n=23; 12.6%) than non-users (n=2; 1.0%) were thought to use cannabis, and this was also the case for the siblings of cannabis users than non-cannabis users.

Table 20. Family Members who use Cannabis (number of mentions)

Family members	Cannabis users N (%)	Non Cannabis users N (%)
Parents	23 (21.9)	2 (5.4)
Siblings	41 (39.0)	10 (27.0)
Other relatives	30 (28.6)	13 (35.1)
No relatives	11 (10.5)	12 (32.4)
<i>Total</i>	<i>105</i>	<i>37</i>

The majority of respondents (n=267, 69.4%) reported that cannabis was easy to get hold of, while 12 (3.1%) young people said cannabis was not easy to find in Liverpool. Eighty seven (22.6%) individuals in the current cohort did not know if it was easy to get hold of cannabis and 19 (4.9%) respondents did not answer the question. When broken down by group (cannabis users vs. non-users), more non-cannabis users (n=144; 78.3%) than non-cannabis users (n=123; 61.8%) said it was easy to obtain cannabis in Liverpool although this difference was not significant.

3.7 Attitudes to Cannabis use

Table 21. Attitudes to Cannabis use

Attitudes to cannabis	Cannabis users N (%)			Non Cannabis users N (%)		
	Yes	No	Don't Know	Yes	No	Don't Know
Cannabis is detrimental to Health	121 (69.5)	41 (23.6)	12 (6.9%)	161 (83.9)	12 (6.3)	19 (9.9%)
Legalise cannabis	92 (52.3)	60 (34.1)	24 (13.6)	30 (15.7)	112 (58.6)	49 (25.7)
Smoke cannabis in public places	124 (70.9)	43 (24.6)	8 (4.6)	7 (3.7)	171 (89.5)	13 (6.8)
Acceptable for under 16 years to smoke cannabis	21 (11.9)	146 (83.0)	9 (5.1)	1 (0.5)	178 (93.7)	11 (5.8)
Acceptable for pregnant women to smoke Cannabis	4 (2.3)	165 (93.8)	7 (4.0)	2 (1.0)	186 (97.4)	3 (1.6)

All respondents were asked five questions relating to their attitudes towards the use of cannabis (see table 21). Firstly, they were asked if they thought cannabis was detrimental to health. A significantly smaller proportion of cannabis users (n=121; 69.5%) compared with non users (n=161; 83.9%) agreed with this statement ($\chi^2 = 21.20$, $p < 0.001$). Next, young people were asked if they thought cannabis should be made legal. Just over half of cannabis users (n=92; 52.3%), but less than 20% of non-cannabis users (n=30; 15.7%) believed cannabis should be legalised. This difference was statistically significant ($\chi^2 = 45.94$, $p < 0.001$). Following on from this, participants were asked if they thought cannabis use should be permitted in public places. The vast majority of young people (n=124, 70.9% cannabis users; n = 171, 89.5% non users) believed it should not, although non users were significantly more likely to hold this view ($\chi^2 = 180.89$, $p < 0.001$). The question of whether young people under the age of 16 years should be

permitted to smoke cannabis was posed to all respondents and a large proportion of both cannabis users (n=146, 83.0%) and non-users (n=178; 93.7%) believed that it was unacceptable. However the proportion of non-users believing this was significantly higher ($\chi^2 = 20.95$, $p < 0.001$). Finally, participants were asked if they thought it was acceptable for someone who was pregnant to smoke cannabis. Almost all respondents in both groups (cannabis users n=165, 89.7%; and non-users n=186, 93.5%) believed that it was not acceptable (non significant difference; $\chi^2 = 0.914$, NS).

3.8 Worries and Concerns about Smoking Cannabis

All respondents were asked to indicate their main concerns and worries about cannabis from six possible answers (see table 22).

Table 22. Concerns about the use of Cannabis

Worries and Concerns	Cannabis users N (%)		Non Cannabis users N (%)	
	Yes	No	Yes	No
Mental Health	98 (64.1)	55 (35.9)	141 (88.7)	18 (11.3)
Physical Health	65 (43.6)	84 (56.4)	117 (75.0)	39 (25.0)
Dependency	66 (43.4)	86 (56.6)	122 (77.2)	36 (22.8)
Police	82 (53.9)	70 (46.1)	94 (61.0)	60 (39.0)
Parents	64 (42.1)	88 (57.9)	91 (58.7)	64 (41.3)
Friends	11 (7.4)	137 (92.6)	107 (70.4)	45 (29.6)

Across the sample as a whole, significantly more non-cannabis users ($\chi^2=26.384$, $p<.000$ (n=141 non- cannabis uses vs. n= 98 cannabis users) said they were worried about the mental health issues of cannabis use. Worries regarding the physical consequences of using cannabis were also a cause for

concern and significantly more non-cannabis users $X^2=31.176$, $p<.01$ than cannabis users being worried about this. Once again, becoming dependant on cannabis was a cause for concern for significantly more non- users ($n = 122$, 77.2%) than users ($n=66$, 43.4%) ($\chi^2=37.070$, $p<.000$). As shown in table 21 getting caught by the police for smoking cannabis was slightly more worrying to non-cannabis users ($n=94$; 61.0%) than cannabis users ($n=82$; 53.9%) but this difference was not statistically significant. In general, the group was concerned about their parents finding out they used cannabis, although non-users ($n = 91$, 58.7%) were once again significantly more worried than cannabis users ($n = 64$, 42.1%) about the possibility of their parents finding out ($X^2 = 8.466$, $p<.01$). The final question asked if participants would be worried or concerned if their friends were aware they smoked cannabis. Significantly fewer cannabis users ($n = 11$, 7.4%) than non-users ($n = 107$, 70.4%) said they would not be concerned ($X^2 = 24.282$, $p<.000$).

3.9 Summary

In summary, a total of 385 young people with a mean age of 18.4 years participated in this study. One hundred and ninety nine had never used cannabis and 184 had. Most users lived with their parents and for the majority their parents did not know they used cannabis. There were varied patterns of use amongst this cohort with most of the young people who used cannabis reporting use for more than three years. The majority of the sample smoked cannabis with their friends at night-time in a private home and the main reasons cited for smoking cannabis were to 'relax' and to 'socialise'. The majority of young people in Liverpool said they would smoke whatever type of cannabis they could get hold of. However, the type of cannabis they preferred to smoke was what they believed to be 'skunk' Using a standardised measure, the Severity of Dependence Scale (SDS), only a small number of users ($n=18$; 9.8%) could be considered cannabis dependent.

Most of the cannabis sample stated that they did not buy cannabis and for those who did, the majority spent less than £20 per week with the main source of obtaining cannabis being from friends followed by a dealer. Most participants did know that cannabis was a Class C drug however; one quarter of those questioned did not know the correct legal status of cannabis.

With regards to mental health issues, for this cohort, paranoia and anxiety were the most common concerns reported after using cannabis and the frequency of which these occurred was weekly. While the majority of the sample did not know where to go in Liverpool to get help with cannabis use (if needed), the widely held view was that they would not use a cannabis service if one was available. Users stated there were no specific barriers that would prevent them from using such a service.

Attitudes to cannabis use were mostly negative, in that, most respondents stated that cannabis was bad for health, it should not be smoked in public places, and that pregnant women and young people under 16 years should not use this drug. However, this cohort was divided as to whether cannabis should be made legal or not.

Worries and concerns about the use of cannabis were most evident in the non-cannabis group as significantly more non-users stated they were worried about mental health problems; physical health problems, becoming dependent on cannabis, and their parents knowing they used this drug.

4. Database Information

4.1 The National Drug Treatment Monitoring System

In total, there were 475 (mean age 19.9, SD=3.6, range 11 to 25 years) young people in contact with structured drug treatment services in Liverpool from 01/10/07 to 21/01/08. Of these, 128 (26.9%) were females (mean age 20.8,

SD=3.5, range 12-25 years) and 347 (73.1%) were males (with a mean age 19.6 years, SD=3.5, range 11-25 years).

Table 23. NDTMS Data, Primary Drug for Young People in contact with Treatment services in Liverpool (2007/2008)

Drug	Male N (%)	Female N (%)
Heroin	34 (9.8)	43 (33.6)
Methadone	1 (0.3)	6 (4.7)
Other Opiates	0	3 (2.3)
Amphetamines (excluding ecstasy)	1 (0.3)	3 (2.3)
Cocaine (excluding crack)	83 (23.9)	25 (19.5)
Crack	7 (2.0)	3 (2.3)
Hallucinogens	1 (0.3)	0
Ecstasy	5 (1.4)	0
Cannabis	199 (57.3)	40 (31.3)
Solvents	5 (1.4)	0
Other drugs	2 (0.6)	0
Drug-not otherwise specified	9 (2.6)	5 (3.9)
<i>Total</i>	<i>347 (100)</i>	<i>128 (100)</i>

The most commonly used drug by females was heroin (n=43, 33.6%), this was followed by 40 (31.3%) who reported cannabis and 25 (19.5%) that used cocaine (see table 22). For young males, a slightly different pattern emerged with regards to primary drug; 199 (57.3%) reported cannabis as their primary drug, this was followed by cocaine (n=83, 23.9%) and heroin (n=34, 9.8%).

As shown in table 24 the main referral source into treatment was from the criminal justice system (CJS) n=105, 24.8%, followed by 113 (23.8%) from other sources (e.g. psychiatry, education service) and 97 (20.4%) young people who self referred into drug treatment services.

Table 24. NDTMS Data, Referral Sources into Drug Treatment Services

Referral Source	N	%
GP	16	3.4
Self	97	20.4
CJS	189	39.8
Drug Services	46	9.7
Other	113	23.8
Missing data	14	2.9
<i>Total</i>	<i>475</i>	<i>100</i>

With regards to cannabis users only, as shown in table 25, the main treatment services attended in the Liverpool area was the Liverpool YOT (n=92; 38.5%), followed by Young Addaction (n=56; 23.4%), and OKUK (n=23; 9.6%)

Table 25. NDTMS Data, Treatment Agencies Attended by Cannabis users.

Agency	N (%)	%
Alternatives LHT	15	6.3
Croxeth LHT	6	2.5
Hope St LHT	19	7.9
Independence Initiative	5	2.1
Knowsley CAHMS	1	0.4
Knowsley LAC	1	0.4
Knowsley Shared Care	1	0.4
Liverpool Addaction YP	56	23.4
Liverpool Criminal Justice LHT	2	0.8
Liverpool DIP Team	8	3.3
Liverpool YOT	92	38.5
OKUK	23	9.6
Sharp Liverpool	1	0.4
South Knowsley CDT LHT	1	0.4
Spider Project	5	2.1
Summer Grove	1	0.4
Transit	2	0.8
<i>Total</i>	<i>239</i>	<i>100</i>

The main reason why young cannabis users left services was through successful completed (65.7%) were still in treatment, 43 (18.0%) had

successfully completed treatment and only 38 (15.9%) had an unplanned discharge.

Table 26. NDTMS Data, Cannabis users treatment status

Discharge Reason for Cannabis users	N	%
Successful completion	43	18.0
Unplanned discharged	38	15.9
Other	1	0.4
Treatment ongoing	157	65.7
<i>Total</i>	<i>239</i>	<i>100</i>

In summary, according to NDTMS data, 475 young people engaged with treatment services from 1st October 2007 to 21st January 2008. The main problem drug reported by this client group was cannabis (n = 239; 50.3%). When stratified by gender, results showed that the primary drug of use recorded for young females was heroin and for young males it was cannabis. For cannabis users only (n=239), the main referral route into treatment was through the Criminal Justice System (CJS) and the most common services attended by this cohort was the YOT, Young Addaction and OKUK.

4.2 Drug Interventions Programme

DIP data

In total, 155 young people aged under 25 years (mean age 21.10, SD=2.00, range 17-24 years) were participating in the Liverpool Drug Interventions Programme (DIP). The majority were male (n=148, 96.1%) mean age 21.08, SD=1.99 and six were female (3.9%), mean age 21.52 (SD=2.43), gender was not recorded for one client.

For both cannabis users (n=45, 40.2%), and non-cannabis users (n=14; 32.6%), the most common accommodation type was local authority (LA) or Registered Social Landlord (RSL) rented accommodation followed by 'other'

accommodation for cannabis users (n=20, 17.9%) and own property for non users (n=8; 18.6%), (see table 27).

Table 27. DIP Data, Accommodation Type

Accommodation Type	Cannabis users N (%)	Non-Cannabis users N %
Direct access short stay hostel	1 (0.9)	0
LA or RSL rented	45 (40.2)	14 (32.6)
Other	20 (17.9)	7 (16.3)
Own property	19 (17.0)	8 (18.6)
Private rented	14 (12.5)	7 (16.3)
Sleep on different friends floor	1 (0.9)	1 (2.3)
Sleep on streets	1 (0.9)	1 (2.3)
Staying with friends/family-short term	8 (7.1)	3 (7.0)
Supported housing/hostel	1 (0.6)	0
Missing data	2 (1.8)	2 (4.7)
<i>Total</i>	<i>112 (100)</i>	<i>43 (100)</i>

Most cannabis users were unemployed (n=68, 60.6%) as were the non-cannabis users (n=21: 48.8%). For the cannabis users, 30 (26.8%) were in regular employment as were 11 (25.6%) of the non-cannabis users (See table 28).

Table 28. DIP Data, Employment Status

Employment Status	Cannabis users N (%)	Non-Cannabis users N %
Economically inactive (e.g. incapacity benefits)	5 (4.5)	3 (7.0)
Other	4 (3.6)	2 (4.7)
Pupil/student	3(2.7)	2 (4.7)
Regular employment	30 (26.8)	11 (25.6)
Unemployed	68 (60.6)	21 (48.8)
Missing data	2 (1.8)	4 (9.3)
<i>Total</i>	<i>112 (100)</i>	<i>43 (100)</i>

Drug Misuse

In all, 153 (99.4%) of those arrested had misused drugs in the last month. Clients were asked to record their age of first use and this ranged from 10 years to 21 years, with a mean age of 15.21 (SD=2.48).

While this cohort had tried a range of drugs, the most frequently reported main drug was cannabis and in all, 112 (72.7%) young people stated cannabis was their main drug. Of these 107 (95.5%) were male and five (4.5%) were female. Their mean age was 20.90 (SD=2.03), and the age range 17-24 years. Cocaine (n=36; 23.4%) was next most commonly drug used by this cohort (see table 29).

Table 29. DIP Data, Main Drug and Frequency of use

Main Drug	Yes	No
Cannabis	112 (72.7%)	42 (27.3%)
Cocaine	36 (23.4%)	58 (37.7%)
Crack	1 (0.6%)	3 (1.9%)
Ecstasy	1 (0.6%)	10 (6.5%)
Heroin	2 (1.3%)	2 (1.3%)

With regards to money spent each week on drugs, both groups (cannabis users n=52; 46.4% and non-users n=22; 51.2%) tended to spend between £0 and £50 per week and 23 (20.5%) cannabis users stated they would spend approximately £51 to £100 each week (see table 30).

Table 30. DIP Data, Money Spent Each Week on Drugs

Amount (£)	Cannabis users N (%)	Non-Cannabis users %
0 - 50	52 (46.4)	22 (51.2)
51 - 100	23(20.5)	8 (18.6)
101 - 250	22 (19.6)	7 (16.3)
251 - 500	7 (6.3)	4 (9.3)
501 - 1000	4 (3.6)	1 (2.3)
Missing data	4 (3.6)	1 (2.3)
<i>Total</i>	<i>112 (100)</i>	<i>43 (100)</i>

The main reasons why this young cohort was arrested are set out in table 31. The most common crime committed that led to arrest of cannabis users was possession of drugs (n=37; 33.3%), this was followed by theft of a vehicle for (n=18, 16.1%).

Table 31. DIP Data, Crimes Committed

Crime Committed	Cannabis users N (%)	Non-Cannabis users N (%)
Attempted handling	1(0.9)	0
Burglary (domestic)	9(8.0)	6 (14.0)
Burglary (other)	3(2.7)	4 (9.3)
Possession of drugs	37(33.3)	10 (23.3)
Robbery	7(6.3)	4 (9.3)
Supply	3 (2.7)	0
Theft from a vehicle	5 (4.5)	2 (4.7)
Theft of a vehicle	18 (16.1)	3 (7.0)
Theft (other)	10 (8.9)	3 (7.0)
Theft (shoplifting)	6 (5.4)	1 (2.3)
Taking a vehicle without consent	2 (1.8)	1 (2.3)
Wounding or assault	2 (1.8)	2 (4.7)
Missing data	9 (8.0)	7 (16.3)
<i>Total</i>	<i>112 (100)</i>	<i>43 (100)</i>

Most young cannabis users were assessed in custody (n=87, 77.7%) followed by CJIT offices (n=19, 17.0%) (see table 32).

Table 32. DIP Data, Assessment

Assessed	Cannabis users N (%)	Non-Cannabis users N (%)
CJIT Offices	19 (17.0)	2 (4.7%)
Court	6 (5.4)	3 (7.0%)
Custody	87 (77.7)	36 (83.7)
Other	0	1 (2.3)
Missing data	0	1 (2.3)
<i>Total</i>	<i>112 (100)</i>	<i>43 (100)</i>

Within the group as a whole, further intervention was needed for 100 (64.9%) of the young people and 54 (35.1%) clients did not need any further assistance. Further intervention was accepted by 73 (47.4%) of this young cohort and six (3.9%) refused any further assistance (N.B. data are not recorded for 75 [48.7%] of this young client group).

With regards to treatment for drug misuse, six (3.9%) clients had received treatment in the past two years and 148 (96.1%) individuals had not had any help for drug misuse in the previous two years. Three (1.9%) young people were currently in treatment for drug misuse. Only one (0.9%) cannabis user had received treatment for drug misuse in the last two years.

In summary, 155 young people under the age of 25 years had been arrested in Liverpool from April 2007 to December 2007, 112 of whom stated that their primary drug was cannabis. The most common crimes committed by cannabis users were possession of drugs and the theft of a motor vehicle. Fifty two (56.4%) of those cannabis users arrested spend between £0 and £50 per week on drugs. Prior to arrest, only one (0.9%) cannabis user had received treatment for drug misuse in the past year. This finding may highlight the common perception held by many cannabis users that their cannabis use is not problematic and they do not need to seek treatment.

5. Discussion

The aim of this study was to investigate cannabis use in Liverpool residents aged between 16-25 years, who had never been in contact with drug treatment services. The research established perceptions of risk as well as beliefs and behaviours regarding the use of cannabis.

The main results emerging from this work were:

- the vast majority of users bought cannabis from friends, and smoked it at a friend's house;
- the main reasons reported for using cannabis were to relax and to help socialisation with friends;
- users stated would not attend cannabis service if one was available;
- while the majority of the sample knew that cannabis was a Class C drug, one quarter of the current sample were uncertain over the exact legal status;
- the main concerns of using cannabis for both groups (cannabis users and non-users), but significantly more for non-cannabis users, were mental and physical health problems, becoming dependant on cannabis, and their parents knowing they smoked this drug.

5.1 Cannabis and Friendship Networks

The overwhelming majority of young people using cannabis accessed and purchased cannabis through friendship networks, and smoked it in private homes.

This finding is consistent with Duffy et al's (2008) study of young UK cannabis users, which also found that most young users purchased and smoked cannabis with friends. These authors argued that the means in which young

people purchased cannabis and the friendship networks used in order to seek out cannabis distanced young people from exposure to more harmful drugs and their culture.

Access to cannabis through parents has received recent media attention. For example, Merseyside Police Assistant Chief Constable, Simon Byrne, stated in interview that there was a group of parents who were complicit in their children's use (Liverpool Daily Post, 15/10/2007). In October 2007, a mother from Suffolk was given community service for supplying her teenage children with Cannabis. Her justification was that she did not want them to become involved with 'dealers' and compared herself to other parents that provided their children with alcohol and tobacco (Guardian, 10/10/2007). Young people in the current study did smoke cannabis at friend's homes or in their own homes and while 99 (54.7%) said that their parents did not know they smoked cannabis, 54 (29.8%) stated their parents were aware that they smoked cannabis and 28 (15.5%) respondents stated they did not know. Although this may not represent complacency and/or complicity, and a discussion of these ideas is beyond the scope of this report, parents who openly talk to their children about cannabis use, before it commences or becomes problematic, may help to reduce associated risks (Hightet, 2005).

More young cannabis in the current study had parents, siblings and other relations that used cannabis than non-cannabis users. A briefing paper by the Centre for Research on Families and Relations (CRFR, 2004) reported that many young people were introduced to cannabis by siblings and family members. Moreover, the CRFR (2004) study showed that some parents may implement a proactive harm reduction approach to their children's alcohol use, however, when it comes to cannabis use, parents either fail to acknowledge that their children are using cannabis or hold an ambivalent attitude to it.

5.2 Reasons for using Cannabis

The main reason why respondents were using cannabis was to *'relax'* and to *'socialise'*.

Again, this finding consistent with other recent research (Duffy et al., 2008; Melrose et al., 2007; Rethink, 2008). For example, in Duffy's study (2008) the main reasons given for using cannabis was to relax (54%), calm down (32%) and to be more sociable (24%). In the Rethink report, young people used cannabis because it aided relaxation (33%) and made them more sociable (12%). In Melrose and colleague's study, young cannabis users smoked cannabis to relieve stress, aid relaxation, facilitate peer bonding and sometimes to manage and/or control their anger.

As pointed out by Melrose et al (2007), while young people may ascribe a number of positive functions to their cannabis use, this may be instrumental in gaining access to drug using friends or peer groups. Alternatively, as highlighted by Boys et al (1999) the functions that substance use serves for young people may not be fulfilled by other activities, particularly those offered as drug prevention programmes. It is a mistake to believe that young people use drugs simply to alleviate boredom as this research demonstrates a range of functions. Encouraging young people to participate in alternative activities may be challenging if these do not fulfil the perceived benefits and fulfil the functions of substance use. Melrose et al (2007) also pointed out that some practitioners may not be fully aware of the benefits young people attribute to cannabis use, and as a consequence a greater understanding of the positive effects young people attach to using cannabis is needed.

Significantly more cannabis in the current study also used alcohol at the same time as cannabis compared with other substances. This is a cause for concern as this age group (18 to 24 years) are more likely to be binge drinkers (Hughes, 2004), and binge drinking is considered to be the most common form of risky alcohol consumption among young people (Murgraff et al, 1999;

Hammersley & Ditton, 2005). While alcohol consumption levels were not recorded in the current study of young people, this issue warrants further investigation. Hammersley and Leon (2006) point out, young people are now more likely to, mix alcohol with cannabis than any other illegal drug, and to categorise cannabis together with alcohol and tobacco rather than any other drugs. Concomitant cannabis and alcohol use may be normalised and so should be an important focus of intervention.

5.3 Drug Treatment Services in Liverpool

The overwhelming majority of respondents (n=310, 80.5%) in the current sample were not aware of cannabis services in Liverpool. This is partly unsurprising as none of the sample had received treatment for cannabis use. However, the overwhelming majority of cannabis users (n=142, 77.7%) stated they would not attend a cannabis service even if there was one available to them.

The main drug used by young people in Liverpool, attending specialist treatment services or in contact with DIP, was cannabis. Perhaps what is of greatest interest is that prior to arrest, only one cannabis user that had engaged with the DIP and had received treatment for drug misuse in the past year.

These findings may emphasise some of the common perceptions held by cannabis users with regards to obtaining help for cannabis use. For example, some studies have shown that cannabis users do not feel their drug use is problematic (e.g. Melrose, et al, 2007), that services have nothing to offer them in the way of treatment options (e.g. Duffy, et al, 2008) or that attending a drug service is stigmatising and only for problematic drug users (Wareing et al 2007a).

In Melrose et al's (2007) study young cannabis users believed that in contrast to smoking cessation services, current treatment services could not offer any

treatment for cannabis use, such as nicotine patches or gum. Melrose's sample also perceived drug treatment services to be solely for problematic drug users and were not willing to engage with this type of drug user. This appears to be a common perception of drug services in younger cohorts of drug users as Wareing et al (2007a) found similar views in their study of young substance misusers in Liverpool. In Wareing's study, young people were reluctant to engage with treatment services and cited the main barriers to accessing services as having to interact with problematic drug users, age boundaries and the stigma attached to attending a drugs service.

The Rethink report (2008) found that young people wanted more information about cannabis and would prefer it to come from a previous cannabis user. Modes of delivering such information included the Internet (21%), and/or the TV (21%).

5.4 The Legal Status of Cannabis

One quarter of the current sample of young people questioned were confused over the legal status of cannabis. This is a common theme among young people (e.g. Rethink, 2008; Melrose et al, 2007; Jenkins 2005) and needs clarifying. With the reclassification of cannabis once again coming under review, young people may be confused about the legal status and the penalties for possession and supply of this drug. Although previous research suggests that legal status of cannabis is not a deterrent to use (Rethink, 2008), young people should be informed of the potential legal consequences of being caught in possession or dealing cannabis. Further information should include the barriers this may present to some training, employment and travel opportunities. Clarification of the law is especially important as many users in the current study bought their cannabis from friends, who may not have realised that according to the law, they could be charged with supply of a controlled substance.

5.5 Worries and Concerns Regarding Cannabis use

Cannabis users' main worry was that use could cause long term mental health problems. Short term adverse effects were also reported. For example, 50 (27.2%) young people reported they experienced paranoia after smoking cannabis, and this was usually on a weekly basis. Interestingly however, a significantly greater number of non-users had these concerns, which may be one reason for abstention.

Melrose and colleagues (2007) found that cannabis users were circumspect in their views and whilst some believed that cannabis should be made legal, they were also concerned about its mental health and dependence potential. Although Melrose argued that the complex and conflicting views of young people regarding cannabis suggested that they were misinformed or confused as to the actual dangers of use, this is unsurprising considering the inconsistent views and communication emanating from national media. The FRANK Brain Warehouse cannabis campaign for example, has been criticised in the literature for overstating the risk of use and development of psychosis (Sumnall and Bellis, 2007). In May et al's (2007) study many young users were critical of the way advice and information regarding the potential psychological and physical problems associated with cannabis was reported. They perceived their own experiences and those of their peers with cannabis use to be less severe or dangerous than those reported. Providing young people with evidenced based advice and information about cannabis is important, but should also be accompanied by robust evaluation to ensure that content and delivery are appropriate and the campaign has no unforeseen negative effects (Sumnall and Bellis, 2007).

6. Limitations

The study had a number of limitations which will be discussed. Firstly, as the questionnaire was designed to be self completed, many young people did not answer all the questions on the questionnaire; as a consequence of this, the study had some missing data. Secondly, the study used a convenience sample and so was not truly representative of all young people in the Liverpool area. Furthermore, respondents self reported their own cannabis use and incidence of psychological symptoms, which may have reduced disclosure. However, previous studies within the substance misuse literature have shown that generally, self report is usually reliable and trustworthy (e.g. Halpern et al, 2004; Wareing et al, 2007b) and we have no grounds for believing that respondents were deliberately misleading in their answers. Finally, participants stated that the usual type of cannabis they smoked was of the skunk variety, and that they knew the difference between this and herbal cannabis. However due to time and space constraints we were not able to determine what these differences were, and if self-report accurately reflected the formulations used. Recent media discourse on cannabis has focused almost entirely on skunk varieties, so it is possible that respondents regard all their herbal cannabis use as being skunk. Unfortunately local data on types of cannabis seizures was unavailable at the time of writing so we have no indication whether these perceptions are matched by the types of cannabis available on the street.

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