Navigating drugs at university: normalisation, differentiation and drift?

David Patton

David Patton is based at the University of Derby, Derby, UK.

Abstract

Purpose – *Whilst drug use appears to be common amongst university students, the purpose of this paper is to move beyond mere drug prevalence, and use the six dimensions of normalisation to better understand the role and place drugs play in the lives of university students.*

Design/methodology/approach – *In total, 512 students completed a student lifestyle survey.*

Findings – *A differentiated normalisation is occurring amongst different student groups; the social supply of drugs is common, and some users are "drifting" into supply roles yet such acts are neutralised. Students are "drug literate" and have to navigate drugs, and their consumption, availability and marketing, as part of their everyday student life.*

Practical implications – *Student drug use is not homogenous and very little is known about the nuances and diversity of their use/non-use beyond prevalence data. Qualitative studies are needed to better understand the processes of differentiated normalisation and social supply.*

Originality/value – *This is the first study in the UK to use the six dimensions of normalisation amongst a sample of university students.*

Keywords *Drug use, University students, Young adults, Drugs, Normalisation, Drug strategy, Young adult transition*

Paper type *Research paper*

Introduction

University student drug use has consistently been shown to be widespread (NUS and Release, 2018; Bennett and Holloway, 2017; Newbury-Birch *et al.*, 2002, 2000; Webb *et al.*, 1998). However, research in the UK is patchy, sporadic, overly reliant on "class-room" surveys excluding non-attenders and is overly simplistic in its focus on drug prevalence. Bennett and Holloway (2014b, p. 448) stated: "in the absence of a more substantial research base, some of the most fundamental facts about drug consumption among university students in the UK remain unknown".

This paper explores the normalisation of drugs, highlighting a nuanced and differentiated understanding of the concept before discussing the changing patterns of university student drug use including the role of social supply and drift. It moves on to discuss how university lifestyle may be key in understanding differential drug prevalence before presenting findings from the six dimensions of normalisation that show students are "drug literate" and a differentiated form of normalisation is occurring for some groups within the student sample.

Normalisation of drugs

Received 22 January 2018
Revised 18 August 2018
Accepted 24 August 2018

The author reports no conflicts of interest. The author alone is responsible for the content and writing of the paper.

The term normalisation originated in the field of learning difficulties and disability (Wolfensberger, 1972) but was adopted in the drugs field in 1994 with the North West Longitudinal Study (Measham *et al.*, 1994). Normalisation:

> […] highlights the way illicit drugs consumption, particularly by conventional "ordinary" young people, has grown in importance within lifestyles […] Normalisation […] is more a conceptual framework to

> monitor, in this case, how attitudes and behaviour in respect of illegal drugs and drug users change through time […] The issue is whether the "sensible" use of cannabis and more equivocally amphetamines, LSD, ecstasy and cocaine has become sufficiently widespread and socially accommodated as to ensure that, first within their own social worlds and then in the wider society, we see "recreational" drug users and their drug use being acknowledged as unremarkable and within normative boundaries. (Parker, 2005, p. 206)

Therefore, normalisation uses the following six dimensions: drug availability or offers; drug trying or lifetime prevalence; current usage; intended future use; being "drugwise" regardless of individual experiences with drugs; evidence of a cultural accommodation in wider society (Measham and Shiner, 2009, p. 503) to monitor key changes over time as a "barometer of change" (Parker *et al.*, 2002, p. 943).

Normalisation was praised for having:

> presented a new frame of reference for perceiving drug users as being controlled rather than chaotic, disciplined rather than disorganised, and proactive recreational consumers of drugs and drug-referenced goods (music, film, fashion, etc.) rather than passive dependent addicts. (O'Gorman, 2016, p. 252)

But, it has been critiqued for its oversimplification of the acceptability of drugs in the lives of young people (Shiner and Newburn, 1996, 1997). For overstating the breadth and acceleration of societal change (Blackman, 2010, 2004), it's use of lifetime prevalence data and an overemphasis on agency as opposed to structure affecting drug taking (Measham and Shiner, 2009; Shiner and Newburn, 1996, 1997, 1999). Contemporary critics view the original concept as too simplistic and expansive, and some consider that it "homogenizes some aspects of youthful drug use and excludes others" (Shildrick, 2010, p. 46).

Some critics have therefore suggested a more nuanced understanding of normalisation and have suggested the concept of differentiated normalisation, whereby different types of drugs and different types of drug use may be normalised for different groups of young people (Shildrick, 2002). Other forms of normalisation have emerged such as relative normalisation (O'Gorman, 2016) and denormalisation (Pennay and Measham, 2016), to support a more diverse and nuanced view of normalisation.

Drug taking amongst university students

Lifetime drug prevalence rates for "any illicit drug" amongst university students (figures can be seen in Table I) peaked at 66 per cent in 2002 (Newbury-Birch *et al.*, 2002).

It would appear that there have been some key changes in university students' drug use since 2014:

> The most troublesome findings concern the high levels of multiple drug use, the use of some of the most dangerous drugs (including crack and powder cocaine and heroin, as well as ketamine), and the list of recorded harms experienced as a result of drug misuse. (Bennett and Holloway, 2014b, p. 448)

Key changes include an expansion in the type and range of drugs consumed to include new psychoactive substances (NPS), study drugs and prescription drugs, along with use of the Darknet to purchase drugs (NUS & Release, 2018; Bennett and Holloway, 2014a, b; Measham *et al.*, 2011). Holloway *et al.* (2013). NPS, formerly known as legal highs, contain one or more chemical substances which produce similar effects to illegal drugs, such as cannabis, cocaine, ecstasy, etc. Study drugs are prescription drugs used to treat conditions, such as Attention Deficit Hyperactivity Disorder, which are being used instead to increase concentration and alertness for increased academic performance. The Darknet (Cryptomarket) is a place on the internet that allows drug dealers and users to encrypt their communications, and provides greater anonymity to buy and sell drugs using Bitcoins (Power, 2013). Or in the words of Barratt (2012, p. 113) an "ebay for drugs".

Despite these changes, cannabis remains the clear drug of choice (Bennett and Holloway, 2014b; Pickard *et al.*, 2000). Cocaine powder and Ecstasy (both Class A drugs) now join cannabis as the top three drugs of choice (Bennett and Holloway, 2014b). They replace amphetamines, LSD, amyl nitrate and magic mushrooms.

Table I Drug prevalence rates amongst university students

Author	*Year*	*Drug prevalence*
Bestic	1966	2% lifetime prevalence for cannabis amongst Oxford University students
Binnie and Murdoch	1969	8% lifetime prevalence for cannabis
Young and Critchley	1972	Lifetime prevalence rate for any illicit drug amongst students went from 15 to 40% over course of 3-year study
McKay and Hawthorne	1973	Lifetime prevalence rate for any illicit drug amongst students went from 13% in 1971 to 16% in 1972
Kosviner *et al.*	1973	50% lifetime prevalence for cannabis; 25% were regular users
Kosviner	1975	38%, 28% and 24% lifetime prevalence for cannabis at 3 universities
Somekh	1976	34% lifetime prevalence rate for any illicit drug
Goldin and Cornish	1987	47 and 21% of non-medical and medical students, respectively, lifetime prevalence rate for cannabis; 24 and 3% of non-medical and medical students, respectively, lifetime prevalence rate for any other illicit drug
Ghodse and Howse	1994	37% lifetime prevalence rate for any other illicit drug
Ashton and Kamali	1995	49% lifetime prevalence for cannabis; 22% lifetime prevalence rate for any other illicit drug
Webb *et al.*	1996	59% lifetime prevalence rate for any illicit drug; 20% were regular cannabis users
Webb *et al.*	1997	63% lifetime prevalence rate for any illicit drug
Birch *et al.*	1998	35% (males) and 19% (female) current cannabis users
Webb *et al.*	1998	44% (male) and 40% (female) lifetime prevalence for cannabis
Pickard *et al.*	2000	33% lifetime prevalence rate for any illicit drug
Underwood and Fox	2000	55% lifetime prevalence rate for cannabis; 45% (male) and 34% (female) lifetime prevalence rate for any other illicit drug
Newbury-Birch *et al.*	2001	Lifetime prevalence rate for any illicit drug amongst students went from 50% to 65% over study period
Newbury-Birch *et al.*	2002	66% of medical students and 51% of dental students lifetime prevalence rate for any illicit drug
Boland *et al.*	2006	41% lifetime prevalence rate for any illicit drug
Horrowitz *et al.*	2008	17% lifetime prevalence rate for a club drug
Holloway and Bennett	2012	33% lifetime prevalence rate for misusing a prescription drug
Bennett and Holloway	2013	41% lifetime prevalence rate for any illicit drug
Bennett and Holloway	2014a	36% lifetime prevalence rate for misusing a prescription drug
Bennett and Holloway	2014b	21% of students and 17% of non-students lifetime prevalence rate for any illicit drug
Bennett	2015	Higher drug prevalence rate amongst students as opposed to non-students aged 20–22
Deniozou	2015	15% lifetime prevalence rate for any illicit drug
Holloway and Bennett	2017	30% lifetime prevalence rate for any illicit drug; 9% lifetime prevalence rate for a NPS
NUS and Release	2018	56% lifetime prevalence rate for any illicit drug

The social supply of drugs has become a dominant feature of young people's drug use (Coomber *et al.*, 2016; Duffy *et al.*, 2008). Social supply of drugs occurs through friends sharing their drugs, gift giving, mutual turn-taking and reciprocity as opposed to directly sourcing drugs from a dealer "proper" with the latter referring to someone directly involved in the drugs economy (Duffy *et al.*, 2008; Coomber and Turnbull, 2007). Coomber *et al.* (2016) draw upon Matza's (1964) theory of drift. Matza's theory highlighted the impact of low levels of self-control contributing to fluctuations into and out of criminal and deviant behaviour as opposed to a person being inherently deviant or criminal. Coomber (2004) usefully highlights the often symbiotic relationship between normalised drug use and normalised drug supply, especially when occurring via social supply networks:

> Applying Matza's theoretical framework of drift helps explain journeys into social supply not so much as conscious decisions, but instead as taking "short steps down a familiar path" rather than a "long leap down an unknown road" […] where respondents drifted into supply by virtue of finding practical solutions to enable their own drug use. (Coomber *et al.*, 2016, p. 261)

Coomber *et al.* (2016) highlighted the desire to maintain a supply of drugs and gain the best deals as key to users drifting in and out of drug supply roles with friends. Consequently, drug use and supply roles became increasingly blurred. The effect of drift typically resulted in neither the social supplier or the friend supplied viewing the act of drug supply as a drug deal by a dealer (Coomber, 2004). Further, social suppliers drew upon Sykes and Matza's (1957) "techniques of neutralization" as a heuristic device to rationalise and re-label their illegal actions as "normal", non-deviant and as acts of sharing and gift giving. Social supply of drugs was normalised in the micro-sites of recreational drug use (Coomber *et al.*, 2016).

The importance of university life and drug use

The shift to university life is a key transition point, and as a result, there may be something distinct about university students as a social group. The normalisation thesis:

> As well as linking patterns of drug use to young people's leisure transitions, the original thesis linked drug-using behaviours to transitions in education, family and housing. (Shildrick, 2016, p. 264)

Similarly, Bennett and Holloway (2014b, p. 1) concluded "students might be particularly at risk of drug use as a result of features relating to university lifestyle". They found that students had higher levels of drug use as compared to non-students in their analysis of 26,000 students and non-students from the 2010/2011 Crime Survey for England and Wales (CSEW). Three key factors were found to contribute to higher drug rates; first, students living away from their parents, second, regular visits to pubs and third, regular visits to clubs. A recent comparison between university students and 16–24 year olds, shows higher lifetime drug prevalence rates of any drug use for university students at 41 per cent whereas this is just 18 per cent for 16–24 year olds in the CSEW (Bennett and Holloway, 2014b; Home Office, 2014).

Studies show that because of the changing landscape of higher education, students feel increased levels of pressure. This can be due to friendship changes, academic workloads or the need to gain a good honours degree as half of young adults now enter H.E. (Jenkins, 2018), in a globally competitive job market (YouGov, 2016). Additionally, students now graduate with an average of £40,000 worth of student debt (Thorley, 2017), and many need to work whilst at university (YouGov, 2016). Students have also shown a fivefold increase in mental illness in the last ten years, and have lower wellbeing levels relative to other sections of the general population (Neves and Hillman, 2018; Thorley, 2017).

Methodology

This study aimed to move beyond mere drug prevalence surveys by using the six dimensions of normalisation to provide a fuller picture of the role and place drugs play in the lives of university students, and therefore by extension, to explore if, and how, normalisation of drug use is occurring. In total, 512 university students completed a student lifestyle survey during the two-week period at the end of May 2014 from a total of 1,242 social science students. This represented 41 per cent of the total target population from a university from a city in West Yorkshire. Data collection occurred within the Social Sciences Department building, and respondents had to be current students (studying Sociology, Psychology, Criminology, Politics, International Relations). In total, 62 per cent of the sample was female, 38 per cent male and 91 per cent were undergraduates with 9 per cent postgraduates. These broadly mirrored the School of Social Sciences, and the overall student population of the university. In addition, 95 per cent of the sample had a part-time paid or voluntary job and typically worked 15 hours per week. Only 8 per cent of the sample lived with their parents, 25 per cent lived in halls of residence, 50 per cent lived in shared rented housing and 17 per cent lived in their own house or flat. In total, 33 per cent described themselves as working class, 63 per cent as middle class and 4 per cent as upper class.

Questions used in the second segment of the student lifestyle survey were taken directly from Parker *et al.*'s (1998) North West Longitudinal research instrument to allow for ease of comparison across results and consistency in the measurement of the dimensions of normalisation. Questions in the first and third segments explored engagement with university, and hobbies, leisure and interests beyond university or drugs.

A form of non-probability sampling was used to counter the predominant approach in the literature of "classroom" based methodologies (Newbury-Birch *et al.*, 2002, 2001, 2000; Pickard *et al.*, 2000; Webb *et al.*, 1998, 1997, 1996; Somekh, 1976; McKay and Hawthorne, 1973) and allow for participation of non-attenders. Attendance in education can be negatively affected by drug use for some (Engberg and Morral, 2006; Roebuck *et al.*, 2004). In total, 11 per cent of the current sample had missed a lecture due to drug intoxication in the last semester. Some question a truly representative random sample of drug users being attained given the inherent nature of the phenomenon and population type being studied regardless of sampling method (Salganik and Heckathorn, 2004; MacCoun and Caulkins, 1996). Highlighting issues such as anonymity,

confidentiality, using peer researchers to distribute the "Student Lifestyle Survey" physically or virtually hopefully helped to minimise potential selection bias (Patton, 2004; Harrison, 1997; O'Farrell, *et al.*, 2003).

A paper and an online survey were used. Two trained level six undergraduate students administered the paper survey. Social media was used to share a link to an online survey either via a Student Union Facebook post or Twitter tweet. There were no discernible differences in sample composition or the findings from the two modes of data collection. The online survey was created and administered using Qualtrics. Students were given a free university tea/coffee voucher and seven buy one get one free Pizza vouchers for their participation. Qualtrics was set up so that only one submission per IP address was possible to ensure that an individual could only complete one survey.

It should be noted that the research was conducted prior to the "New Psychoactive Substances Act 2016" coming into force, making it illegal to supply any "legal highs" for human consumption. It is difficult to gauge the impact of the absence of this legislation on prevalence rates for these drugs in the current sample but the cross-sectional design with its associated limitations sought to capture a snapshot of use at that point in time.

Results

The results from the current sample will now be presented in relation to the six dimensions of the normalisation thesis.

Drug availability

Just under half (48 per cent) of respondents stated that it was easy to get the drugs they wanted to use, and as one respondent stated, "All drugs are easy to get, all year round and for a cheap price" (F 322).

The top three sources of drug supply were first, from a friend (54 per cent), followed by a dealer (25 per cent), followed by online (7 per cent). Typical responses included, "Drugs are very readily available; my friends sell them cheap" (M 87). In total, 31 per cent of respondents had sold or given drugs to another student. The motivation for social supply occurred due to the friendship, as a consequence of the purchase, or as a practical cost sharing solution to enable their own use as opposed to gaining a profit by supply (Coomber *et al.*, 2016). Only small-scale social supply was noted here as opposed to large commercial transactions.

The notion of "drift" (Matza, 1964) was central to student responses regarding drug supply. The process of drift was described by one student, who illustrates the blurring of the user and supplier dynamic, "I'm friends with people who are regular drug users and they sometimes casually sort friends" (F109). The practical solution to enable drug use also featured, "A £20 bag of cannabis sees four of us through a good fun evening for the price of a pint and with no hangover. We take it in turns to buy" (M433).

Sharing and gift giving acted as an inclusionary mechanism facilitating drug use, "I've never got drugs for myself, friends have shared theirs with me" (F162), or some students only using "when they were free" (M225) or "when passed around" (F034).

In total, 37 per cent of the sample were drug abstainers, of which 83 per cent stated that it would also be very/easy for them to get drugs. Abstainers typically did not report any access issues. One respondent stated: "I don't take drugs, but I am aware of how easy it is to get hold of [drugs]" (F099).

Access to drug dealers (proper) was easy and quick with an average delivery time of between 30–60 minutes. One respondent quoted, "It takes longer to get your Saturday night pizza delivered than it does your drugs" (M342). They spoke about drug dealers advertising in student areas and receiving texts of "their deals and prices" (M002).

Respondents had socially reconstructed the criminal offence of drug supply to differentiate between supply by friends and "dealers". This points to evidence of the techniques of neutralization operating (Sykes and Matza, 1957) in line with other studies (Coomber *et al.*, 2016).

The existence of the Darknet has the potential to alter the way in which drugs are sold (Aldridge *et al.*, 2017; Martin, 2014). There is some debate about the potential harms and benefits of selling and consuming drugs from the Darknet. These range from increasing the spectrum and intensity of drug use, increasing some transactional risks (e.g. rip-offs), but may provide better information on drug contents, and, reduce the prospects of, for example, violence or arrest (Aldridge *et al.*, 2017, p. 6). This respondent encapsulates the appeal of the Darknet:

> […] if I want to buy legal highs which are readily available on the Internet and can have next day delivery by royal mail […] Online drugs are incredibly cheap. Some websites have reward systems so if you buy a certain amount over a certain period you earn points, which lowers the price of future orders. This is my main reason for not buying cocaine – it is expensive and I can find drugs online that are cheaper, legal and have the same effect. (F074)

The proportion of drug users reporting purchase of drugs via the Darknet is small (Aldridge *et al.*, 2017) similar to the finding here. Further, respondents in this study, as in others, liked the convenience of ordering from home, a cheap purchase price, quick home delivery and consumer reviews (Barratt, 2012).

Drug trying or lifetime prevalence

The lifetime drug prevalence rates for university students in this sample are presented in Table II. In total, 63 per cent of students reported consuming one or more illegal drug at some point in their lives. Cannabis was most prevalent at 53 per cent, Ecstasy 32 per cent, Cocaine powder 26 per cent and Amyl nitrate at 23 per cent. Lifetime prevalence of NPS was 16 per cent and 12 per cent for a study drug. Neither gender nor social class showed any significant correlation to having tried drugs.

The top three reasons for drug consumption were for fun/pleasure (58 per cent); for relaxation (48 per cent), to enhance an activity (36 per cent). These reasons fit with typical normalisation motivations (Parker *et al.*, 1998; Aldridge *et al.*, 2011). The next two reasons were "to reduce stress" at 26 per cent and "to wind down" at 21 per cent.

Questions about polydrug use over the students lifetime revealed that the sample were not a homogeneous group in terms of their drugs of choice, routines, patterns or places of use. Polydrug consumption is where a person consumes two or more drugs in a "single event", e.g. during a night out, etc. The specific combination of drugs consumed during this "single event" is referred to as a drug repertoire. In total, 40 per cent of university students had engaged in polydrug consumption. There were 225 polydrug events recorded by respondents which produced 71 unique drug repertoires. In total, 40 per cent of respondents said that their polydrug repertoire consisted of two substances (alcohol and cannabis or alcohol and tobacco featured heavily in these polydrug repertoires). In total, 28 per cent consisted of three substances (alcohol, tobacco and either cannabis or ecstasy) featured heavily in these polydrug repertoires. In total, 17 per cent consisted of four substances, alcohol, tobacco, ecstasy was often often combined with cocaine, ketamine or cannabis. In total, 9 per cent consisted of five substances, and from this category onwards the repertoires diversify more and it is difficult to summarise a typical repertoire. In total, 3 per cent had used six substances, 2 per cent had used seven substances and 1 per cent had used eight substances.

Students were asked what desired effects they sought to achieve for each stated polydrug repertoire during each drug event. Analysis revealed four distinct groups operating that point to a form of differentiated normalisation occurring, highlighting the complexity of youthful drug consumption (Shildrick, 2010). Here it can be observed that some types of drugs and some types of drug use may be normalised for some groups of young people. Each group expresses their agency via their distinctive motivation or intention for their drug consumption; yet their resultant places and spaces of consumption, routines and rhythms of use and lifestyle are also mediated by diverse structural, temporal and socio-spatial settings (O'Gorman, 2016; Measham and Shiner, 2009).

"Get wasted" group: This group sought to be heavily intoxicated by using more drugs during a single event usually at a club during the weekend. They wanted to: "get messy"; and "have a mad

Table II Type of drug misused by sex and year of study

Drug	All respondents % use ever	All respondents % use in last Year	Sex: Males % use in the last year	Sex: Females % use in the last year	Sig.	Year of study: First year % use in the last year	Second year % use in the last year	Third year % use in the last year	Fourth Year % use in the last year	Sig.
Alcohol	61	56	44	52	ns	28	25	35	9	ns
Amphetamine	12	6	6.1	8.2	ns	4.3	3.9	4.8	0.9	ns
Amyl nitrate	23	9	11.1	9.0	ns	4.5	6.2	7.4	2.1	ns
Cannabis	53	40	29.0	30.1	ns	16.8	15.7	19.6	7.0	ns
Cocaine (powder)	26	17	21.2	19.5	ns	7.5	10.8	17.5	4.6	*
Ecstasy	32	24	26.4	26.0	ns	12.8	16.0	17.9	5.4	ns
Ketamine	20	12	14.0	16.3	ns	5.4	9.0	12.2	3.6	ns
LSD	6	3	5.5	2.7	ns	0.5	3.7	4.1	0.0	*
Heroin	0.4	0	0	0	/	0	0	0	0	ns
Methadone	2	1	0.9	1.4	ns	0.0	0.9	1.4	0.0	ns
Cocaine (crack)	1	0.4	0.9	0.0	ns	0.0	0.0	0.5	0.5	ns
Methamphetamine	2	1	2.1	1.0	ns	0.5	1.5	0.5	0.5	ns
Modafinil	5	5	7.5	5.2	ns	1.4	1.9	7.6	1.4	*
Adderall	2	1	0.5	1.5	ns	0.0	0.5	1.5	0.0	ns
Ritalin	3	1	1.5	2.5	ns	0.5	0.5	2.0	0.5	ns
Dexedrine	0.5	0.4	0.0	1.0	ns	0.5	0.0	0.0	0.5	ns
Ephedrine	2	0.4	0.0	1.0	ns	0.0	0.5	0.5	0.0	ns
Other study drugs	5	5	6.6	7.6	ns	4.1	3.6	5.1	1.5	ns
BZP	0.5	0.5	0.5	0.0	ns	0.0	0.5	0.0	0.0	ns
Khat	2	1	1.0	1.6	ns	1.0	0.5	1.0	0.0	ns
Methedrone	12	4	6.7	3.8	ns	2.4	2.9	3.4	1.9	ns
Spice	1	0	0	0	/	0	0	0	0	/
GBL/GHB	2	1	0.5	3.1	ns	1.0	0.0	2.6	0.0	ns
Other new psychoactive substances	2	2	3.2	2.7	ns	1.1	1.6	1.6	1.1	ns
One or more of the above (all drug types excluding alcohol)	56	45	43	50	ns	26	24	34	10	*

Notes: ns, not significant. $^{*}p < 0.05$

night"; to "get fucked up" (M109); or "to get wasted" (F157); and "not be in my own head" (M409). The patterns of use potentially suggest serious or heavy recreational drug use for some, given both the drug types consumed and typically, a higher than average number of drugs in their poly drug repertoires as compared to those from the other groups. Polydrug repertoires were most diverse for this group as compared to the other groups. A popular polydrug repertoire was LSD, ketamine, 25NBOMB, MDMA, alcohol, tobacco and cannabis. For some, there were signs emerging of the beginnings of problematic use. This was demonstrated by their selection of more serious statements relating to their concerns about their drug use, and demonstrated by more frequent responses to serious concerns as compared to other groups, for example, "I worry I am dependent on drugs", "My life without drugs is boring", "I spend too much money on drugs". This group typically worked between 15 and 24 h per week in paid employment.

"Clubbing enhancer" group: Ecstasy, alcohol, cocaine, cannabis and NPS were used by clubbers predominantly to provide energy to dance and maximise pleasure at the weekend in the mainstream night-time economy. Typical motivations for use included: "increased enjoyment" (F078) and to "stay out longer clubbing" (M501); and to "dance all night" (M255). Users in this group spoke of managing stimulant drug use and come downs, "I get a buzz from the ecstasy and then I use the cannabis to cheer me up in the come down" (F311). The majority of this group lived in halls of residence and worked 15 hours or less a week in a job.

"Mellow mood" group: A clear profile of alcohol and cannabis use in an informal, social and private context at home with a small group of friends emerged. Respondents stated: "a few of us just get high and happy, and mellow out" (M368) and that "smoking together with friends is a good

feeling" (F209). Use predominantly occurred during weekdays and their polydrug repertoire typically consisted of alcohol, tobacco and cannabis.

"Study enhancing" group: Study drugs were used by students to temporarily enhance alertness for academic attainment as opposed to "getting high" recreationally. Respondents felt they: "needed to pull an all nighter to catch up" (M499); or simply needed "to get assignments done" (F029). For some it was because that they were aware that "other students are doing them [study drugs]" (M261). Common polydrug repertoires consisted of Modafinil and tobacco, or Ritalin and tobacco. Consumption occurred both during the week and weekend.

Student characteristics: Females were more likely than males to have used a drug, however, no statistically significant differences were found by gender or for social class. Third year students had the highest levels of drug consumption (34 per cent). Year of study and drug use in the last 12 months was shown to be statistically significant, $p \leqslant 0.05$. The average age of first use for the three most prevalent drugs amongst this sample was 16 for cannabis, and 18 for both Ecstasy and Cocaine powder. The average age of first use for a NPS was 19, and 20 for a study drug.

Current usage

25 per cent of students were current users and therefore had used at least one drug on one or more occasions in the last four weeks. In total, 38 per cent were former triers, and 37 per cent were abstainers. In total, 100 per cent of current users had friends who used drugs and 73 per cent had six or more close friends who used drugs, 83 per cent knew where to source drugs very/easily, and 94 per cent considered themselves drugwise, 100 per cent of current users considered using drugs in the future and 100 per cent had no problem with others taking drugs. The majority, 56 per cent had sold or given drugs to a friend.

The majority of abstainers, 59 per cent had friends who used drugs . In total, 14 per cent had six or more close friends who used drugs, and 83 per cent knew where to source drugs very/easily. The majority, 69 per cent considered themselves drugwise, and a minority, 11 per cent considered using drugs in the future. Yet the majority, 54 per cent felt that others should not use drugs. In total, 4 per cent had sold or given drugs to a friend. This illustrates the micro-politics of drugs that results in contrasting and conflicting positions, behaviours and views (Hathaway *et al.*, 2016; O'Gorman, 2016).

The majority of former triers had friends who used drugs (85 per cent). In total, 32 per cent had six or more close friends who used drugs, and 96 per cent knew where to source drugs very/easily. The majority, 56 per cent considered themselves drugwise, and 55 per cent considered using drugs in the future. In total, 86 per cent had no problem with others taking drugs. In total, 40 per cent had sold or given drugs to a friend.

Intended future use

Drug user status is not static and can change. In total, 100 per cent of current drug users said that they intend to use drugs again in the future. One current user stated "Why wouldn't I?". In total, 55 per cent of former triers and 11 per cent of abstainers also intended to use drugs. As one abstainer stated, "I don't think anyone can absolutely say never".

Cultural accommodation in wider society

Depictions of drug use in the media were widespread with 83 per cent of students stating that drug use had featured in the music/TV programmes/Movies/Magazines consumed. In total, 78 per cent said that they felt very/comfortable consuming media that featured drug use. As one respondent noted, "I had to think twice about the question, I mean drug use being on TV or in magazines. It's a given isn't it?"*. (M261).*

Further, evidence of the shift from drug use as a deviant activity into mainstream cultural arrangements can be seen as 59 per cent of abstainers said they had one or more close friends who used drugs. In total, 36 per cent of students had six or more close friends who used drugs.

Being "drugwise"

In total, 76 per cent of respondents were very/knowledgeable about drugs and their effects. In total, 69 per cent of abstainers also felt this way. Polydrug users responses for the desired effects sought demonstrated clear drug knowledge. Shildrick's (2010) notion that young people are more "drugs aware" than "drugwise" would seem to fit here as drugs knowledge was limited, confused or absent.

The top three sources from which students obtained information about drugs and their effects were, first, the internet (68 per cent) for an easy, quick, reliable source of information offering anonymity. Second, their friends (61 per cent) having personal experience of using drugs and being trustworthy. Third, their housemates (21 per cent) for the same reasons cited for friends.

Despite high levels of self-perceived drug knowledge, students expressed concerns about "having an unpleasant come down" (33 per cent); of "feeling paranoid or scared after taking drugs" (26 per cent); of "spending too much money on drugs" (22 per cent); of taking "drugs too often" (19 per cent); and of taking "too much/too many drugs" (17 per cent).

Discussion

Access to and use of a broad spectrum of drugs to aid pleasure and fun during university life required very little effort. Drug careers developed and extended at university, for example, the onset of NPS and study drug use. Drugs are inclusive to a broad spectrum of university students regardless of gender, socio-economic status, ethnicity or age. The availability and marketing of drugs did not occur at limiting times, places or spaces, rather they had access through a range of sources.

The issue of normalisation is however a complex and nuanced one (O'Gorman, 2016). The micro-politics between abstainers, former triers and current users (which include the four user groups), at times creates interesting dynamics and requires students to navigate drugs in their day-to-day realities and relationships. It appears that different drugs and patterns of drug use may be normalised for different groups within the sample to differing extents (Shildrick, 2002) and are not uniform or homogenous. For example, the motivations, patterns and micro-sites of use for the "Club Enhancer" and the "Mellow Moods" group differ. Their micro-sites of choice were clubs vs home settings (public vs private), consumption typically occurred on different days of the week (weekend vs weekday). Students' drug using behaviour is mediated by structural opportunities and constraints as well as their own desires and preferences.

The classic elements of controlled, recreational pleasure-based consumption at set periods of the week (Aldridge *et al.*, 2011) were evident for the "Clubbing Enhancer" and the "Mellow Moods" group. The "Study Enhancing" group did not appear to have a controlled, recreational pleasure-based consumption profile. It seems that when, and what, they use is determined more by their workload, deadlines and stress levels, and therefore not linked to hedonistic motivations. Similarly, the "Get Wasted" group due to their desire to obtain a state of obliteration and their drug related health concerns, do not seem to match this profile. Thus a differentiated normalisation appears to be occurring for some groups of students and not for others.

Both clubbing groups: "Get Wasted" and "Clubbing Enhancer", highlight the segmented nature of the night-time economy (Measham and Moore, 2009) with their own distinctly different experiences during their weekend clubbing experiences. Data did not indicate that either group represented a subcultural or underground clubbing group, but rather, their different motivations and experiences in part reflect the diverse and nuanced night-time leisure consumer clubbing scenes. Similar, to the findings here, Measham and Moore (2009, p. 455) noted that there were "significant differences in the polydrug profiles of customers in diverse urban playspaces". Chatterton and Holland (2003, p. 94) concluded that 'there is no "single" mainstream, but a variety of mainstream scenes.

The "Mellow Mood" group appears to align more to the normalisation perspective of young adults enjoying leisure with their social network of friends (Aldridge *et al.*, 2011) as opposed to the perspective that cannabis use represents opposition or cultural difference, even when accounting for subcultures as a collection of rituals, stories and symbols (Sandberg, 2013).

The "Study Enhancing" group is both culturally different due to their choice to use substances to give them a potential performance or attainment advantage, and their stance in opposition to traditional study methods for the attainment of their degree classification (Kolar, 2015). It is therefore possible that this group has subcultural practices (Muggleton, 2000) that need researching further. They do not appear to be in alignment with the typical profile of controlled, recreational, leisure based and hedonistic drug consumption (Measham and Shiner, 2009).

The majority of students relied on social supply via their direct social networks to source drugs through "friends" and "friends of friends" (Parker, 2000, p. 6). Abstainers reported that they would also use social networks if they later decided to use drugs. As with Coomber *et al.* (2016), a generalised culture of social supply of drugs in the form of sharing, gift giving and small-scale designated buying practices was found to be normalised here. These practices were inclusionary, enabling some to consume who otherwise would have been excluded from consumption based on price or low levels of disposable income.

The intricate relationship between recreational drug use and social supply (Parker, 2000) highlighted how "drift" occurred for users. Here the drug use and drug availability dimensions of normalisation interact (Coomber *et al.*, 2016) whereby the perceived deviance present in either use or supply is simultaneously neutralised by the other to produce a normalised effect. The linguistic distinction for the same act of drugs supply from a "friend" vs a "dealer" was universal and unquestioned amongst students, and highlights the use of techniques of neutralization (Sykes and Matza, 1957). This differentiated view of supply has also been acknowledged outside of the student population in the Sentencing Council (2012) Guidelines in England and Wales by using an understanding of "profit" and gain and "harm" to differentiate social supply from dealing "proper".

The social network provides a protective barrier so that the majority of students do not come into direct contact with dealers from the drug economy, and ensures drugs can be exchanged in micro-sites that are less visible to the police (Aldridge *et al*, 2011). However, groups using and supplying in public micro-sites ("Clubbing Enhancer" and "Get Wasted") may be more at risk of coming to the attention of club security and the police. Improved partnerships are needed between students, drug and alcohol services, universities, legal policy makers and the police to work together for the benefit of students. Clear tensions operate between such partners, for example, the zero tolerance approach to drugs by universities, the more pragmatic approach which seems to have been adapted by drug and alcohol services and public health which focus more on harm minimisation, between UK drugs laws and the routine breaching of UK drug laws in respect of recreational drug use and supply by university students.

The current research has limitations as it is not known whether the findings are representative of the wider population at the target university or other universities. Nevertheless, it provides a valuable insight at least amongst this sample. The broad trends and levels of drug use found here mirror those of other recent university student studies (Bennett and Holloway, 2014b; Bennett, 2015) and drug use among young adults in the normalisation literature (Parker *et al.*, 1998, 2002; Parker, 2005).

Longitudinal research, larger or nationwide surveys using the six dimensions of normalisation are needed to provide richer data, trend data and geographic comparisons, to better understand the complexity of the variables operating. The findings here represent a first step. Given a differentiated normalisation being found, more qualitative research is needed to further explore the social meanings and normative context in which drug use occurs (Hathaway *et al.*, 2016; Shiner and Newburn, 1997).

Conclusion

The six dimensions of normalisation have allowed for a greater understanding of how the perceptions, experiences, desires, motivations, intentions and lifestyles of the groups discussed are differentiated (Shildrick, 2002). It cannot be said that drugs are normalised amongst university students as a whole but rather drugs, drug use and drug supply, take a form of differentiated

normalisation within the lives of differing groups within the university student population. The use and supply of some drugs, in some locations, at certain times in their weekly routines were more or less normalised for certain groups. Regardless of group, students are required to navigate drugs and drug taking in their relationships, and in their study, social and leisure/pleasure spaces, where drugs are present, marketed and consumption is taking place. Collectively, the findings from the six dimensions point to the fact that we have a cohort of university students who are "drug literate" in the same sense we talk about someone being computer literate or emotionally literate.

References

Aldridge, J., Measham, F. and Williams, L. (2011), *Illegal Leisure Revisited: Changing Patterns of Alcohol and Drug Use in Adolescents and Young Adults*, Routledge, London.

Aldridge, J., Stevens, A. and Barratt, M.J. (2017), "Will growth in cryptomarket drug buying increase the harms of illicit drugs?", *Addiction*, Vol. 113 No. 5, pp. 789-96, doi: 10.1111/add.13899.

Ashton, C.H. and Kamali, F. (1995), "Personality, lifestyles, alcohol and drug consumption is a sample of British medical students", *Medical Education*, Vol. 29 No. 3, pp. 187-92.

Barratt, M.J. (2012), "Silk road: eBay for drugs", *Addiction*, Vol. 107 No. 3, p. 683.

Bennett, T. and Holloway, K.R. (2013), "Drug misuse among university students in the UK: implications for prevention", *Substance Use & Misuse*, Vol. 1 pp. 1-8, doi: 10.3109/10826084.2013.846378.

Bennett, T.H. (2015), "Differences in the age-drug use curve among students and non-students in the UK", *Drug and Alcohol Review*, Vol. 33 No. 3, pp. 280-6.

Bennett, T.H. and Holloway, K.R. (2014a), "Drug use among college & university students: findings from a national survey", *Journal of Substance Use*, Vol. 20 No. 1, pp. 50-5.

Bennett, T.H. and Holloway, K.R. (2014b), "Drug misuse among university students in the UK: implications for prevention", *Substance Use & Society*, Vol. 419 No. 4, pp. 448-55.

Bennett, T.H. and Holloway, K.R. (2017), "Motives for illicit prescription drug use among university students: a systematic review and meta-analysis", *International Journal on Drug Policy*, Vol. 44 No. 2, pp. 12-22.

Bestic, A. (1966), *Turn Me on Man*, Library Thirty Three, New York, NY.

Binnie, H.L. and Murdoch, G. (1969), "Cannabis use amongst students", *Drug & Alcohol Dependence*, Vol. 2 No. 1, pp. 119-23.

Birch, D., Ashton, H. and Kamali, F. (1998), "Alcohol, drinking, illicit drug use, and stress in junior house officers in north-east England", *Lancet*, Vol. 352 No. 11, pp. 785-6.

Blackman, S. (2004), *Chilling Out: The Cultural Politics of Substance Consumption, Youth and Drug Policy*, Open University Press, Maidenhead.

Blackman, S. (2010), "Youth Subcultures, normalisation and drug prohibition: the politics of contemporary crisis and change?", *British Politics*, Vol. 5 No. 3, pp. 337-66.

Boland, M., Fitzpatrick, P., Scallan, E., Daly, L., Herity, B., Horgan, J. and Bourke, G. (2006), "Trends in medical student use of tobacco, alcohol and drugs in an Irish university, 1973–2002", *Drug and Alcohol Dependence*, Vol. 85 No. 2, pp. 123-8.

Chatterton, P. and Hollands, R. (2003), *Urban Nightscapes: Youth Cultures, Pleasure Spaces and Corporate Power*, Routlege, London.

Coomber, R. (2004), "Drug use and drug market intersections", *Addiction Research & Theory*, Vol. 12 No. 6, pp. 501-05.

Coomber, R. and Turnbull, P. (2007), "Arenas of drug transaction: adolescent cannabis transactions in England", *Journal of Drug Issues*, Vol. 37 No. 4, pp. 845-66.

Coomber, R., Moyle, L. and South, N. (2016), "The normalisation of drug supply: the social supply of drugs as the 'other side' of the history of normalisation", *Drugs: Education, Prevention & Policy*, Vol. 23 No. 3, pp. 255-63.

Deniozou, T. (2015), *Student Health & Lifestyle Survey*, University of Edinburgh, Edinburgh.

Duffy, M., Schafer, N., Coomber, R., O'Connell, L. and Turnbull, P. (2008), *Cannabis Supply and Young People: 'It's a Social Thing'*, Joseph Rowntree Foundation, York.

Engberg, J. and Morral, A.R. (2006), "Reducing substance use improves adolescents' school attendance", *Addiction*, Vol. 101 No. 12, pp. 1741-51.

Ghodse, A.H. and Howse, K. (1994), "Substance use of medical students: a nationwide survey", *Health Trends*, Vol. 26 No. 3, pp. 85-8.

Golding, J.F. and Cornish, A.M. (1987), "Personality and lifestyle in medical students: psychpharmacological aspects", *Psychology & Health*, Vol. 1 No. 4, pp. 287-301.

Harrison, L. (1997), "The validity of self-reported drug use in survey research: an overview and critique of research methods", in Harrison, L. and Hughes, A. (Eds), *The Validity of Self-Reported Drug Use: Improving the Accuracy of Survey Estimates*, NIDA research monograph, 167, NIDA, Rockville, MD, pp. 17-36.

Hathaway, A., Mostaghim, A., Kolar, K., Erickson, P. and Osborne, G. (2016), "A nuanced view of normalisation: attitudes of cannabis non-users in a study of undergraduate students at three Canadian universities", *Drugs: Education, Prevention & Policy*, Vol. 23 No. 3, pp. 238-46.

Holloway, K. and Bennett, T. (2012), "Prescription drug misuse among university staff & students: a survey of motives, nature & extent", *Drugs: Education, Prevention and Policy*, Vol. 19 No. 2, pp. 137-44.

Holloway, K. and Bennett, T. (2017), "Characteristics and correlates of drug use and misuse among university students in Wales: a survey of seven universities", *Addiction Research & Theory*, Vol. 26 No. 1, pp. 11-19.

Holloway, K., Bennett, T.H., Parry, O. and Gordon, C. (2013), "Misuse of prescription drugs on university campuses: options for prevention", *International Review of Law, Computers & Technology*, Vol. 27 No. 3, pp. 324-34.

Home Office (2014), *Drug Misuse: Findings from the 2013 to 2014 CSEW*, Home Office, London.

Horrowitz, A., Galanter, M., Dermatis, H. and Franklin, J. (2008), "Use of and attitudes toward club drugs by medical students", *Journal of Addictive Diseases*, Vol. 27 No. 4, pp. 35-42.

Jenkins, P. (2018), *Minding our Future: Starting a Conversation about the Support of Student Mental Health*, Universities UK, London.

Kolar, K. (2015), "Study drugs don't make you smarter: acceptability evaluations of nonmedical prescription stimulant use among undergraduate students", *Contemporary Drug Problems*, Vol. 42 No. 4, pp. 314-30.

Kosviner, A. (1975), "Cannabis use", *Drug & Alcohol Dependence*, Vol. 1 No. 6, pp. 449-53.

Kosviner, A., Hawks, D.V. and Webb, M.G.T. (1973), "Cannabis use amongst British University students: I. Prevalence rates and differences between students who have tried cannabis and those who have never tried it", *British Journal Addiction*, Vol. 69 No. 3, pp. 35-60.

McKay, A.J. and Hawthorne, V.M. (1973), "Drug taking among medical students at Glasgow university", *British Medical Journal*, Vol. 3 No. 1, pp. 540-3.

MacCoun, R. and Caulkins, J. (1996), "Examining the behavioral assumptions of the national drug control strategy", in Bickel, W.B. and DeGrandpre, R.J. (Eds), *Drug Policy and Human Nature*, Springer, New York, NY, pp. 189-222.

Martin, J. (2014), *Drugs on the Dark Net: How Cryptomarkets are Transforming the Global Trade in Illicit Drugs*, Palgrave Macmillan UK, London.

Matza, D. (1964), *Delinquency & Drift*, Transaction Publications, NJ.

Measham, F. and Moore, K. (2009), "Repertoires of distinction: exploring patterns of weekend polydrug use within local leisure scenes across the english night time economy", *Criminology and Criminal Justice*, Vol. 9 No. 4, pp. 437-64.

Measham, F. and Shiner, M. (2009), "The legacy of normalisation: the role of classical and contemporary criminological theory in understanding young people's drug use", *International Journal of Drug Policy*, Vol. 20 No. 6, pp. 502-08.

Measham, F., Newcombe, R. and Parker, H. (1994), "The normalisation of recreational drug use amongst young people in North-West England", *British Journal of Sociology*, Vol. 45 No. 2, pp. 287-312.

Measham, F., Wood, D.M., Dargan, P.I. and Moore, K. (2011), "The rise in legal highs: prevalence and patterns in the use of illegal drugs and first- and second-generation 'legal highs' in South London gay dance clubs", *Journal of Substance Use*, Vol. 16 No. 4, pp. 263-72.

Muggleton, D. (2000), *Inside Subculture: The Postmodern Meaning of Style*, Berg, Oxford.

Neves, J. and Hillman, N. (2018), *2018 Student Academic Experience Survey*, HEPI, Oxford.

Newbury-Birch, D., Lowry, R.J. and Kamali, F. (2002), "The changing patterns of drinking, drug use, stress, anxiety & depression in dental students in a UK dental school: a longitudinal study", *British Dental Journal*, Vol. 192 No. 5, pp. 646-9.

Newbury-Birch, D., Walshaw, D. and Kamali, F. (2001), "Drink and drugs: from medical students to doctors", *Drug and Alcohol Dependence*, Vol. 64 No. 3, pp. 265-70.

Newbury-Birch, D., White, M. and Kamali, F. (2000), "Factors influencing alcohol and illicit drug use amongst medical students", *Drug Alcohol Dependence*, Vol. 59 No. 2, pp. 125-30.

NUS & Release (2018), *Taking the Hit: Student Drug Use and How Institutions Respond*, NUS, London.

O'Farrell, T.J., Fals-Stewart, W. and Murphy, M. (2003), "Concurrent validity of a brief self-report drug use frequency measure", *Addictive Behaviors*, Vol. 28 No. 2, pp. 327-37.

O'Gorman, A. (2016), "Chillin, buzzin, getting mangled, and coming down: doing differentiated normalisation in risk environments", *Drugs: Education, Prevention & Policy*, Vol. 23 No. 3, pp. 247-54.

Parker, H. (2000), "How young Britons obtain their drugs: drugs transactions at the point of consumption", *Crime Prevention Studies*, Vol. 11 No. 2, pp. 59-82.

Parker, H. (2005), "Normalization as barometer: recreational drug use and the consumption of leisure by young Britons", *Addiction Research & Theory*, Vol. 13 No. 3, pp. 205-15.

Parker, H., Aldridge, J. and Measham, F. (1998), *Illegal Leisure: The Normalisation of Adolescent Recreational Drug Use*, Routledge, London and New York, NY.

Parker, H., Williams, L. and Aldridge, J. (2002), "The normalisation of 'sensible' recreational drug use: further evidence from the North West England longitudinal study", *Sociology*, Vol. 36 No. 4, pp. 941-64.

Patton, D. (2004), "Normalizing the deviant?: arrestees and the normalisation of drug use", *British Journal of Community Justice*, Vol. 2 No. 3, pp. 61-72.

Pennay, A.E. and Measham, F.C. (2016), "The normalisation thesis–20 years later", *Drugs: Education, Prevention & Policy*, Vol. 23 No. 3, pp. 187-9.

Pickard, M., Bates, L., Dorian, M., Greig, H. and Dustyn, S. (2000), "Alcohol and drug use in second year medical students at the University of Leeds", *Medical Education*, Vol. 34 No. 3, pp. 148-50.

Power, M. (2013), *Drugs 2.0: The Web Revolution That's Changing How the World Gets High*, Kindle ed., Granta Publications, London.

Roebuck, M.C., French, M.T. and Dennis, M.L. (2004), "Adolescent marijuana use and school attendance", *Economics of Education Review*, Vol. 23 No. 2, pp. 133-41.

Salganik, M.J. and Heckathorn, D.D. (2004), "Sampling and estimation in hidden populations using respondent-driven sampling", *Sociological Methodology*, Vol. 34 No. 1, pp. 193-239.

Sandberg, S. (2013), "Cannabis culture: a stable subculture in a changing world", *Criminology and Criminal Justice*, Vol. 13 No. 1, pp. 63-79.

Sentencing Council (2012), *Drug Offences Definitive Guidelines*, Sentencing Council, London.

Shildrick, T. (2002), "Young people, illicit drug use and the question of normalisation", *Journal of Youth Studies*, Vol. 5 No. 1, pp. 35-48.

Shildrick, T. (2010), "Young people, illicit drug use and the question of normalisation", *Journal of Youth Studies*, Vol. 5 No. 1, pp. 35-48.

Shildrick, T. (2016), "Normalisation, youth transitions and austerity", *Drugs: Education, Prevention and Policy*, Vol. 23 No. 3, pp. 264-6.

Shiner, M. and Newburn, T. (1996), *Young People, Drugs and Peer Education*, Home Office, London.

Shiner, M. and Newburn, T. (1997), "Definitely, maybe not: the normalisation of recre- ational drug use amongst young people", *Sociology*, Vol. 31 No. 3, pp. 511-29.

Shiner, M. and Newburn, T. (1999), "Taking tea with noel: the place and meaning of drug use in everyday life", in South, N. (Ed.), *Drugs: Cultures, Controls and Everyday Life*, Sage, London, pp. 140-59.

Somekh, D. (1976), "Prevalence of self-reported drug use among london undergraduates", *British Journal of Addiction*, Vol. 71 No. 1, pp. 79-88.

Sykes, G. and Matza, D. (1957), "Techniques of neutralization: a theory of delinquency", *American Sociological Review*, Vol. 22 No. 6, pp. 664-70.

Thorley, C. (2017), *Not By Degrees: Improving Student Mental Health in the UK's Universities*, IPPR, London.

Underwood, B. and Fox, K. (2000), "A survey of alcohol & drug use among UK based dental undergraduates", *British Dental Journal*, Vol. 189 No. 10, pp. 314-417.

Webb, E., Ashton, C., Kelly, P. and Kamali, F. (1998), "An update on British medical students' lifestyles", *Medical Education*, Vol. 32 No. 1, pp. 325-31.

Webb, E., Ashton, C.H., Kelly, P. and Kamali, F. (1996), "Alcohol and drug use in UK university students", *Lancet*, Vol. 5 No. 10, pp. 922-5.

Webb, E., Ashton, H., Kelly, P. and Kamali, F. (1997), "Patterns of alcohol consumption, smoking and illicit drug use in British university students: interfaculty comparisons", *Drug Alcohol Dependence*, Vol. 47 No. 3, pp. 145-53.

Wolfensberger, W. (1972), *The Principle of Normalisation in the Human Services*, National Institute on Mental Retardation, Toronto.

YouGov (2016), "One in four students suffer from mental health problem", available at: https://yougov.co.uk/news/2016/08/09/quarter-britains-students-are-afflicted-mental-hea/ (accessed 9 August 2016) .

Young, J. and Critchley, J.B. (1972), "'Student drug use'; Drugs & Society", Vol. 2 No. 10, pp. 11-15.

Corresponding author

David Patton can be contacted at: d.patton@derby.ac.uk