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Targeted population surveys on drug use in recreational settings across Europe

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Running head: Targeted population surveys in recreational settings

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In this chapter, we focus on in situ targeted population surveys (TPS) of drug use in recreational settings across Europe. Such surveys feed into European Union (EU) drug monitoring systems aimed at drug prevention and harm reduction. Specifically, we explore how TPS shape knowledge production about drug use. To do this, we situate TPS research within contemporary drug use trends, such as the emergence of new psychoactive substances (NPS) and darknet markets for pharmaceutical medications. We also use critical drug studies and sociological work on leisure spaces and times to explore how 'recreational settings' are understood within this research literature. From there, we argue that specific drugs, drug-using populations, and recreational settings dominate investigations, while others are largely ignored. To counter this, we suggest a critical, reflexive approach to processes of definition and conceptualisation by in situ TPS, including recreational setting inclusion/exclusion processes.

Keywords: recreational settings, in situ targeted population surveys, leisure spaces/times, knowledge production, European drug research.

Introduction

Both national self-report general population surveys (GPS) and more localised in situ targeted population surveys (TPS) are used across Europe to identify drug use prevalence, patterns, and trends across time, within different population groups and between EU member states. Sociological thinking on knowledge production (Bourdieu & Wacquant, 1992) points to the need for European drug researchers to reflect on our role in knowledge production about drugs and drug use (Vitellone, 2013). This is because power relations are implicated in measuring drug use prevalence, patterns and trends, just as they are, for example, in the measurement of violence against women (Walby et al., 2017).

TPS data is presented as evidence to be used, co-opted, or ignored to build drug policy responses (Stevens, 2011; Ritter & Lancaster, 2013). It is in this way that TPS contribute to the production of 'the drug problem'. In turn, specific representations of the drug problem shape the statistical and other data collected by TPS. New/novel psychoactive substances (NPS), for example, have been widely embraced by politicians, media, drug policy-makers and academics as a 'new problem' that demands more research to feed into policy and practice. Potter & Chatwin (2017) critique the separation of NPS from existing drugs and the labelling of them as new or novel, which 'obscures both the differences between

substances within the category and the similarities between NPS and other illicit substances' (p.4). Producing statistical data on NPS as separate from other illicit substances reinforces these obfuscations, and has consequences for our perceptions of the size and nature of the overall drug problem. This in turn has a very real bearing on the lives of people who use drugs.

In the drugs field, numbers and statistics matter. They matter because they form a crucial part of the evidence base. Quantitative research may be used to entrench or challenge existing and future policy responses to social problems such as drug use, through its contribution to this evidence base. European drug policies are, for the most part, built around prohibition, although investment in harm reduction initiatives remains a key feature of many EU member states' responses to drug use (Harm Reduction International, 2017). Not all in the global drug research field support prohibition and its largely punitive approach to the use of psychoactive substances. Given this, wariness may arise between academic drug researchers, drug policy change advocates, and organisations such as the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) that are charged with monitoring illicit drugs (drug use, drug-related harms, drug markets, drug treatment) for the purposes of shaping national and supranational drug policies. Others have noted similar professional considerations when working directly with law enforcement agencies (Lumsen & Goode, 2017).

The benefits of in situ or 'at the scene' research (of all forms) with those undertaking criminal, deviant and transgressive activities is well documented (Bloch, 2016). However, dealing with the connotations of monitoring drug use in recreational settings through TPS are complicated. In the USA, there has been an explosion in the number and scope of surveys funded by the International Narcotics Control Board (INCB) primarily targeting MDMA users at Electronic Dance Music (EDM) events (e.g. Mohr, Friscia, Yeakel & Logan (2018). Given the increasing use of biomedical data in TPS research and the punitive approach to post-rave cultures in the US¹, this TPS explosion should not necessarily be welcomed. Sociological theories on power, discrimination and biocitizenship alert us to possible problems in relation to drug use research (Pereira & Scott, 2016). Moore and Measham (2012, p.571) wrote about similar conundrums in relation to TPS on γ -Hydroxybutyric acid (GHB) use:

By concentrating on GHB/GBL [G] use in gay clubs using location-based samples of targeted populations, we (and others) have contributed to the production of (one of) G's multiple meanings as a 'gay drug'. The production of evidence via academic research—on drug prevalence for example—is ultimately and unavoidably a politicised activity.

Increased visibility through data capture using TPS can have detrimental effects on already historically stigmatised groups, such as gay populations and post-rave MDMA-using dance event attendees. Punitive action entailing a show of strength by the state, such as police raids of gay clubs or police drug dogs at dance events are in part based on results from TPS in these specialised recreational settings. Hence, having the intellectual space and freedom to think reflexively about how power shapes the production of quantitative data on

¹ See for example Dancesafe US, a US-based organisation promoting safer drug use by advocating in situ drug checking services. <https://dancesafe.org/about-us/>

any 'wicked problem' is crucial if social justice is to be the goal of social research (Urry, 2016, p.64; Walby et al., 2017).

However, making (dominant) drug user groups visible through TPS is not necessarily a negative process. Public health initiatives, for example, may be better designed and implemented when based on TPS research with a longitudinal approach. This enables the exploration of causal factors in the development of problematic drug use patterns among those frequenting recreational settings (Trimbos Instituut, 2016). However, such studies entail greater resources, a broad range of expertise, and most importantly, greater continuity of research funding, than the cross-sectional or 'snapshot' surveys that are more typical of research on drug use in recreational settings across Europe.

The impact of research on drug policy and practices matters greatly, but is hard to capture directly. The mass of often contradictory and/or complex statistical data available on drug use across leisure space and times means that policy-makers rarely look directly at academic papers (Stevens, 2011, p.56; Ritter & Lancaster, 2013), and they seldom consult exploratory and ethnographic drug studies producing primarily qualitative data (Stevens, 2011). Aggregated quantitative materials (in the form of infographics for example) are often preferred, as they are deemed to help control uncertainty and overcomplexity in drug policy development. Yet rarely is sustained and specific consideration given to how European drug statistics are produced, despite our era of big data and data science critiques (Kitchin, 2014).

Methodology

The project on which this chapter draws was commissioned by the EMCDDA. A key aim was to identify knowledge gaps on drug use in recreational settings across EU member states. We explored the development of existing monitoring tools through 'integrating new data sources and novel measurement methodologies' (EMCDDA, 2017, p.1) to help close identified knowledge gaps. For example, we considered the burgeoning online self-report TPS of recreational drug users (EMCDDA, 2018, in press). Our main data sources were academic studies using in situ TPS on drug use among those frequenting recreational settings across EU member states, and the data gathered by the EMCDDA on this topic for the period 2013–2016. We developed a critical stance towards in situ TPS and produced a roadmap identifying innovative best practice through the selection of a subgroup of national research endeavors. In this chapter, we focus specifically on issues of definition and conceptualisation (specifically drug and population inclusion/exclusion) in TPS research, as areas ripe for sustained reflexive consideration.

Findings: definitional and conceptual challenges

In our introduction, we situated research on drug use within broader debates about the social construction of statistics and the contested role of evidence in drug policy-making. We now examine specificities by further discussing the concept of drugs; critiques of night-

time economy (NTE) research; and issues surrounding which populations, and which places, spaces and times are targeted by in situ TPS researchers².

What is a drug? Using critical drug studies

By researching drugs, we are continuously engaging with and shaping the very concept of a 'drug', understood by critical drug theorists as a hybrid of pharmacology and politics (Derrida, 1993; Tupper, 2012). Those who prefer qualitative approaches to drug research are understandably wary of using survey tools that allow limited space for reflexive, critical and political considerations. One way forward is to ensure we openly engage with how definitions and concepts—that is, epistemological concerns—permeate research processes, practices and outcomes. These concerns are sometimes thought of as territory reserved for social theorists and critical writers. However, they are crucial for those who wish to design robust and innovative quantitative drug research tools. So, how do these concerns play out in relation to TPS on drug use?

Familiar 'traditional' illegal drugs such as cannabis, cocaine and MDMA/ecstasy remain the focus of both GPS and in situ TPS across Europe (with the addition of the two most prevalent legal drugs, tobacco and alcohol). State-by-state agreement with, and adherence to the global system of drug prohibition and (some) legal regulation act as a form of meta-standardisation, making it possible to compare prevalence data across time and between EU member countries (EMCDDA, 2017). However, the appearance of the apparently distinct group of substances (i.e. NPS) challenged the status quo in terms of drug survey questions. How were we to capture the use of largely unfamiliar psychoactive substances in recreational settings? Should we produce a long list of chemical formulations and tick off those that participants have used? Or should we ask survey participants about NPS as if they were a distinct category to more familiar 'drugs', then request further information of the specific NPS where appropriate? Measham and Newcombe (2016) suggest NPS are subsumed into existing drug categorisation systems, which includes stimulants, empathogens, psychedelics, dissociatives, cannabinoids, depressives and opioids. Yet without widespread drug checking, users (and indeed researchers) may not know what they are taking, and therefore in which category to place them. The practical aspects of survey research, such as keeping survey sheets to a feasible length (two sides of A4 paper, or 10–15 minutes when using electronic data capture devices), become unwieldy as in situ TPS participants and researchers grapple with categorising potentially unfamiliar NPS.

The low NPS prevalence in recreational settings, alongside user ignorance as to what they are consuming, make NPS hard to incorporate into in situ TPS on illicit drug use. Where NPS are included, coverage is not always comprehensive and is dependent on the definition of NPS by the country, region and/or research group in question. In Belgium for example, the target population for the VAD Nightlife Survey 2015 were Flemish partygoers who included both users and non-users of illicit drugs (Rosiers, Möbius, & Schrooten, 2016). Based on the results of the Nightlife Survey 2015, NPS were found to have very low prevalence rates: 88.9% of the respondents reported never to have used them. Of those indicating lifetime use, 7.7% reported not having taken any NPS in the past year and 3.4%

² In our EMCDDA report (2018, in press) we explore in depth the positive and negatives of combining self-report surveys with new and emergent forms of drug monitoring data such as wastewater analysis. We also discuss the potentialities of mixed method studies for monitoring drug use in recreational settings. However, due to space constraints, in this chapter we have concentrated on the findings most relevant to this book's theme of place and space in drug use, markets and policy.

reported last year use (N=26). Rosiers et al. note that some NPS, such as ketamine and GHB, had been present in local nightlife scenes since the 2000s, but that other newer psychoactive substances, such as synthetic cannabinoid receptor agonists (SCRAs), were not included in TPS.

Discussions of the place of 'drugs' in European drug research, policy and practice landscape alerts us to many definitional, conceptual, methodological and ethical challenges (Chatwin, 2017; Potter & Chatwin, 2017). Reflecting on definitional and conceptual issues around 'drugs' for TPS specifically generates conundrums about which drugs we should and should not include in the surveys. One example is the inclusion (or otherwise) of pharmaceutical medications. The emergence of benzodiazepines for purchase on the clear web and on darknet sites, and of a youth-orientated 'Xanax culture', took many European survey researchers by surprise. In situ TPS struggled to capture such trends because the lists of drugs asked about in recreational settings research rarely included medications. Here, critical engagement with sociological theory about broader societal and drug use trends, such as the impact of pharmaceuticalisation on recreational drug use among young people (Quintero, 2012) is helpful, rather than the unreflexive use of existing TPS measurements.

Drug use in recreational settings vs. recreational drug use

Using a drug in a recreational setting does not necessarily mean the user is best defined as a recreational user. The use of cocaine powder in leisure times/spaces can become problematic for some individuals, and so we cannot assume that targeting recreational settings is proxy for targeting 'recreational users'. Given this, in situ TPS also gather data where possible on prevalence, use patterns, health harms experienced, and visits to emergency departments, helping to capture any (emergent) problematic patterns of use among those frequenting recreational settings (Trimbos Instituut, 2016). Again, this helps identify differences and similarities between drugs and between user groups. Crucially, while largely different groups with differing needs, there are some overlaps which suggest that recreational drug users (RDU) and problematic drug users (PDU) may, in specific recreational locales, be best placed along a continuum of concern. Research on the use of GHB/GBL among men who have sex with men (MSM) attending gay-friendly nightclubs and nearby specialist drug clinics is one example of this continuum (Measham, Moore, Wood & Dargan, 2011; Moore, Dargan, Wood & Measham, 2013; Hakim, 2018).

Typologies of the characteristics of drug users in recreational settings, developed from TPS data, capture diversity, identify potentially vulnerable groups, and enable better designed interventions relevant to specific groups, especially those on the continuum of concern (Trimbos Instituut, 2016). TPS on drug use in recreational settings undertaken in Germany, for example, identified characteristics of drug users to develop user group typologies (Hannemann, Kraus & Piontek, 2017). The research by Hannemann et al. focused on dance music events, was linked to existing drug prevention projects in nightlife settings, and incorporated 1571 participants across 37 club nights and music festivals, who filled in questionnaires at the events. This sample was sufficiently large to enable more detailed statistical work, including 2-6 latent class analyses based on 12-month prevalence rates, and compared on 30-day drug use, concurrent drug use, drug sources, and consumption of NPS. The study confirms that Germany's dance music nightlife attendees have an affinity for drug use. However, the analysis produced four different types of drug use patterns within this 'single' population. The smallest group (11% of users) were profiled as 'Unselective' in that they tended to have the riskiest use patterns, and the greatest

likelihood of combining substances. Hanneman et al. highlight this group as causing the most concern, and who are most in need of support. There is considerable advantage, then, in developing statistical typologies, which can in turn be enhanced by triangulation with qualitative methods (such as in-depth interviews with those who fit differing profiles) to ascertain the meanings, motivations and consequences of these various substance use patterns. Pill/powder checking services, for example, would best be aimed at Hanneman et al.'s 'Traditional' user group (37%), who preferred familiar illegal drugs such as MDMA. Interventions around the risk of polysubstance and polydrug use would be best aimed at the Unselective group that is the smallest (11%), but are causing the most concern because they are unselective about their drug consumption.

Producing robust data on the risks and harms of drug use in recreational settings through in situ TPS and other monitoring activities contributes to the evidence base for localised, specialised, and even real-time harm reduction interventions. Yet in keeping with our critical approach to drug knowledge production processes, we cannot ignore the near absence of survey questions on the pleasures of drug use, such as the energetic and euphoric effects of MDMA use reported by users at raves (Ter Bogt & Engels, 2009). Qualitative researchers have long recognised the centrality of pleasure, beyond cost-benefit theorisations, to our understandings of drug use (Duff, 2008; Dennis & Farrugia, 2017). When undertaking in situ TPS, one response to this recognition is to incorporate questions on the pleasures of drug-taking, with equal weight given to the risks and harms of drug use in recreational settings. The more systematic inclusion of pleasures in TPS would, for example, advance our understandings of drug prevalence data and of emergent drug trends.

Recreational settings

A further conundrum relevant to the spaces and places of drug use emerges in relation to how recreational settings are understood within in situ TPS across Europe. The conundrum is that those recreational settings deemed to be risky, involving participants that are assumed to be at risk themselves, are those settings most likely to be the focus of TPS. Nordfjaen, Bretteville-Jensen, Edland-Gryt & Gripenberg (2016), for example, understand nightlife settings in Norway as inherently high-risk. Using in-situ self-report TPS and blood alcohol concentration (BAC) data, they further identify high-risk subgroups within 12 popular licensed premises in downtown Oslo. It is not clear why this area of Oslo was chosen, nor why the 12 premises were chosen beyond their 'popularity', and perceived riskiness. Recreational settings not judged to be risky, or deemed unlikely to harbour drug-using participants, are least likely to be the focus of TPS. In addition, those recreational settings that are hard for researchers to access are often excluded from TPS altogether. For example, afterparties, defined as any party in a private 'closed' domestic space taking place after participants have attended a (typically dance) music event, are the site of drug-using practices and friendship group interaction (Pennay, 2015). As recreational settings, afterparties are rarely amenable to drug researchers and seem unsuitable for in situ TPS research, not least in relation to representativeness, given that most afterparties require a personal invitation³.

Commonsense choices about recreational settings across Europe and beyond enable a certain degree of comparability between those EU member states that do undertake

³ Online survey platforms are one solution to this conundrum about drug use in closed domestic settings.

targeted population surveys in recreational settings⁴. Surveys of those attending music nightclubs within urban centres are common. Music festivals enjoy the same attention. However, it is worth noting that many young adults do not frequent nightclubs or music festivals, enjoying their leisure time in different recreational settings such as football stadiums or shopping malls. Hence, we need more coherent definitions of recreational settings for drug use, as well as studies in a broader range of those settings. Existing evidence is clear that those who frequent night-time economies (NTEs) are more likely than the general population to use drugs (Järvinen, Demant & Østergaard, 2010). From GPS subsections, more frequent attendance at bars and nightclubs is associated with more recent drug use (e.g. Lader, 2016)⁵. NTEs have been the focus of much targeted population survey research across Europe and historically, this research has focused on large cosmopolitan cities. The NTEs of medium-to-small towns feature less frequently in NTE research, although there are notable exceptions (e.g. Rosiers et al., 2016).

Variability between European member states' NTEs means that the comparability of European survey research may be undermined, unless such variability is acknowledged (EMCDDA, 2018 in press). The conceptualisation and measurement of drug use by in situ TPS of specific types of NTE venues (pubs, bars, nightclubs, but also live music spaces) can also be reflected upon and improved. Studies attempt to adopt common methodologies, and repeat 'snapshot' studies of the same locales (such as specific NTE venues) where possible. However, rapidly changing NTEs can make repeat studies difficult as venues change hands, shut down, or refurbish and reopen for a different use of the premises and/or clientele. Gathering contextual, longitudinal data about continuity and changes in types of NTE venue, before TPS are undertaken, would help capture the specifics of European leisure spaces and times. Definitions of what counts as a nightclub venue may vary greatly across studies, with research often based on insider or partial-insider knowledge of NTE venues, specific nights being promoted, and the clientele attracted. This definitional uncertainty renders regional and country-level comparisons potentially problematic. Indeed, as McGrath (2016) claims, 'The dividing line between nightclubs and late-night bars continues to be blurred, with no distinction between these different types of outlet by the licensing authorities or, indeed, the industry itself' (np). Where possible, clarity around defining pubs, bars and nightclubs is crucial in TPS research given the complexity of contemporary NTEs, and the enduring importance of music, alcohol and drug consumption relationships (Hesmondhalgh, 2013).

Targeting populations

Dance music fans who attend nightclubs are more likely to be prolific polydrug users than those attending other NTE events (Measham & Moore, 2009). There have been many single, dual and multi-site qualitative studies of drug cultures relating to the consumption of electronic dance music genres (e.g. House, Techno, Trance, EDM), alongside decades of TPS of drug use among attendees of dance music events across Europe. These studies consistently highlight that use of drugs is higher in venues playing dance music than in the general population and/or compared to other NTE venues. Therefore, committed clubbers who are passionate about dance music may be a distinct subgroup of those people who attend bars, pubs and 'normal nightclubs' playing non-dance music. As Van Havere, Vanderplasschen, Lammertyn, Broekaert & Bellis (2011) note, TPS need to include night-time venues playing music genres other than dance.

⁴ Not all EU member states include questions about drug use in recreational settings in their national self-report GPS (EMCDDA, 2018 in press)

⁵ In the past month is used as a standardised proxy for 'recent' use.

Older people, women, those with low incomes, black and minority ethnic populations, and people with disabilities are often excluded from NTE spaces such as nightclubs (e.g. Søggaard, 2017). Few in situ TPS of drug use in recreational settings explicitly reflect on how age, gender, socioeconomic status, ethnicity and disability shapes participation in these settings. Such exclusion is of concern because, without researcher reflection, spatiotemporal relations and identity-based participation/non-participation become embedded in the statistical evidence base (Walby et al., 2017).

Rhythmic analysis undertaken by critical social geographers offers interesting insights here as it draws attention to the fluid nature of NTEs (Rowe & Bavinton, 2011). Rhythmic analysis involves making systematic observations to produce data for statistical analysis on how people 'flow' through NTEs. These flows are shaped by the age, gender and ethnicities of NTE customers and combine with spatiotemporal dimensions, such as opening hours and the visible presence of surveillance technologies and the police (Schwanen & Kwan, 2012; Schwanen, Van Aalst, Brands & Timan, 2012a; De Backer, 2018). Rhythmic analysis ensures temporal considerations (e.g. early, mid- and late-night practices) are not forgotten, as they often are when the places and spaces of drug use are foregrounded. The interdisciplinary pan-European ALAMA project team note that 'Previous studies have failed to capture the dynamic aspects of nightlife drug use, both in the short-term (before, during, and after the club) and the longer-term (changes over time)' (Trimbos Instituut, 2016). The ALAMA project (2016–2019)—part of the European Research Area Network for Illicit Drugs (ERANID)—addresses some of the issues we raise here by using momentary or 'real time' data capture, long-term, subjective and biological data capture, and comparative perspectives⁶.

Beyond NTE research: other recreational settings of interest for in situ TPS

Music festivals – particularly dance music festivals – have become a key recreational setting in which to locate drug research. These festivals can be loosely defined as public, music-based leisure events involving substantial numbers of people congregating outdoors and consuming a range of legal and illegal drugs. Those attending music festivals – which have grown in number and size over the last decade or so throughout Europe – understand these recreational settings as spaces/times in which to experiment and/or consume a greater amount of those drugs with which they are familiar (Bennett, Woodward & Taylor, 2014). Music festivals attract people whose patterns of use may range from experimental use, occasional recreational use, regular recreational use to problematic use. Drug use may be compressed into a relatively short period, so occasional recreational use becomes daily use for the duration of the festival. This is also the case for those who spend time at holiday resorts that have a nightlife scene conducive to drug use and experimentation, such as Ibiza (e.g. Bellis, Hughes, Bennett & Thomson, 2003).

It is worth noting that only relatively affluent young people can afford to travel to party destinations that include European music festivals (e.g. Amsterdam Dance Event, Creamfields, Tomorrowland), specific nightclubs in European cities (e.g. Amsterdam, Brussels, London) and European holiday resorts. The increased mobility of some young people for work and play, alongside the globalisation of the entertainment industry, demands a broader range and scope of TPS, specifically but not exclusively, in popular tourist destinations in Southern Europe (Hughes, Bellis & Chaudry, 2004; Kelly, Hughes &

⁶ See also www.club-health.eu and www.safernightlife.org

Bellis, 2014; EMCDDA, 2012, 2012a). Further, the nationality of TPS participants cannot simply be assumed by their presence in a locale. In a targeted survey of gay-friendly clubs in London for example, multiple national identities of participants were noted (Measham et al., 2011). This suggests nationality should be included in in situ TPS research alongside age, gender, ethnicity, sexuality, disability and socioeconomic status (e.g. occupation, income bracket) as a matter of routine.

Drug use also occurs at illegal raves, which are unlicensed gatherings of people dancing to a series of amplified repetitive beats, as defined in the UK Criminal Justice Act 1994. These events are rarely included in those in situ TPS studies that feed into the EU's drug monitoring activities. While many across Europe saw the growth of licensed nightclubs and commercial dance music events drawing on warehouse rave aesthetics as signaling the end of the illegal rave, this is far from the case (Griffin, Bengry-Howell, Riley, Morey & Szmigin, 2016). In London, the Metropolitan Police have noted a rise in the number of unlicensed parties they attend and attempt to break up (Guardian, 2018). This suggests that the closure of licensed dance venues for residential and commercial development is driving a return to raves. As with afterparties in domestic settings, researcher access is the main barrier to including illegal raves as recreational settings in TPS. Unlicensed event organisers are wary of engagement with researchers who may be perceived to be 'part of the establishment'. This means the need for partial insider knowledge about such events is even greater than for those who concentrate on licensed events in NTEs. Further, there is no agreed working definition of a 'rave' beyond the legal definition offered above. This in turn makes standardisation of research instruments within and across EU member states harder to achieve.

Private, domestic spaces as recreational settings

One of the most hidden populations of drug users within recreational settings are those who party within private, domestic settings. Some people frequent leisure spaces (bars, nightclubs, festivals) and choose to continue to use drugs at what are known as afterparties. Afterparties—often associated with dance music cultures—typically consist of groups of friends listening to music, socialising, and using drugs for hours (or sometimes even days) after they leave the main event. Given difficulties around access to such populations, and the ethics of undertaking drug research in private, domestic spaces, afterparties are yet to be surveyed in any systematic way. Qualitative research, using innovative ethnographic methods, has so far proven to be more fruitful in understanding how private, domestic spaces may also be recreational settings for drug use across Europe (Ravn & Duff, 2015). The same access issues apply to other types of parties that occur within private domestic settings, including student parties (in university housing, or private rented accommodation); dinner parties where friendship groups gather to eat food, drink alcohol and use drugs; and gay sex parties.

The places, spaces and times of European elites at play

Those in the top echelons of society are unlikely to be captured by in situ TPS in recreational settings, primarily due to difficulties accessing leisure spaces in which European elites socialise (Network, 2018). The City of London for example, historically a key global financial centre drawing workers from across Europe, is renowned for its workers' use of cocaine (Quinn, 2017). London was ranked first in wastewater analyses for weekday cocaine use, but has since been usurped by Barcelona, and Swiss cities such as

Geneva and Zurich (EMCDDA, 2016, 2018a)⁷. Little, if any, TPS research has focused on elite locales and/or populations. This dearth of data adds to concerns about existing TPS reinforcing assumptions about drug use within and across member states: certain recreational settings are deemed more 'problematic' than others by authorities and researchers, most obviously illegal raves/free parties, music festivals, (some) nightclubs, and dance music events. Those working in, for example, central business/banking districts, frequent specific configurations of bars, pubs and clubs that are busier during the working week than at weekends, and we suggest these be targeted as important recreational settings for the more privileged.

Conclusions

In this paper we argued that statistics matter greatly given their role in shaping understandings of, and responses to 'the drug problem' in Europe. As Miller, Chikritzhs, Droste, Pennay & Tomsen (2017, p.36) note, 'Effective and lasting policy change is dependent upon independent research from an active and collaborative community of scientists which constructively support, critique and expand the evidence base.'

Supporting, robustly critiquing, and carefully expanding the drug survey evidence base, while acknowledging the power relations at play in its production, is crucial for researchers, for policy-makers, and for people who use drugs. Given their enduring popularity as a means of producing data on drug use in recreational settings across Europe, we focused here on in situ targeted population surveys. Reflective research practices around definitional and conceptual issues emerged as one way to produce more meaningful data both to add to, and to question our existing knowledge about drug use in recreational settings. We suggested that reflecting on how 'drugs' are defined, labelled, and included (and excluded) on TPS research instruments would be in keeping with developments within European drug markets, such as the emergence of online purchasing of pharmaceutical medications on the darknet. We also suggested that targeted surveys focus on a more diversified range and previously hidden populations. This would change how 'recreational settings' might be conceptualised within drug survey research, and include hitherto under-researched spaces, places and times across Europe.

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⁷Details available at <http://www.emcdda.europa.eu/topics/pods/waste-water-analysis#panel2> and at <http://www.emcdda.europa.eu/topics/pods/waste-water-analysis>

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