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Drugs and the dance music scene: a survey of current drug use patterns among a sample of dance music enthusiasts in the UK

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Abstract

This study explores the utility of a self-completion survey method to quickly and cheaply generate information on patterns and trends among regular 'recreational' drug consumers. Data is reported here from 1151 subjects accessed through a dance music publication. In keeping with previous studies of drug use within the dance scene polysubstance use was the norm. Many of those reporting use of 'ecstasy' were regularly using multiple tablets often consumed in combination with other substances thus exposing themselves to serious health risks, in particular the risk of dose related neurotoxic effects. Seventy percent were drinking alcohol at hazardous levels. Subjects' patterns of drug purchasing also put them at risk of severe criminal sanction. Data supported evidence that cocaine use had become increasing popular in the UK, but contrasted with some commentators' views that ecstasy use was in decline. The utility of this method and how the results should be interpreted is discussed, as are the data's implications for harm and risk reduction activities.

Keywords: Ecstasy; Dance drugs; Dose related neurotoxicity; Polysubstance use; Harm reduction

1. Introduction

The prevalence of illicit drug use, especially MDMA (Ecstasy) and other stimulants has increased over the last decade among the younger section of the UK population (Measham et al., 1998) with recent studies showing that approximately 50% of those ages 16–22, have tried an illicit substance (Health Education Authority, 1997). Whilst cannabis remains the most widely consumed illicit drug, young people are increasingly experimenting with a range of other illicit psychoactive substances. Concern has been expressed about the increasing popularity of stimulant drugs (WHO, 1997) and their association with certain youth subcultures, in particular the dance music scene. For example, a study of over 3000 second year university students in the UK reported that 13% had tried MDMA (Webb et al., 1996). The prevalence of drug use amongst high-risk populations such as young people attending 'dance music' events often appear dramatically higher, with studies among this group having reported lifetime use of ecstasy of between 60–80% (Branigan et al., 1997; Release, 1997). This phenomenon is not restricted to the UK, with reports of use and associated problems coming from Denmark (Frydenlund Nielsen et al., 1995), Germany (Rakete and Flusmeiser, 1996), Spain (Calafat et al., 1998), Australia (Solowij et al., 1992; Boys et al., 1997; Topp et al., 1999) and the Netherlands (Sandwijk et al., 1995; van de Wijngaart et al., 1999) among others. Studies do suggest however, that the UK has amongst the highest levels of use of the ecstasy group of drugs (MDMA and its related analogues) (Griffiths and Vingoe, 1997).

Despite the political and public concern about the use of a range of drugs by young people attending dance events there have been relatively few large studies of this population. Very little is known about patterns of drug use among dance club attendees other than evidence of high levels of ecstasy use (Forsyth, 1996; Petridis and Sherlock, 1996; Release, 1997; Korf et al., 1998). The difficulties in accessing large numbers of illicit drug users outside of institutional settings are well known (Griffiths et al., 1993). This problem is particularly acute for drugs like MDMA as consumers rarely come into contact with treatment services and those that do are unlikely to be representative of the larger population of users. Previous studies have used snow-

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balling techniques (Callow 1996; Topp et al., 1999), privileged access interviewing (Beck and Rosenbaum, 1994; Brown et al., 1995; Williamson et al., 1996) advertisements in magazines (Petridis and Sherlock 1996) and on local radio (Winstock and King, 1996). None of these techniques are without their limitations, and none produce statistically random samples. However, conventional survey techniques perform poorly in this area and convincing random samples of hidden drug users are rarely, if ever, available. Even in national population samples where considerable resources have been invested, the actual numbers of drug users sampled is usually low and response and non-response biases mean that the credibility of the conclusions drawn are often questionable. Therefore, for reasons of methodological difficulty, cost, and practicality, some form of non-random sampling procedure will often be the only method available for exploring patterns of drug consumption within non-institutionalised populations. Whilst caution must be used in generalising from such samples to the general population, this does not mean that valuable information can not be collected.

In respect to drug users attending dance events, a better understanding of the detail of current consumption patterns is likely to be important in assessing the risk of related health and social problems this group may be exposed to. It has also been argued that whilst not representative of young peoples' drug use per se, understanding changing patterns of drug consumption amongst regular users can provide important information on trends and therefore provide a valuable 'early warning' role (Griffiths, 2000 in press). As such, the tracking of drug use patterns among at-risk populations such as dance scene attendees has recently become a focus for development activity by such groups as the Office of National Drug Control Policy (ONDCP) in the United States (McCaffrey, 1998), and the European Monitoring Centre on Drugs and Drug Addiction (EMCDDA, 1999; Griffiths et al., 2000). In this paper, data from a large self-nominated sample of dance music enthusiasts are reported. The study was conducted not only to improve understanding of drug use among this group but also to explore the utility of the sampling method used to generate information on the behaviour of large numbers of regular drug consumers.

2. Method

2.1. Sample

A cross sectional survey of a self-nominating sample of non-treatment drug users was accessed through advertisement in a popular media publication 'Mixmag'. This publication is widely read by those interested in the dance music scene and is one of the UK's largest dance music magazine with a UK circulation of about 50 000 (world-wide approximately 60 000). The magazine was chosen because of the well-recognised association between drug use and dance music and because the magazine has a history of publishing articles about drug and alcohol use. Further it was hoped that association with a magazine that has credibility in the youth market would produce a higher response than advertising in more generalist publications. The method was selected therefore to assess its efficacy as a cheap, practical and timely technique to generate a large sample of regular drug consumers, who would be difficult to access by other means.

2.2. Questionnaire

The research tool, was a specially designed self-report questionnaire that filled the 2 centre A4 pages in the June 1999 issue of the publication. A freepost facility was also provided. Topics covered by the questionnaire included: demographic and drug use details, self protection and harm reduction strategies, changing patterns of use and high-risk behaviours. In addition a number of problem drug use measures and a dependence scale (the Severity of Dependence Scale (Gossop et al. (1995)) were included, plus the 5-item Alcohol Use Disorders Identification Test (AUDIT) (Piccinelli et al., 1997) which identifies hazardous drinking levels (Saunders et al., 1993). Although the questionnaire was anonymous and confidential, subjects were given the option to record a first name (to retain some anonymity) and address if they wished to take part in further research activities. The findings concerning high-risk behaviour and harm reduction are presented elsewhere (Winstock and Griffiths, forthcoming).

2.3. Results

A total of 1168 responses were received, of which 1151 were suitable for subsequent analysis. It is not possible to estimate a response rate for several reasons. First the questionnaire was only relevant to those subjects who currently consider themselves as drug users and secondly, people other than the purchaser may have read the magazine. The UK and world-wide circulation figures for the June 1999 issue were 49 000 and 59 000, respectively. The exercise cost less than £2000 (3300 euros) to complete, the only major expenses being postage and data entry costs.

2.4. Demographics

Six hundred and eighty-nine respondents (60.5%) were male, and 462 (39.5%) were female. The mean age of all respondents was 23.9 years (SD 5.49), with male respondents being slightly older (24.57 years vs. 22.94 years, $t = 5.15$, [df = 1149], $P < 0.001$). The majority of the sample were employed (65%, $n = 745$), 27% (308) of the sample were students, with only 6.0% (72) unemployed. The average demographic profile for Mixmag readers based on the magazines marketing data was; age 21–23years, 70% male, 30% female, with 70% being employed and 30% being students. This suggests that the sample broadly reflected the demographic characteristics of the magazine readership as a whole.

2.5. Drug use experience

Table 1 shows the lifetime and recent drug use histories of the sample, with mean age of first use for each drug.

The majority of subjects were polysubstance users with 60% ($n = 692$) reporting use of three or more substances in the past month. Those who reported use of ecstasy in the past month were significantly more likely within the same period to have used amphetamine (43 vs. 17%, $\chi^2 = 41.11$, [df = 1], $P < 0.0005$); cocaine (49 vs. 28%, $\chi^2 = 25.06$, [df = 1], $P < 0.0005$); amyl nitrite (25 vs. 4%, $\chi^2 = 36.90$, [df = 1], $P < 0.0005$); LSD (11 vs. 3.0%, $\chi^2 = 10.51$, [df = 1], $P < 0.005$); cannabis (74 vs. 66%, $\chi^2 = 5.4$, [df = 1], $P < 0.05$); benzodiazepines (9.0 vs. 4%, $\chi^2 = 4.31$, [df = 1], $P < 0.05$) and GHB (4 vs, 1%, $\chi^2 = 4.60$, [df = 1], $P < 0.05$).

3. Use of ecstasy

3.1. Length and frequency of use

Almost all of the sample reported ever having used ecstasy (96%, $n = 1106$), with a mean age of first use being 19.58 years (range 12–52 years). Women reported first use at a younger age than men (see Table 2). The mean duration of use was 4.65 years (SD 3.96 modal 2 years), with 452 (41%) reporting having used the drug for more than 5 years and 82 (8%) reporting use for 10 or more years. Eighty six percent ($n = 951$) of ecstasy users reported use with-in the last month, with only 29 (3%) reporting that last use had occurred more than 1 year ago. The group reported having used ecstasy on a mean of 160.6 occasions (SD 261 with a range of 1–3000). Of those who reported use of ecstasy during the past year, 12% (134) of subjects used the drug on average 2–3 times per week, 22% (243) reported using once a week, 30% ($n = 334$) once every 2 weeks, 16% ($n = 180$) monthly and 15% ($n = 168$) less than monthly. Only 5 individuals (0.5%) reported daily or near daily use. There was no significant difference in current frequency of use between the sexes.

3.2. Tablets consumed

The majority of subjects (55%, $n = 606/1106$) took two or less tablets per typical using session, with a mean of 2.8 tablets being taken per session for the sample as a whole. Just over a quarter of those who had ever used ecstasy ($n = 279$, 25%) reported usually taking 4 or more tablets in a session. These data can be found in Fig. 1. Subjects were also asked what was the

Table 1
Lifetime and recent drug use histories of sample ($n = 1151$)

Drug	% ever used	Mean age first used[a] (SD)	% ever injected[a]	% used in past month	Mean days used past month[b] (SD)
Ecstasy	96	19.6 (4.7)	0	86	4.5 (3.8)
Amphetamines	92	18.1 (3.9)	3	40	4.7 (5.6)
Cannabis	91	16.1 (3.3)	0	73	17.9 (11.1)
Amyl nitrite	77	17.8 (4.0)	0	22	3.8 (4.8)
Cocaine (powder)	75	20.7 (3.9)	0.2	46	3.2 (4.3)
LSD	71	17.9 (4.1)	0	10	1.9 (1.5)
Benzodiazepines	31	19.4 (4.1)	0.3	8	6.2 (8.2)
Ketamine	26	21.6 (5.2)	0	4	2.4 (2.6)
Crack cocaine	13	21.4 (4.4)	0	2	2.8 (4.2)
GHB	13	22.4 (5.6)	0	3	2.7 (4.1)
Heroin	12	20.3 (3.7)	14	1	4.5 (7.0)
Flatliners (4MTA)	10	20.8 (4.4)	0	1	1.4 (0.7)
Herbal highs	9	21.2 (6.2)	0	2	4.4 (7.5)
2CB (nexus)	5	23.8 (5.7)	0	1	4.3 (8.2)
Viagra	2	27.7 (7.9%)	0	1	1.9 (1.8)

[a] Among subjects reporting use.
[b] of those who had used index drug in the last year.

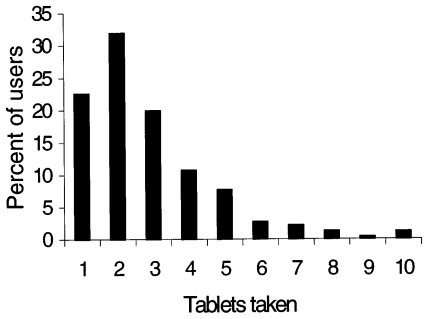

Fig. 1. The number of ecstasy tablets usually taken in a session based on the sample of 279 subjects.

maximum number of tablets they had ever consumed in a single session. The mean maximum number of tablets ever having been taken was 5.8. Just over half (54%, $n = 595$) of those who had ever used ecstasy reported their maximum use in one session to have been 5 or more pills, 16% ($n = 171$) 10 or more, 5% ($n = 49$) 15 or more and 2% ($n = 18$) more than 20 pills in one session. The mean maximum number of consecutive days that ecstasy was ever used for was 3.3, with 14% ($n = 156$) of ecstasy users reporting using the drug for 5 or more consecutive days and 3% ($n = 38$) on 10 or more consecutive days.

3.3. Injecting drug use

Sixty two (5.4%) of the sample reported ever having injected a drug (28/61 amphetamines, 22/61 heroin, 3/61 cocaine) with no significant differences between the sexes.

3.4. Purchase patterns

Subjects were asked how much they usually paid for an ecstasy tablet, how many tablets they usually buy and what the largest number was that they had ever bought in a single purchase. The mean number of pills bought by respondents was 8.16 (modal 2, median 4) at a mean cost of £6.89 (mode £5, range £2–25). Fifty eight percent ($n = 633$) reported usually purchasing 4 or less pills at a time, 26% ($n = 283$) reported usually purchasing 10 or more pills, with 8% ($n = 84$) regularly purchasing more than 20 pills. The majority (90%, $n = 1039$) reported ever having bought a pill for a friend, with almost three-quarters (73%, $n = 815$) reporting ever having sold an ecstasy pill. Table 2 compares parameters of ecstasy use by gender.

Table 3
Drugs used with ecstasy and to assist the comedown from ecstasy ($n = 1106$)

	Drug use with ecstasy %	Drugs used to help comedown%
Alcohol	88	60
Amphetamines	83	–
Cannabis	82	82
Cocaine	58	0.5
Amyl nitrite	51	–
LSD	30	–
Ketamine	14	–
Prozac	6	–
Crack cocaine	6	–
Herbal highs	4	–
Benzodiazepines	–	18
Heroin	–	2
Antihistamine	–	5
Viagra	2%	–

3.5. Drugs used with ecstasy

To ascertain the level of concurrent polysubstance misuse, subjects were asked to record if they had ever used any other drugs while 'on' ecstasy and also which drugs or methods they had used to assist with the 'comedown'. From Table 3 it can be seen that polystimulant use is common, as is use of ecstasy in combination with cannabis and/or alcohol. The later two drugs also appear to be the most common drugs used to assist in reducing the comedown associated with ecstasy use (see Table 3).

Table 2
Patterns of ecstasy use and purchase by gender ($n = 1106$)

	Male	Female	t[df = 1104]	Significance
Age first used	20.4	18.9	4.05	$P < 0.001$
Number of times used	183.9	124.4	4.04	$P < 0.001$
Days used in last month	3.9	4.2	−1.30	n/s
Number of Pills usually taken per session	3.0	2.6	3.98	$P < 0.05$
Most pills ever taken in one session	6.4	5.0	5.56	$P < 0.001$
Mean number of consecutive days of use	3.5	3.1	2.09	$P < 0.005$
Number of pills usually bought (mean)	9.8	5.5	2.55	$P < 0.05$
Largest number ever bought (mean)	80.8	39.2	2.97	$P < 0.001$
Price usually pay/pill	£6.9	£7.1	−1.23	n/s

Table 4
The effects of drug and personal variables on levels of use of ecstasy[a]

	Use more %	Use less %	No different %	Not applicable %
The quality of ecstasy got worse	21	34	38	7
The quality of ecstasy got better	35	10	42	1
Needing to take more tablets than used to	35	9	46	9
Having a bad experience on ecstasy	1	22	57	21
Knowing someone who has had a bad experience on ecstasy	1	11	69	19
Feeling depressed a few days after use	2	27	60	11
Worrying about dying from using ecstasy	1	15	69	16
Worrying about risk of brain damage	1	25	61	13

[a] Increase or decrease in use over the last year, $n = 1078$ (use in the last year).

3.6. Level of alcohol consumption

Using the 5 item AUDIT (Alcohol Use Disorders Identification Test), 70% ($n = 774$) of those who had used ecstasy scored 5 or more (where a score 5 or more indicates harmful drinking). The mean score was 6.89, with men scoring on average higher than women (7.27 vs. 6.42, $t = 3.58$, [df = 1104] $P < 0.0005$). The modal value was 5. A significantly greater proportion of men than women (75 vs. 63%, $\chi^2 = 17.19$, [df = 1], $P < 0.0001$) scored 5 or more.

3.7. Current trends in use

To assess changes in the consumption of ecstasy over time both the frequency of use and number of pills consumed in a typical occasion were asked. Over the last year 47% ($n = 519$) reported increasing the amount of ecstasy they usually took during a typical using session and 24% ($n = 269$) reported taking less. In addition, 33% ($n = 366$) of subjects reported increasing their frequency of use of the drug, as compared with 53% ($n = 587$) who reported using it less often. Nine percent ($n = 97$) had stopped taking ecstasy altogether. In order to assess some of the influences on current patterns of use, subjects were asked how a number of different variables affected their use. The items chosen were based on widely publicised potential adverse consequences following the use of ecstasy as well as perceived drug quality variables that were thought to impact on consumption patterns. The results are shown in Table 4.

3.8. Changes over the last year in use, cost, quality and perceived popularity of stimulant drugs

Subjects were also asked how their patterns of use of the three most commonly used stimulant drugs (cocaine, amphetamine and ecstasy) had changed over the preceding year. Of those reporting a change in their use of amphetamine (69% $n = 790$) and cocaine (53% $n = 613$) over the last year, 185 (23%) reported using more amphetamine compared to 77% ($n = 605$) who reported a decrease in amphetamine use and 353 (58%) reported using more cocaine compared to 42% ($n = 255$) who reported using less cocaine now than 1 year ago. Table 5 shows changes in cost, perceived drug quality and popularity of ecstasy, cocaine and amphetamine compared to 1 year ago.

3.9. Problems controlling use of ecstasy: dependence potential

The mean SDS score for those subjects who had ever taken ecstasy was 2.31 (SD 2.26), with a modal value of 2. Seventeen percent ($n = 169$) of subjects recorded scores of 5 or more with 5% ($n = 56$) scoring seven or more. Less than one percent ($n = 8$) of the sample scored 10 or more. In terms of dependence criteria investigated, 58% ($n = 596$) of the subjects reported the development of tolerance to ecstasy, 55% ($n = 551$) reported continuing to use ecstasy despite experiencing problems with their health, work or relationships, 36% ($n = 361$) reported loss of interest in activities or friends not connected with ecstasy and 25% ($n = 259$) reported difficulty in controlling the amount of ecstasy they took.

Table 5
Changes in cost, perceived drug quality and popularity of ecstasy, cocaine and amphetamine compared to one year ago

	Amphetamine	Ecstasy	Cocaine
Quality			
Better quality %	20	43	25
The same %	58	288	62
Worse quality %	22	29	12
Price			
Cheaper	35	61	36
The same	58	35	53
More expensive	7	4	7
Popularity			
More popular	16	58	70
The same	33	34	26
Less popular	52	9	4

4. Discussion

This study represents one of the largest explorations of patterns of drug use among those associated with the dance music scene in the UK. The sample was self-nominating and therefore maybe subject to bias and thus cannot be said to be representative of drug users associated with the dance scene in general. Other than the broad similarity of demographics between responders and other readers there is no information as to how the responders differ. In particular, those readers with the greatest interest in, and commitment to, drug use may have been disproportionately likely to respond. This sample therefore probably better represents the 'harder end' of the drugs/dance music scene, and less well reflects those dance music enthusiasts whose drug use is less intense. Regarding prevalence estimates given in this study it is perhaps more informative to focus on the range of drugs used by each subject rather than the absolute prevalence of each, since by definition entry into the study required subjects to be current users. From the point of view of this study, a bias towards more intensive users is not particularly problematic, as its aim was to explore patterns of drug consumption among regular users. In this respect, the method used was successful. At low cost and within a short period of time, data were collected on a large number of drug users on topics that have current relevance. Patterns of drug use reported by this sample cannot be assumed to be representative of young peoples' drug use in any general sense. They do however illuminate what is happening in one particular part of the youth-drug subculture and do suggest that significant numbers of young people maybe using illicit substances in a manner that is potentially damaging.

The findings of this study are a cause for concern in a number of respects. The levels of typical and binge consumption of ecstasy tablets reported here are worryingly high and exceed that reported in previous studies. For example an Australian study (Topp et al., 1999) of 329 ecstasy users reported a typical dose of one tablet per session, with the median heaviest use of two. Comparison with previous UK studies (e.g. Winstock, 1991, Sherlock, 1998, Bellis et al., 2000) also suggest that both the high levels of typical use reported here and the frequency of binge use are indicative of a trend towards generally higher levels of ecstasy use among dance drug users in the UK. In this sample a quarter of respondents were regularly taking four or more tablets per session, with men on average consuming more tablets than women. Many subjects also reported occasional binge sessions when the number of tablets consumed was greatly in excess of what are routinely regarded as typical. These periods of prolonged or heavy use may be especially likely while on holiday as demonstrated by Bellis et al. (2000) who reported the percentage of ecstasy users using 5 or more days a months increased from 2.9% while in the UK to over 40% while in Ibiza. Such high levels of ecstasy use are significant. Animal studies (Molliver et al., 1989; Steele et al., 1994; Seiden and Sabol 1996; O'Shea et al., 1998), those utilising neuroimaging (McCann et al., 1998) and neuropsychological methodologies (Bolla et al., 1998, Morgan, 1998), have demonstrated that MDMA associated neurotoxicity is dose dependent. The relevance of studies to MDMA consumption in man has been brought into question because of the difference in doses consumed (Hegadoren et al., 1999). This topic is complex and other issues may also be important such as 'species scaling' (the higher metabolic rate in small rodents reduce the equivalence of dose in human beings) and the route and frequency of administration (WHO, 1997 for review). Data from this sample would suggest that some regular ecstasy consumers are, at least on occasion, consuming large doses that are not dissimilar to the conditions used in animal experiments.

Even if these patterns of use are only found among a small proportion of ecstasy users in general, the large numbers of young people taking the drug would suggest that in public health terms a significant number of individuals are being exposed to a serious risk of MDMA neurotoxic damage. It would thus be prudent for harm reduction and public health initiatives to target high dose and binge ecstasy use as a matter of urgency.

Given such high levels of use among this sample, it is perhaps not surprising that a significant minority fulfilled some of the diagnostic criteria for dependence. These were primarily behavioural, such as loss of interest in unrelated activities and continued use despite problems. Almost 60% reported increasing tolerance. Using research from studies of amphetamine users suggesting that the SDS has diagnostic utility and that a score of greater than 4 is indicative of problematic use (Topp and Mattick, 1997), over 15% of ecstasy users in this sample fell into this problematic range. However the ability of MDMA to produce a clinically significant dependence syndrome remains unclear. Data reported here (addressing only some of the diagnostic criteria from ICD-10 dependence) in combination with case study evidence (Jansen, 1998) and telephone interviews with heavy users (Winstock and Hartmann-Johnsen, 1999) suggest that an ecstasy dependence syndrome may be a real clinical entity with socio-behavioural constructs as its key criteria. This contention remains speculative and requires further research attention.

Alcohol use was also high among users of ecstasy, with over 70% drinking at hazardous levels, and with a greater proportion of men than women scoring above this threshold. This greater use of alcohol by men is matched by higher doses of ecstasy and may indicate a need for gender specific, harm reduction initiatives. In a

time when much of the focus has been on young peoples use of illicit drugs these findings serve to remind us that society's favourite social lubricant should not be forgotten by those concerned by substance use among young people.

Polysubstance substance abuse patterns appear to be the norm among this group, with previous studies reporting similar findings (Boys et al., 1997; Release, 1997; Pedersen and Skrondal 1999; Topp et al., 1999). Rates of injecting drug use among this sample however are considerably lower than those of approximately a third reported by Topp et al. (1999) and Lenton et al. (1997) in Australia, perhaps reflecting cultural and sampling differences. The issue of drug use combinations and their functionality is poorly understood but can result in increased risks to the individual than when using substances individually for example the combined use of alcohol and cocaine (Perez-Reyes et al., 1994; Bailey, 1995; Andrews, 1997). Polydrug use among the ecstasy users may serve different functions at different points of intoxication, with the concurrent use of stimulants in the early part of the evening being used to enhance energy levels, whilst alcohol and cannabis use later in the session serving to reduce agitation and insomnia. The high level of benzodiazepine use among this group is of particular concern in this later regard.

The concurrent use of multiple stimulant drugs not only increases the risk of dose dependent problems such as those consequent upon sympathetic overdrive, increasing the likelihood of dehydration, hyperthermia (Dar and McBrien 1996; Williams et al., 1998) and cardiovascular complications (Milroy et al., 1996) but may also enhance neurotoxicity. Studies suggest that MDMA mediated neurotoxicity requires both an intact serotonergic (Schmidt et al., 1990) and dopaminergic system and that the degree of neurotoxicity may be increased if the levels of dopamine are increased (Stone et al., 1988; Schmidt et al., 1991). Such a rise in extracellular dopamine levels is seen following cocaine use and thus this stimulant drug may pose a double threat of physiological and neurotoxicological complications (the later further compounded by increase body temperature consequent upon multiple stimulant use).

Drug use is often addressed in a substance specific manner, by those assessing the risk to the individual or by those designing drug prevention or harm reduction interventions. This study suggests that such a perspective is likely to be inadequate among a group of predominately poly-substance users and will need to take not only different patterns of use into consideration but also gender. Moreover the choices they made in respect of what drug they consumed varied over time. Boys et al., (1999a) have suggested that young people select drugs for their functional properties. Prevention interventions, if substance specific and effective, may simply therefore encourage the individual to shift consumption from one drug to another.

The data reported here add support to the evidence for a trend towards increased cocaine use in the UK (British Crime Survey: Boys et al., 1999b; Ramsey and Partridge 1999). It has been suggested that dissatisfaction with the quality of ecstasy available in the UK, together with a concern about safety issues, has caused people to cease using ecstasy in preference to other stimulant drugs, cocaine in particular. This was not evident in our data. Cocaine's increased popularity was not matched by the view that ecstasy use was declining. Rather, the majority of respondents believed that ecstasy has become more popular over the last year. The findings in this study also suggest that some individuals may use ecstasy for many years, with 40% having used the drug for more than 5 years. This finding supports other anecdotal accounts that the illicit ecstasy market has recovered from the quality and supply problems that were reported in the latter half of the 1990s. It remains to be seen therefore if the view that trends in ecstasy use were static or even in decline in the UK was premature.

5. Conclusion

This self report study of over 1000 dance drug users in the UK represents one of the largest investigations into the patterns of drug use among a now established youth culture. The vast majority of drug users in this study were polysubstance users, with over 70% reporting alcohol consumption in the hazardous range. The mean number of ecstasy pills consumed in a session was 2.8, with a quarter of the subjects reporting regular use of 4 or more tablets with a smaller number reporting even higher levels of use. These high-levels of polysubstance use pose a significant health risk to a large number of young people associated with the dance music scene. Although not representative of drug use among all 'clubbers', this study suggests vigilance upon the consequences of such use is required. It may be that this vulnerable group deserve greater attention in terms of research and possible health interventions to help reduce the potential harmful effects of such patterns of use.

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