

## Plant food for thought: A qualitative study of mephedrone use in Ireland

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The synthetic cathinone derivative club drug 'mephedrone' [4-methylmethcathinone (4MMC)] has been recognized in the EMCDDA early warning system since 2008 [EMCDDA (2010a). 'Article 5 of the Council Decision' council decision 2005/387/JHA of 10 May 2005 on the information exchange, risk assessment and control of new psychoactive substances. *Official Journal*, L 127. Retrieved from <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32005D0387:EN:HTML>] and is currently under legislative control in Ireland. Research on this drug remains scant, and primarily UK based. This exploratory research aimed to present a 'consumptive snapshot' of this emerging drug in the Irish drug scene, with specific focus on mephedrone user experiences, social situatedness of use and risk discourses. Twenty two in-depth interviews were undertaken with young Irish people aged 18–35 years, who had used mephedrone in the 6 months prior to fieldwork. The resulting narratives were phenomenologically and thematically analysed; and identified unique mephedrone user decision-making processes, particular drug effects and outcomes, socially contextualized mephedrone use and user harm reducing strategies grounded in prior illicit and poly drug taking careers. The research supports UK-based findings, which suggested the presence of drug displacement patterns between licit and illicit, with Irish mephedrone user preferences centralized in mephedrone availability, competitive pricing and general lack of quality illicit stimulants in the street trade. Policy makers and drug educational specialists are dealing with rapid metamorphoses and re-branding of cathinone derivatives circumventing legislation amid widespread internet availability.

### BACKGROUND TO RESEARCH

The rapidly diversifying market of designer drugs and once known as 'legal highs'<sup>1</sup> responding to diverse user demand trends, circumvention of legislative controls and lack of safety control is widely debated in media and political forums in Ireland and the UK today (Long, 2010; Measham, Moore, Newcombe, & Welch, 2010). Issues regarding desired drug outcomes, reliability of effects, purity and potency of the designer drugs, availability and pricing remain central to a displacement of drug practices from the illegal towards the legal (Measham, et al., 2010; Newcombe, 2009; Winstock et al., 2010). The difficulties in sourcing street drugs, and indeed good quality street drugs coupled with the widespread availability of synthetic and herbal derivatives in 'headshops'<sup>2</sup> and global web-based marketing and distribution networks contribute to user perceptions of legality, inferring safety (Winstock et al., 2010). The lack of quality control or clinical trials evaluating the safety of human consumption with frequent misrepresentation of contents and packaging where contents, uses and effects are not expressly declared are additionally of grave concern (Archer, 2009; Davies, Button, Archer, Ransay, & Holt, 2010; Long, 2010; Measham et al., 2010; Winstock & Ramsey, 2010).

One designer drug of heightened user and media interest is mephedrone, which is a phenethylamine and cathinone derivative, and originated from the use of khat among migrant Somali and Ethiopian cultures in Europe in the 1980s. Khat leaves (*Catha edulis*) are chewed recreationally to provide a stimulant effect (Davies et al., 2010) and contain the keto amphetamines called cathinone and cathine (A.T. Shulgin & A. Shulgin, 1991). Cathinone human metabolism produces cathine and norpseudoephedrine, which is similar to amphetamine and epinephrine, and can inhibit monoamine transmitter uptake (Davies et al., 2010). It appears that emerging designer drug

manufacturers are choosing to create substituted cathinones (also known as synthetic keto-amphetamines), which are collectively called 'M-Cats' (i.e. 'methcathinone'; 'ephedrone'; 'methylone'; 'methedrone'; 'ethcathinone'; and 'fluoromethcathinone') with first reports of online availability in 2007 (Psychonaut Web Mapping Research Group, 2009). Mephedrone was first notified to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) by the EU Early Warning system on new drugs in March 2008 along with some 15 other synthetic cathinones (see 'Article 5 of the Council Decision', EMCDDA, 2010a).

Currently, seven EU Member States (namely UK, Ireland, Denmark, Germany, Estonia, Romania and Sweden) plus Norway (non-EU member) have legislative control on mephedrone use. Other member states control mephedrone under medicine-related legislation (Finland and the Netherlands). Internet sales in some countries (i.e. Sweden) have been restricted due to the classification of mephedrone as 'hazardous'. In 2010, the 'Europol-EMCDDA joint report on a new psychoactive substance: 4-methylmethcathinone (mephedrone)', reported that synthetic cathinone derivatives (i.e. mephedrone, methylone, methedrone and flephedrone) are aggressively marketed by web-based suppliers as legal alternatives to ecstasy, amphetamine and cocaine (EMCDDA, 2010b). Mephedrone's frequent advertising as 'research chemicals, bath salts, plant food and Hoover freshener' commonly denoted by pseudonyms such as 'Meph, Drone, Mmcat; Miaow Miaow, Bubbles, Rush, Drone, Bounce and Sub-coca' with 'not for human consumption' labelling on packaging ensures that it falls outside medicinal product regulations with harm reduction information surrounding dosage, administration, risks and contraindications notably absent (Winstock & Ramsey, 2010).

Mephedrone shares psychoactive properties with cocaine, ecstasy and amphetamines (Morris, 2010), and is commonly sold as a white crystalline powder or in capsules. It is consumed intra-nasally ('bumping') or orally by swallowing, wrapping the compound in cigarette papers ('bombing') or dissolving in liquid (Newcombe, 2009). Intravenous and rectal administrations are less common (Winstock et al., 2010). Mephedrone consumption is reported to cause anxiety, paranoia, seizures, delusions and visual/auditory hallucinations, as a result of CNS hyper stimulations, compromised cardiovascular function and 'serotonin syndrome' or concomitant prescribed inhibited selective serotonin reuptake (Gustavaaon & Escher, 2009; Morris, 2010; Newcombe, 2009). Other health concerns for users include strong cravings to administer repeated dosage following drug peak outcomes of 20–30 min; and unusual difficulties in cessation of use. In addition, the European Psychonaut Web Mapping Project has identified that mephedrone has potential for abuse liability relating to such re-dosing and binges

within drug episodes (Psychonaut Web Mapping Research Group, 2009). Mephedrone has been implicated in A and E admissions, and detected in several post-mortems in Sweden and the UK (Morris, 2010), but these cases have also recorded poly drug use (alcohol, cannabis and ketamine), user uncertainty around which product consumed (mephedrone, methadone or methedrone; Gustavaaon & Escher, 2009) and difficulties in routine drug screening for mephedrone (Winstock et al., 2010).

The exponential rise in media, web-based and consumer interest into mephedrone is of concern. Many circumvented substitute cathinones which include mephedrone are improving in range, strength of user effect, drug profile and availability (Brandt, Sumnall, Measham, & Cole, 2010; Morris, 2010). Winstock et al. (2010) describe how Google Insights for Search have recorded a steep rise in mephedrone-related searches since June 2009. Research on UK attitudes to mephedrone use indicate that mephedrone is fully regarded as an acceptable ecstasy, amphetamine and cocaine substitute, with many illicit drug users switching to this substance in preference to illegal street drugs (Measham et al., 2010). According to the MixMag survey in February 2010 of 2200 self-selecting dance music fans and club goers in the UK (65.0% males, 81.0% employed and aged between 18 and 27 years), mephedrone was the fourth most commonly used drug in the past month in 2009; with 41.7% reporting lifetime prevalence mephedrone use, 34.0% reporting past month use; 6.0% reporting weekly use and 10.8% reporting having also used methylone (MixMag, 2010). However, the research based on mephedrone use remains scant, primarily grounded in the analysis of user forums, YouTube videos, single case reports and focus groups, and with little research conducted to date on mephedrone user experiences, short- and long-term effects, toxicity and pharmacodynamics (Winstock et al., 2010). To date in Ireland, no research has been undertaken to explore how mephedrone has filtered into the Irish drug scene, with little known with regard to mephedrone drug effects, user experiences, methods of use, poly drug taking and risk management practices. On the 11th of May 2010, the Irish government imposed a Declaration Order under the Misuse of Drugs Act 1977 and 1984 banning synthetic cannabinoids, benzylpiperazine (BZP) derivatives, mephedrone, methylone and 'related' cathinones, GBL and 1, 4 BD, ketamine and Tapentadol. However, anecdotal reports in Ireland suggest increased rates of mephedrone use, availability and mephedrone implicated in A and E admissions. Thereby, this study aimed to explore and uncover a 'consumptive snapshot' of mephedrone use among pre-legislation Irish users, with specific focus on user experiences, social situatedness of mephedrone use and lay mephedrone risk and legality discourses.

## METHODOLOGY

The research was conducted in the South Eastern region of the Republic of Ireland as part of a cross-border study on mephedrone use, with ethical approval for the research gained in April 2010 at Queens University Belfast, Northern Ireland (NI). The study criterion was any use of mephedrone in the 6 months prior to the fieldwork. The researchers accessed the sample via invitations uploaded on Facebook, drug user blog forums, and to some extent via internal snowballing. Twenty-two one-to-one interviews were conducted with young people aged 18–35 years (eight females and 14 males), all of whom had prior illicit drug taking histories, with the majority semi-professional and employed, and the remainder in third-level education. No participants dropped out.

The fieldwork was conducted prior to the legislative ban on mephedrone in Ireland, and thereby the resulting narratives distinguish between mephedrone as legal drug at that time, and other illegal street drugs such as cocaine, ecstasy and speed. The interview guide was devised by the ROI researchers ( $n=2$ ) following consultation with the NI research team ( $n=2$ ) who were conducting the cross-border post-legislative study, and also several regional Drugs Task Forces (RDTFs). The interview guide consisted of several key areas of interest, namely; the sourcing of mephedrone, modes of use, dosage, effects, initiation, experiences, frequency of use, comedown management, concurrent and sequential poly drug use, initiation and social settings for use, preferences relating to other illicit drugs, risk perceptions, media interpretations and lay mephedrone risk and legality discourses. The interviews were approximately 45 min in duration and took place within a variety of informal settings, which included private and student houses, cafes and outdoor settings. All participants were informed with regard to the research aim; gave consent and were paid €20 for their participation in the research. All were assured of anonymity and allowed to withdraw if and when they wished.

The study is contextualized within a localized regional setting in the South Eastern region Drugs Task Force (SERDTF) area (counties Waterford, Wexford, Kilkenny and Carlow), with the researchers aware that subsequent social meanings and mephedrone consumptive behaviours are context dependent (Gourley, 2004). The researchers recognize that the research is localized with lay risk discourses pertaining to mephedrone exposure and use shaped by inherent social structural conditions in day-to-day associational life (Corbin & Strauss, 2008; Martin & Stenner, 2004). In this way, however small scale by nature, this study aimed to understand ‘lived’ individualized experiences and contextualizations pertaining to mephedrone, with such mephedrone infused experiences explored as subjective phenomenon, and to investigate the dynamic reciprocal interplay between the users and their micro

environments. Thereby, the narratives garnered were used to situate and contextualize the mephedrone consumptive processes and trajectories, with the researchers assuming a ‘second order’ stance in order to avoid potential influences by the dominant mephedrone drug discourses at that time (Martin & Stenner, 2004, p. 399).

A phenomenological approach was chosen in order to discover and explore the ‘lived’ and ‘situational’ experiences of mephedrone use for these Irish users. The core phenomenological principals of bracketing, intuiting, analysing and describing (Coyle, 2008; Giorgi, 1985; Leininger, 1985) were of paramount importance in order to describe exact mephedrone experiences without judgement and recognize the external and also internal perspectives of garnered textual language. The interview guide was designed to encourage participant engagement, with questions asked in a conversational tone and aimed to derive rich data pertaining to experiences and perceptions of the mephedrone users. The researchers collected data through verbatim interview narratives in answer to questions, and additionally within the participants’ own exploration of the questions. The use of techniques to encourage and develop rapport with the participants aimed to optimize on information retrieval and included; repetition and clarification of questions, providing information, body language and eye contact. Each interview was audio taped, which allowed the researchers to concentrate on participant narratives, laughter, sighs, pauses, reflections on certain questions, and all of which represent aspects of interviews which were revealing, vivid and illustrative. In order to ensure a reflexive and unbiased approach, field notes were written and maintained after each interview, and immediately following each interview, the researchers digitally recorded any immediate thoughts, reflections and ideas. The interview data were fully transcribed following each interview. Memoing of each transcript involved the researchers reading and rereading transcripts in order to immerse in the narratives and meanings garnered, to thoroughly comprehend the mephedrone users’ points of view and to follow the mephedrone experience by considering the users’ intentions and feelings. A certain level of synchronic reliability was also achieved whereby participants’ reflections were conveyed in their own words and corroborated by other participant narratives with relative agreement.

Thereby, data analysis involved the utilization of integrated and reflexive methods during and after data collection. The narratives were analysed to yield structural descriptions of these real ‘lived’ mephedrone experiences with recognition of the underlying situational factors and integration of the textural languages yielded. Once recognized in its entirety, the material was divided into ‘meaning units’ of key phrases, perspectives, opinions, attitudes and values of the participants (De Castro, 2003). In order to reduce bias

and subjectivity in the analysis, the material was read and reread by the research team (independently and as a team) with concepts and themes identified using descriptive codes and spider diagrams to map the mephedrone experiences and subsequently place within concepts, categories and themes. The researchers interpreted the narratives and developed concepts surrounding the collective presence of similar incidents, actions, meanings, perceptions and behaviours within the illustrated mephedrone experiences of the participants. The identified thematic patterns consisted of 'conversation topics, vocabulary, recurring activities, meanings, feelings, or folk sayings and proverbs' (Taylor & Bogdan, 1984, p. 131) and were then categorized when the researchers brought together 'components or fragments of ideas or experiences, which often are meaningless when viewed alone' (Leininger, 1985, p. 60).

In particular, the utilization of open coding analysed the data by 'breaking down' data into concepts, that is, 'words that stand for ideas contained in the data' (Corbin & Strauss, 2008, p. 159). Concepts were defined at either context or process, and dependent on the narratives garnered. Open coding of the data in line-by-line analysis reinforced the use of the constant comparative analysis, with each mephedrone incident, actions, meanings, perceptions and behaviours compared and contrasted with others, and subsequently allocated the same conceptual labelling, until all data was coded within at least one concept. In particular, the line-by-line data analysis ensured that ongoing deductive analysis of the data through reading and rereading the data deterred the development of researchers' personal beliefs and biases surrounding mephedrone use (Charmaz, 2000). Axial coding was used after open coding to develop higher level concepts, by which concepts were grouped together into categories according to shared properties, relationships between conditions, consequences of behaviours, interactions and perceptions between the concepts, until conceptual saturation was reached. Categories were developed using Corbin and Strauss' (2008) paradigm, which allowed the researchers to identify the concepts as conditions or actions, interactions and emotions or consequences. When each category achieved full development in terms of properties and dimensions, conceptual saturation was reached. Categories were also analysed to investigate any links and relationships between conditions, actions and interactions and consequences within categories. Finally, the integration of the categories, and selective coding uncovered the following key themes as related to each other, and will be presented in the results section as a running analysis with narratives.

## RESULTS

The narratives shall be presented according to the identified thematic categories namely; 'mephedrone

choices, experiences and outcomes'; 'social situatedness of Mephedrone use' and 'perceptions of mephedrone risk and legality.'

### Mephedrone choices, experiences and outcomes

All participants had prior experience of illicit street drugs and had used both licit and illicit drugs on a regular basis in the past 6 months. Mephedrone was commonly purchased from other users and used alongside alcohol, cannabis, ecstasy, cocaine and other legal 'smart or headshop' products available at that time such as 'Sky High'; 'Ice Gold'; 'Ice Silver', 'Bonzai', 'Salvia'; 'Blessed' and 'Tijuana' (substitute cannabinoids); 'Charge'; 'Snow'; 'Oceanic'; 'Bolts'; and 'Blow' (cocaine substitutes); 'Charleeze'; 'Jaxx'; and 'XXX' (MDMA substitutes); 'Red Devil'; 'Diablos'; and 'Giggles' (party pills containing BZP and TFMPP derivatives mimicking ecstasy and amphetamine); 'Purple Ohms' (party pills containing herbal hallucinogen); 'Hawaiian Woodrose' (containing LSA) and 'Mushrooms'.

The participants described their initiation to mephedrone as based on several consumptive decision-making factors which included exposure, widespread user availability, curiosity, peer use and competitive pricing. In addition, the participants commented that when compared to illicit street drugs such as ecstasy and cocaine; positive peer reports relating to strength and purity of mephedrone effect, and lack of negative comedown symptomatology assisted them in their choices surrounding mephedrone initiation. Mephedrone products were commonly sold as 'Bathsalts', 'Hoover freshener' and 'Plant food' and recognized by the following labelling; 'M1'; 'Miaow Miaow' and 'Wildcat'. Several participants described mephedrone as follows;

'I was looking for the same kind of buzz you get from E or coke and also meph was being talked about a lot at the time in my circle of friends and I was curious about it. Most people I knew had said it was brilliant.' (Male, 24)

'Anyone that's a regular drug taker would have heard of Miaow Miaow or M1 as soon as it became available. It's widely known for the "clean" high and lack of comedown. I tried it for these reasons.' (Male, 27)

'Everybody seems to be taking mephedrone. It's better than MDMA and it's cheaper. It's like a proper drug for less money.' (Male, 31)

When questioned with regard to mephedrone drug effects, the participants described quickened heart rhythms; dilated pupils; feelings of elation; 'feeling loved up', heightened senses, sensuality and sex drive; few negative physical side effects during the 'rush' and manageable comedowns. A participant described his experiences of the mephedrone effect;

'I would describe the effects of mephedrone as taking a good night and multiplying it by twenty. Everybody's conversation is more interesting. If you are with somebody you like,

you will suddenly love them. If you are with somebody you love, you won't be able to keep your hands off them. It's a heightened sense of absolutely everything. Even breathing air or smoking a cigarette is a million times more pleasurable. Music sounds better, you can dance better, sometimes things get blurry or weird but you just go with the feeling and it's actually enjoyable to be detached from reality just for a few hours. There are no problems when you are high on meph, you can't remember if there is anything in your life worrying you or troubling you, real life seems far away and irrelevant.' (Male, 29)

Immediate negative effects were named as significant painful burning sensation upon inhalation through nasal cavities, unpleasant acidic chemical taste in the sinuses, an initial 'come-up' that was 'too intense' causing disorientation, confusion, temporary psychological detachment from reality and an uncomfortable sudden increase in body temperature (similar to that experienced by ecstasy and cocaine users). Few participants reported cravings or withdrawal symptoms ( $n = 2$ ). The majority of user experiences were positive ( $n = 19$ ), and once experienced presented with strong preference for mephedrone, as opposed to illicit party drugs such as ecstasy, amphetamine and cocaine. A participant commented on his experiences of mephedrone;

'Mephedrone had an effect similar to E. There was a definite "love buzz" present and I spent 2 hours talking non stop. I was high for 3 hours from one "bump",<sup>3</sup> I can't say I experienced any negative effects on meph. I prefer mephedrone to any drug I have taken in my life. The high is clean and simple with no uncomfortable physical side effects like increased body temperature, sweating and gurning that you get with E. It seems like a purer drug. I believe your body will tell you if you have harmed it. With meph I woke up the next day feeling fine and I have nothing but good things to say about this drug.' (Male, 29)

'M1 is absolutely brilliant. Stayed up all night, had a great night. Had a few vals (valium) to take to come down when I needed to. I'd definitely repeat the experience. Its more like coke than yokes [ecstasy], you're not pulling faces but you are high as a kite.' (Male, 33)

'Mephedrone gives the effect of a good ecstasy pill without the messiness and good coke without the edginess.' (Female, 25)

However, the consumption of poly substance 'cocktails' over the course of mephedrone experiences were common, with some participants reporting more pleasurable drug outcomes, and others opting to 'stick to' mephedrone in isolation ( $n = 15$ ). However, in many cases, poly drug taking served to confound user expectations of the mephedrone drug outcome, and individual attributions of positive and negative mephedrone effects. Several participants commented;

'It's hard for me to distinguish between mephedrone and other drugs like cocaine and E because I would have been on them all together; to me they all have the same effect.' (Female, 25)

'Yes I have mixed them all on occasion but usually I will stick to one type of high for the night.' (Male, 22)

The older participants (aged 30–35 years) likened the effects of mephedrone to good quality cocaine and ecstasy present in previous drug taking trajectories in the 90s, with a majority ceasing illicit drug use in their late 20s, and recommencing drug use with the advent of mephedrone in their local social scenes. Some of the younger members (aged 18–26 years) approximated mephedrone effects to contemporary ecstasy use. These observations appeared attributed to both the length of drug taking careers and stimulant/hallucinogenic experiences coupled with the reduction in street drug quality at that time, with MDMA and cocaine purity decreasing in recent years in Ireland. Indeed, the participants appeared to underscore the availability of mephedrone in 'headshops' and amongst peers, the guaranteed mephedrone effect and competitive pricing within a cost benefit rational decision-making approach. A participant commented;

'At an affordable price, mephedrone has realised the gamble of paying for aggressively priced street drugs is unnecessary... the commonly experienced disappointment of paying hundreds of euros for cocaine which does little other than to generate insomnia can't compare to the reliability of paying €40 for a gram of mephedrone with an inbuilt customer satisfaction guarantee.' (Female, 26)

Route of mephedrone administration appeared to be intranasal, in lines or from a coin dipped in a mephedrone bag ('bumping'); and ranged from ½ to 2 g ingested frequently over the course of the mephedrone episode (usually 6–12 h in length). A participant commented on his preferred use of mephedrone;

'Snorted through the nose in small lines... Hard to say how much over the course of a night, with meph you have to take more and more often than Charge,<sup>4</sup> the high doesn't last as long so you have to keep taking it.' (Male, 31)

The majority ( $n = 18$ ) claimed 'to trust their own judgement' as grounded in previous drug taking repertoires and experiences, and 'to gauge their own dosage' with regard to frequency of administration and the attainment of the mephedrone induced 'rush.' The remainder of more novice users followed advice from peers and headshop staff. This rather tentative approach to mephedrone consumption appeared centralized in both a certain level of risk scripting and autonomy in rational decision-making processes, and user recognition of the incurred potency of effect. A participant commented;

'I'd take meph the same way I would MDMA. As anyone who has ever taken MDMA knows, it's a different powder to cocaine or speed, it's stronger and it has different effects in that it doesn't necessarily make you more alert – in fact it can have the opposite effect and make you really messy. Small lines and build up your high gradually that's the way to go. I haven't read the instructions. I'd like to know how many people have to be honest... not many I'd imagine.' (Female, 25)

The majority of participants ( $n = 20$ ) reported more manageable 'comedowns' in comparison to other stimulant and hallucinogenic drugs but some reported sweating, restlessness, insomnia, anxiety, feeling down and regret over 'out of character behaviour' whilst taking mephedrone ( $n = 6$ ). The majority ( $n = 19$ ) self-medicated with alcohol, benzodiazepines and cannabis in order to assist the comedown process. Some participants ( $n = 8$ ) reported an unpleasant body odour emittance for up to a week after ingestion likened to the smell of rat poison or battery acid. Several participants observed;

'There's not really a comedown as such off meph, you start to feel a bit tired and not as happy, I suppose you'd call it "back to reality". I don't remember ever feeling sick after it or needing to take something to ease it.' (Male, 29)

'Comedowns are easier for me on mephedrone; they don't bother me at all.' (Male, 31)

### Social situatedness of mephedrone use

Mephedrone use appeared central to certain sub-group atmospheres and music types such as techno/dance. User patterns ranged from sporadic to weekly. Repeated and frequent experiences following the initial experimentation with mephedrone occurred in all cases, and this was strongly related to the potency and quality of the user experience, and with consumptive patterns strongly contextualized within the perception of 'a good night out'. Some participants commented on the potency and quality of mephedrone effect;

'I repeated my mephedrone experience multiple times and would continue to do so for the rest of my life if that was possible.' (Male, 24)

'Mephedrone several times. None of the others impressed me enough to repeat the experience.' (Male, 19)

It should be noted that all participants in the study were employed and maintaining normal productive citizenships in terms of their family and personal relationships, and all voiced their ability to contextualize, situate and compartmentalize their mephedrone use within weekend socializing. Several participants commented;

'I take mephedrone every night I go out.' (Female, 21).

'Whenever it's offered or if I see it as a necessity to a night out... at least once a month I would say.' (Male, 27)

There appeared to be an awareness of social appropriateness of settings whilst under the influence of mephedrone with inner group sanctioning against excessive use. Some participants observed the presence of certain settings strongly associated with mephedrone use;

'In some social settings you can't be seen to be visibly out of your head so I'd keep the drug taking to raves and dance gigs where you're surrounded by like minded people who won't judge.' (Male, 31)

'Social setting would have an impact. The company you're keeping is important as you don't want to be wide eyed and too energetic with the wrong crowd.' (Male 31)

The socially controlled phenomenon of mephedrone use for these users appeared connected to the interplay between such specific user contextualization and the social ceremoniousness of snorting lines ('bumping') and control over the mephedrone drug outcome. Many participants ( $n = 17$ ) voiced prejudices to 'swallowing' ecstasy tablets and 'looking messy', or 'out of control'. Mephedrone in contrast appeared to lend the user a degree of self-control over the drug episode, with any incurred negative effects of the mephedrone induced high generally observed to be due to 'greed'; 'impatient novice users' and 'the responsibility of the individual user'. A participant observed this paradigm between inner perceived control and outward the loss of control;

'At every party there is always someone who overdoes it and is bunched up in a sweaty mess on a couch, that has nothing to do with what they took, but how much they took, and what their tolerance for it was.' (Male, 22)

Some older participants (aged 30–35 years) described mephedrone as 'having a more socially respectable psychological tag', and as 'not having undesirable effects' and 'having increased control of the buzz without looking like you're off your face'. In this way, the participants appeared to attach importance to the capacity for controlling the mephedrone 'high' to the outside world. The element of perceived control was reportedly ascribed to the alleged speed with which it takes effect and similarly 'wears off'. The participants reported a sense of ownership over the choice of 'high' continuance or cessation of the drug episode. It appeared that this particular form of intoxication was recognized as one which the participants could 'step in and out of at will'. However, when probed by the researcher(s), the majority recognized that this internal ideology of perceived control over mephedrone was often not the reality, with most participants observed to exhibit some recognizable outward drug consumptive signs and symptomatology. A participant commented;

'I've never heard of anyone having a bad experience on mephedrone other than taking too much as a first line and maybe rushing too hard... some people would call that a good experience.' (Male, 29)

'To be perfectly honest I'm usually too out of my head to notice what other people are at. I'm sure there are a few people who look at me at sessions and think I'm having a bad experience cos I'm just panned out on the floor mashed, when in actuality I'm having the time of my life.' (Male, 19)

As secondary effect to this perceived control over mephedrone, and interestingly, given the intense emotive feelings experienced in the mephedrone induced 'rush', participants also generically commented on the lack of social interaction during mephedrone use. In many cases, mephedrone was described as an insular

individualistic experience with the user wrapped up in their own thoughts, emotions and senses;

'I was too absorbed in my own buzz to notice what other people were experiencing.' (Male, 27)

'I think this particular drug, has a capacity to take the human element out of relations.' (Female, 28)

### Perceptions of risk and legality

In terms of the centrality of drug perceived risk attached to mephedrone consumption, and the conceptualization of legality inferring safety, mephedrone was deemed a safer alternative than illicit street drugs, as the drug outcome was observed by all participants to be reliable in terms of potency, quality and perceived purity. Users appeared to have mixed opinions regarding safety, with legality and lack of street impurities contributing to perceived improved safety when compared to illicit drugs. The majority of users ( $n=19$ ) were aware of the generalized risks of drug consumption, and recognized that drug effect whether licit or illicit could have harmful repercussions. Some participants observed a parallel between illicit and licit drug consumption and said;

'The whole process of elevating your mind into an unnatural state of hyperactivity and increased awareness is an artificial action and therefore not something the body can cope with without negative effects. Whether you do this with illegal or legal drugs, I don't see much difference. The same dangers apply I'd imagine with both.' (Male, 29)

'I believe the compounds they are made from are yet to be classified under legislation and therefore cannot be termed 'illegal'. This does not make them safe as such for consumption. I also recognise their similarity with other drugs, the only difference being a slightly transformed compound.' (Male, 30)

'I don't believe any high, legal or illegal, can be completely safe for everybody. However, I do feel that the legal highs are SAFER than illegal drugs in many cases as they are not cut with other products by unscrupulous dealers.' (Male, 31)

The majority of participants ( $n=17$ ) observed mephedrone as inferring a 'safer high' due to its placement in 'headshops', with others additionally acknowledging the lower cost and general availability of mephedrone as increasing appeal of use ( $n=9$ ). A participant commented on its legal status and said;

'I'm finding a lot of my friends are choosing mephedrone over cocaine. Its cheaper and just as good with significantly less jail time attached.' (Male, 33)

Some participants observed the mephedrone quality of ensured effect as central to their consumptive decision-making processes;

'I would say mephedrone gives a stronger high than street drugs. It's not something that's going to disappear after the ban. The problem with street drugs is the loss of control and the comedowns. Mephedrone doesn't have that.' (Male, 27)

'I suppose the appeal of mephedrone is the fact that you know its going to be a good buzz. You might spend €100 on a bag of coke and get nothing off it.' (Male 33)

When questioned about the suggestive packaging inferring similarities to stimulant and hallucinogenic street drugs such as cocaine and ecstasy (i.e. 'Wildcat'), the participants generally appeared unconcerned with regard to the presence of disclaimers and lack of harm reduction advice (i.e. 'not for human consumption') in reverse side labelling. A participant commented on the presence of such labelling;

'There are directions on the packet if you're inclined to read them but I always used my own initiative to dictate whether I felt I needed more or not. Small lines and build up your high gradually that's the way to go. I haven't read the instructions. I'd like to know how many people have to be honest... not many I'd imagine.' (Female, 27)

All participants appeared confident in their own consumptive decision-making processes, their self-management and avoidance of a negative drug episode. Some participants observed their harm reducing approaches as grounded in prior drug risk taking experiences, controlled management of use and lack of negative comedown symptomatology;

'I treat them like other drugs and handle myself the same as I would with illegal substances.' (Female, 21)

'I'd think about it a small bit. I think once you've taken meph once though the fear goes away. It's like, its obviously not going to happen to me because here I've taken it and nothing happened; I mustn't be one of the unlucky ones that it doesn't agree with.' (Male, 22)

'Mephedrone is safe – I know too many people who have taken it without even a comedown. If you don't get a comedown that means your body was able for the experience.' (Female, 25)

By and large, participants reported that their mephedrone consumptive patterns were unaffected by media coverage, and reinforced by continued positive experiences, individual responsibilities for gauging of dosages, self-moderated mephedrone consumptive patterns and medicated comedown management all contextualized within inner group boundaries providing information, advice, support and sanctioning. A participant commented;

'Mephedrone is better than any illegal drug, everyone is intrigued by it. I haven't heard any bad press about it from my acquaintances/friends.' (Male, 19)

Mephedrone related risk appraisal appeared similar to those of illicit stimulant drugs, with most participants reporting mild discomfort on reading of drug and mephedrone-related fatalities ( $n=20$ ). Some participants utilized internet blogging sites and educational drug user forums for user information, the tracking of new variants of mephedrone and changes in product packaging. Many participants ( $n=16$ ) commented on the surrealism of sensationalist media reporting with

little contextualization of the drug experience involved, whether hedonistic, cathartic or otherwise.

Post-legislative behaviours varied with some users intending to switch back to street drug trading and thereby continue with illegal mephedrone use; some waiting for diversified cathinone derivatives in 'headshops' and some investigating internet options for mephedrone purchasing. Several participants commented on their intended personalized intentions regarding future mephedrone consumption;

'I will definitely not stockpile anyway. If offered to me at a party I may do, yes.' (Male 30)

'I'll hopefully be still able to buy mephedrone from plant food stores and mix it up myself. Not really bothered about any of the rest.' (Female, 21)

'I plan to research the options of ordering M from the internet.' (Male 31)

'I guess I will buy M after the ban. I have been buying illegal drugs for years so I don't see why not.' (Female 23)

'I expect M1 to become available on the street fairly fast. It's too popular to just disappear. I'll certainly be buying it anyway.' (Male, 24)

'I guess it's been enforced upon me already not to buy them but I'm sure once the next altered compound arrives I shall be dabbling to see how it compares.' (Male, 27)

## DISCUSSION

This unique 'snapshot' of mephedrone use in terms of drug transitional experiences, social situatedness and risk perception is intended to further the emerging research base on mephedrone and the potential for identified drug displacement patterns occurring in contemporary society. The research although exploratory and regional by context suggests that mephedrone use has become popular among Irish poly drug users with mephedrone consumptive practices grounded in prior drug taking histories and dance scenes. It supports UK research by Winstock et al. (2010) who found similar poly drug taking profiles in mephedrone users, with mephedrone use incurring the typical dose-related stimulant effects. Similar to research by the Psychonaut Web Mapping Research Group (2009), the users reported frequent dosing (between ½ and 2 g) coupled with a short lived mephedrone effect. In this research, all users consumed intra-nasally, which contrasts with Winstock et al. (2010) who reported a majority using mephedrone intra-nasally. In addition, Winstock et al. (2010, p. 5) also reported users experiencing 'cold blue fingers and toes', a phenomenon not reported in this study. Mephedrone user choices were centralized in the mephedrone effect relating to euphoria, heightened sensuality, auditory and tactile enhancement, quality and control of the drug episode. It's comparisons to

cocaine amongst older users are similar to Winstock et al. (2010) who reported on user perceptions regarding cocaine similarities, the quality of mephedrone drug outcome and potential for abuse liability. User reported symptomatology (increased heart rates, sickness; sex drive and unpleasant smell) are all consistent with typical amphetamine and cathinone effects (Kalix, 1992; Williamson et al., 1997; Winstock et al., 2010).

Fast, Small, Wood, and Kerr (2009, p. 1208) has described the interplay between 'push' and 'pull' factors relating to the integration within a localized drug scene, as understood to be centralized in proximity, availability, the desire for excitement, sense of belonging and indeed the avoidance of certain risk taking behaviours. It appears that mephedrone for this sample of poly drug users indeed builds on these situational factors, with choices and experiences supported by inner group mephedrone availability, perceived quality of effect, autonomous decision-making processes, individualized responsibility for mephedrone outcomes and inner group behavioural sanctions for excessive use (Bahora, Sterk, & Elifson, 2009; Duff, 2005; Gourley, 2004; Wikstrom, 2002). The recognition that all participants reported prior illicit drug experiences assisted them in adopting a moderated consumptive approach to managing the mephedrone episode, and underscores previous research by Shiner and Newburn (1996, p. 24) who argued that key factors in responses to drug risk taking behaviours, constitute routine and familiarity and quote 'it is the automatically at hand knowledge about the world that offers them rough but sufficient rule of thumb for typical behaviour in typical situations.' Exposure to the mephedrone world appeared centralized in localized opportunity and socially contextualized with the more experienced mephedrone users providing advice, recommended gauging of dosage and self-medication of comedown symptomatology. Interestingly, the social element of mephedrone use juxtaposed both sides of the coin, with the inter-relational and associational social element of recreational drug use somewhat compromised; with these users experiencing intense individualistic drug outcomes, presenting an inherent lack of concern for other users when 'high' and perceiving themselves to operate in isolation within larger social crowds of mephedrone users.

Research acknowledges that drug use can have a 'localized' flavour and take place within distinct and normative social contexts which sanction excessive consumption, messy or uncontrolled drug use (Bahora et al., 2009; Egginton & Parker, 2002; Fast et al., 2009; Gourley, 2004; O'Malley & Valverde, 2004). Users in this research (all semi-professional or in third-level education) commented on their abilities to compartmentalize mephedrone use. Indeed, Moore and Miles (2004, p. 507) comment on the mechanism and role



which drugs play, whereby drug users can create 'parallel lives' to counteract day-to-day uncertainty. One can draw parallels with Parker's normalization concept, where he mentions such users as including 'well-adjusted and successful goal-oriented, non-risk taking young persons who see drug taking as part of their repertoire of life' (Parker, 1997, p. 25). Indeed, Cieslik and Pollock (2002) observed the processes whereby young recreational drug users do not identify with so called deviant drug users, and liken their drug consumptive practices to other recreation activities such as shopping, relationships, holidays and sports (Shiner & Newburn, 1997). Within a wider recognition of drug discourses, one can speculate whether mephedrone has indeed side stepped the so called deviant subterranean element of drug use (Fast et al., 2009) due to its widespread availability on the black market and in the cyber world.

Mephedrone users reported little concern for potential harm not only due to their personal faith in their own drug taking capacities, but also with disregard for sensationalist media representation at that time. The research took place at a time of frequent protests, vigilantism and arson attacks on headshops in Ireland (Long, 2010). The labelling as 'not for human consumption' appeared not to deter nor heighten perceptions of drug-related risk for this small group of drug users. The presence of the localized mephedrone user subculture supported by online user forums and headshops appeared to reduce actual mephedrone-related harm with users informed and experienced, and tapping into informal routes of mephedrone knowledge available to them. This element of potent group dynamics and audience control in managing mephedrone risk created a level of reinforcing reciprocity of mephedrone use, and thereby appeared to eliminate any concerns of legal implications or potential harm. The participants recognized that mephedrone was legal, but appeared unconcerned as to whether their future consumptive patterns of mephedrone would change in post-ban Ireland. The transition for mephedrone from legal to illegal was of no concern on several grounds, most importantly with the user's recognition of the development, manufacture and marketing of new M-Cats designed to circumvent Irish legislation, and secondly the diversification of existing mephedrone stock piles to the underground drug market. It appeared that mephedrone user experiences, reliability and positive effects weighed far heavier than fears of illegality, and are potentially reduced or somewhat normalized by familiarity in prior illegal drug consumptive careers. Thereby, the 'temporary displacement' as observed by Hammersley (2010) does not come to bear, with these research findings supporting the presence 'secondary motivating factors' such as convenience, availability, poorer perceived street drug quality and illicit drug availability

(Measham et al., 2010; MixMag, 2010; Newcombe, 2009) as central to the changing forces in recreational drug use in contemporary Ireland. Of particular concern, however, is the presence of such aforementioned displacement patterns between licit and illicit drugs as stemming from control legislation, with subsequent responsive diversification from licit to illicit drug trading, public harm implications and societal repercussions of rising drug-related criminal activity.

## CONCLUSION

The research although small scale offers an exploratory insight into mephedrone use amid heightened anecdotal reporting of mephedrone availability and use (Long, 2010). Mephedrone use for these Irish users presents a certain counter discourse centralized in consumerist negotiation. The research supports the aforementioned UK-based findings on mephedrone use, which suggested the presence of drug displacement patterns between the licit and illicit, and observes that Irish mephedrone use is grounded in mephedrone availability, competitive pricing, poorer perceived street drug quality and general lack of illicit stimulants available on the street. However, the study findings are small scale and therefore not generalizable, and recognize that mephedrone user trajectories and processes are likely to be varied and dynamic, and with abuse potential dependent on prior and problematic drug taking patterns. The solitary focus on criminalization of mephedrone and indeed other cathinone derivatives inherently neglects to include user experiences centralized in acceptable drug consumptive behaviours and internally sanctioned safe use in weekend socializing. Given that this drug has only recently been placed under legislative control in Ireland, and with the emergence of new substitute cathinones on the drugs scene, it points to a potent need for drug educational efforts to provide timely information, build on mephedrone user movements centralized in rational decision-making, autonomy and habituation, and drug consumptive strategies designed to reduce harm and negative experiences. Follow-up interviews are intended in autumn 2010 to further explore post-legislative drug taking profiles, patterns and settings, potential street diversification of mephedrone; rebranding and creation of new designer M-Cat drugs in the Irish drug market.

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## NOTES

1. On the 3rd of June 2010, the Irish government published the General Scheme of the Criminal Justice (psychoactive substances) Bill, which stated that under the proposed Scheme, the sale or supply of substances (formerly known as legal highs), which are not specifically proscribed under the Misuse of Drugs Acts, but which have psychoactive effects, for human consumption will be a criminal offence.
2. A head shop is a retail outlet, which specializes in drug paraphernalia related to consumption of cannabis, other recreational drugs, and New Age herbs, as well as counterculture art, magazines, music, clothing and home decor.
3. A coin dipped in a bag of mephedrone and snorted.
4. Cocaine substitute product called 'Charge'.

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