A Comparative Analysis of Drug Policy:
Exploring types and culture in European countries

Siobhan Callaghan

MPhil

University of York

Social Policy and Social Work

September 2022

Abstract

This research sought to explore the use of international comparisons in the field of Drug Policy, and the utility of such approaches when considered alongside the socioeconomic and cultural contexts within which policies are implemented. Three key research questions (RQs) were identified: 1) What can be understood about the relationship between drug policies, drug-related outcomes, and the national cultural context in which they exist?; 2) How can cross-national variation in types of drug policies be better understood?; 3) How can variation in cultural context (societal values) be explored within cross-national drug policy research? For RQ2, Fuzzy-set Ideal Type Analysis (FsITA) was used to develop a typology of national drug policy regimes for 30 European countries. This approach grouped the differing approaches to national drug policy and placed the countries within it, in order to aid further comparison and understanding of drug-related outcomes. For RQ3, the research further explored the idea that the cultural context in which a drug policy is implemented may be of significance in better understanding the impact of such policies. Utilising a comparable measure of 'national culture' to assist in understanding of this was explored. In seeking to answer question 3, Regression analysis was explored as a method to consider drug related outcomes alongside the key variables of culture, drug policy type, and key socioeconomic factors. The regression analysis was unfinished and is not presented in this thesis. The key contribution of this research to the literature is presented in Chapter 6, with the FsITA types presented, and placement of the countries included in the research discussed. It is suggested that the approach taken to developing a set of 'types' of drug policies may be of use to researchers, and the FsITA approach provides a replicable methodological approach, based on key dimensions of national drug policy strategies.

Contents

List of Tables

List of Figures

Acknowledgements

This research has been interrupted by many difficulties in my personal life, which I want to mention briefly here. Learning how to live with depression is an ongoing battle; it has affected my confidence in my abilities, and sapped energy and motivation from me; however, it is something which has also been lifted with mini successes in my research along the way, and the underlying urge to continue with this project has persisted throughout, despite being unable to complete this in full. Covid-19 was a tremendously challenging time for many people, but for me and my family that period was overshadowed with our own battles: in brief, witnessing the impact of an abusive relationship on a loved one, dealing with drugs, physical and emotional abuse, and the unexpected removal of their children, who then came to live with us. I struggled to return to this research after this period, having witnessed the impact of drugs on the life of someone I truly loved. It led me to reflect deeply on the worth of my research, and in turn my enthusiasm faded. However, seeing the phenomenal progress made by this person since then, and the happy end to the story, gave me motivation once more to work towards submitting this work, and has allowed me to move forward. .

I feel very lucky to have been given the chance to undertake this thesis and want to thank a lot of people for their constant support and encouragement. Firstly, my supervisor Dr Naomi Finch, who has provided so much more support than she was ever required to. I am so grateful for all the advice and guidance with this research, and compassion shown with personal issues when things did not go to plan. I would also like to thank Dr Gernot Klantschnig and Professor John Hudson for

their guidance too, and Dr Stefan Kühner for encouraging me in the early stages of this research during my MRes. I am grateful to everyone who has helped at the Department of Social Policy and Social Work at the University of York, now School for Business and Society, especially those I have been privileged to work with on other projects during this time. I would also like to thank my viva examiners, Dr Antonios Roumpakis and Dr Karen Duke, for making the viva a positive, useful, and enjoyable experience, and for their feedback and comments which have helped in the completion of this research. Finally, thanks to the White Rose DTC, whose funding enabled me to carry out this work.

I want to thank the wonderful friends I have made in York, who have been a huge source of support: Dr Eppie Leishman, Dr Jed Meers, Stephen Jones, Dr Tamlyn Ryan , Dr Kate Stephenson, Alice Park, Dr Natalie Koptyko and Lyle, and Antonios, Kalli and Miley - thanks for all the coffee's, brunches, dinners, gigs, walks, and drinks. Extra special thanks to Eppie for being an incredible friend, always, who has been there for the good and bad times and helped me believe in myself – which is no mean feat! Thanks to my Middlesbrough friends too: Clare, Rachael, Rick, Jon, Linzi, James, Jenna, Tom, Liz, Liam, Holly, Laura, Paul, and all my dog walking pals on 'the avenue of trees' who have all had to listen to me talk about this for many, *many* years!

Thanks must also go to Rachael Maskell MP for her inspiration and encouragement too, and all my wonderful 'Team Rachael' colleagues for helping me get to the end: Michael, Sandi, Danny, Laura, Denise, Margaret, and Kate. I am very lucky to be part of such a great, hardworking team, who make amazing things happy for people in York, and elsewhere!

Finally, and most importantly, I would not have reached this point without my amazing family. Huge thanks to: my parents, Maire and Stephen, who are without questions the best people I know, and have gone above and beyond to support and encourage me with this – and everything else I have ever done: I am so lucky to have such wonderful parents; to my brother Paul and his partner Stacey for always knowing what to say to help, supporting me with my mental health challenges, and inspiring me with their own work; and my sister Anna and her brilliant children Bradley, Elsie, Jacob, and Cassie, for lifting me up on both the good and bad days – I don't know what we would do without them. While I have a huge extended family,, special thanks must go to the Hubble's, especially my auntie Mary and uncle Patrick, for everything they have done to help me get to where I am, not least giving me a home from home with them in York, and always being so incredibly generous and supportive. Lastly, I have to mention my dog Harvey, who has become my unofficial therapy dog over the past few years and kept me going with routine, walks, and companionship.

Declaration

I declare that this thesis is a presentation of original work, and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

Chapter 1

1 Introduction

The well-known rhetoric which states that drugs[1] are dangerous and in need of control has dominated discussions around drugs and drug policy for much of the last century (Buxton 2008; Seddon 2010; Trace 2011; MacGregor 2013; Babor et al. 2018; Ritter 2021). Drugs, and the problems that are seen to accompany them, are a major concern to governments across the world (Babor et al. 2010; Tiberghien 2017; Babor et al. 2018; Ritter 2021). It is well-known that, despite the measures in place enabling global governance of drugs, national policy responses to drug-related problems have varied (Stevens et al. 2019). In seeking to explore what this variation means in terms of the outcomes observed, however, it is also widely observed that countries adopting policies which are considered similar to other national strategies do not necessarily experience the same kind of impact when looking to drug-related outcomes such as drug use, youth use of drugs, drug-related crime, or drug-related deaths (Callaghan 2015). Explanations for this variation, both in terms of policy adopted and the outcomes observed, have been theorised; common explanations include many references to differences in the cultural or socioeconomic context, which in turn are thought to influence the viability of any learning which can be done in comparative analyses in the field. It is also often the case that a particular 'approach' or 'type' of drug policy is assigned to a country, or set of countries, despite there being no agreed-upon method in which to typologise such different approaches to drug policy development nationally.

[1] The terms 'drugs' and 'drug use' throughout this research will be used only to refer to psychoactive substances which are generally prohibited and controlled under legal regulations/criminal law, excluding alcohol and tobacco. Where reference to licit drugs is made, this will be made clear to the reader.

The structure of this thesis is as follows: Chapter 2 introduces the field of Drug Policy and the key areas of consideration identified by the researcher, providing the first of three literature reviews, continued into Chapters 3 and 4. In each of these chapters, key research questions are identified for further consideration, informing the empirical work which follows.

Chapter 2 begins with a discussion of drug policy, focusing on how drug-related harms are observed in the literature. Alongside the complexity in identifying what drug-related problems are experienced by different countries around the world, the politicisation of drug policy is also discussed. This is followed by consideration of how cross-national comparison has sought to consider these issues, and the methodological challenges in doing so. Finally, broader contextual considerations are explored within the drug policy literature, which includes references made to cultural, socioeconomic, and structural policy-related factors which may also impact on drug policy development and evolution. The first research question identified from this exploration of the literature is: RQ1: What can be understood about the relationship between drug policies, drug-related outcomes, and the national cultural context in which they exist?

Chapter 3 moves on to explore comparative and international research within the study of Drug Policy, considering the utility of comparison in this field and how this has been approached across the wider social policy literature. The global governance in place for 'drug control' is explored initially, followed by examples of national policy divergence from the supranational agreements in place. Previous research which has sought to identify and group countries by difference in their national drug policies are then presented, as well as consideration of the use of typologies in the

field of social policy wherein this approach is well-established. The second research question identified builds on this discussion: RQ2: How can cross-national variation in types of drug policies be better understood?

Chapter 4 builds on the first two chapters to explore a further issue which arose from the previous literature reviews: the impact of cultural context on drug policy and related outcomes. The study and conceptualisation of culture across different fields is initially explored, followed by a discussion of key works which have sought to assess the impact of 'culture' in varying ways via qualitative and quantitative methodologies, in the fields of social policy and cross-cultural business and management. Given the limited discussion of how to define and measure the impact of cultural context within the field of drug policy, the third and final research question identified is: RQ3: How can variation in cultural context (societal values) be explored within cross-national drug policy research?

The research questions identified in the three literature review chapters are highlighted in Chapter 5, alongside a discussion of how each of these will be addressed in the course of this research. The first research question will be answered by initially addressing research questions 2 and 3, with the findings of these being required in order to address the initial question. The need and justification for a comparative, cross-national methodological approach is presented, with the methods for each stage set out. Firstly, in order to address RQ2, Fuzzy-Set Ideal Type Analysis (FsITA) is outlined as the approach adopted to build a typology of Drug Policies. Secondly, to address RQ3, Jo's (2010) method of building a quantifiable measure of culture using stable societal

values using data from the European Values Study (EVS) and World Values Surveys (WVS) is adopted. Finally, regression modelling is selected to answer RQ1, which includes the development of a new dataset to explore drug-related outcomes (DV) alongside socioeconomic variables, the FsITA typology of drug policies, and the societal values identified for the measure of culture. The cases used are 30 European countries, which are each placed into the fuzzy set ideal-type analysis, cultural analysis, and regression analysis.

Chapter 6 presents the finding's chapter, setting out the development of the typology of drug policy regimes using FsITA, and some preliminary analysis on the country groupings alongside previous typologies discussed in Chapter 3. Chapter 7 is unfortunately incomplete, and as such presents a limited account of the preparation for developing the culture measure and building the dataset for the regression. The discussion intended for Chapter 8 was not possible due to the omission of the regression, and as such the discussion of the key findings – the typology – has been presented in Chapter 6. Chapter 8 is presented as the concluding chapter, and draws the paper to a close, considering the key findings of this research, discussing strengths and limitations of the approaches adopted, and the utility of the contribution to the field.

Chapter 2

2 The trouble with drugs: The challenges of conceptualising drug-related problems and pursuing cross-national comparative research in the field of drug policy

2.1 Introduction

Drug policy is often discussed as being a means to control drugs, and prevent the harms associated with them, whether that be in their production, trafficking, sale, use or misuse[2] (Babor et al. 2010; 2018). However, it is well documented that variation in approaches to policies designed to manage drugs-related concerns are observed cross-nationally (UNODC 2020). In order to examine variation in policy responses, identifying and defining the problems thought to be associated with drugs, and thus why they need controlling, is first necessary. This chapter will seek to critically explore the various ways by which drugs are discussed as being problematic through a comparative and international perspective.

2.2 Defining harm: Exploring research and data on drug-related problems

Trying to ascertain whether there can be a clear and concise outlining of what the 'drug problem' fully encapsulates, cross nationally, is challenging given that how 'problems' related to drugs are observed may vary depending on a range of risk-factors within national and international contexts. The harms associated with drugs are far-reaching, thus conceptualising the problems related to drugs is necessary; but even this can of course be done in many different ways. Within this

[2] Drug use and misuse are used to differentiate between data which measures *all use (drug use)*, and *problematic drug use (misuse) which is* often presented in the data differently "to describe the point at which psychoactive substances cause problems for the user or for society" (Babor et al. 2010: 9).

research, breaking down the vast range of drug-related problems into smaller more concise clusters will be explored initially. This will be done through a discussion of the literature around drug problems and harms associated with *the consumption of drugs* and the *production, trafficking, and sale of drugs*; these groupings being chosen due to their general acceptance as the broad arenas within which many key problems lie for Drug Policy development (Mosher and Akins 2007; Buxton 2008; Babor et al. 2018). Alongside these discussions, it is important to note that within these areas of concern there exists further variation in what constitutes a *drug-related problem* in terms of the strategies adopted within national drug policies in the context of regional and global governance of drugs. These problems will also be briefly explored to highlight the subjectivity involved in discussions of how to address drug problems via policy responses.

2.2.1 Consumption-related problems

The consumption of illicit drugs is considered to be a global phenomenon, and major concern for most governments around the world (Bennett & Holloway 2005; Hughes et al. 2006; Babor et al. 2010; Coomber et al. 2013; Babor et al. 2018; Ritter 2021). The first challenge in discussing this issue is defining the key terms to be used throughout this research. There are a range of terms used throughout the literature to refer to the consumption of drugs, though the various terms, and their meanings, are not used or defined consistently. It is thought that people who use drugs can do so for very different reasons, while public perceptions of various forms of drug use can also vary in different settings (UNODC 2018). Recreational drug use is often a term used to suggests the use of illicit substances in a way which is not considered to be problematic, or dependence driven, but instead is used socially or to enhance an experience (UNODC 2018). For others, drug

use may be deemed to be ‘problematic’, i.e., they experience harms associated with drugs, such as addiction, dependence, or are diagnosed with a substance misuse disorder (Ritter, 2021). One term often used to express this is ‘drug misuse’, where ‘misuse’ is used as a synonym for ‘problematic drug use’, highlighting the point at which drug use moves on from being classified as recreational, and begins to cause harm to the user or society (Babor et al. 2010). However, elsewhere, this term is also used in the literature to refer to the use of pharmaceutical drugs for purposes which were not intended, or without a prescription from a doctor, which would render their use illicit (Babor et al., 2010). A further example of how a National Government uses the term ‘drug misuse’ illustrates why careful consideration of these terms’ matters. For the UK Government, the terms ‘illicit drug use’ and ‘drug misuse’ appear to be used interchangeably in data collection efforts (Home Office 2013), with all use of controlled substances referred to as misuse under the relevant legislation, the Misuse of Drugs Act (1971).

The World Drug Report (UNODC 2017: 7; 2018: 5; 2020: 5; 2021: 7) notes the “scientific and legal ambiguity” of what differentiates ‘drug use’ and ‘drug misuse’ from one another. Given these ambiguities in the literature, for clarity, the term ‘drug use’ will be used throughout this research, as an inclusive term for any form of drug use (undefined as being specifically ‘recreational’ or ‘problematic'). The term ‘people who use drugs’ will also be used, when discussing those consuming drugs without specification as to whether their use is considered problematic or not. The term ‘drug misuse’ will be used only where drug use has been considered to be problematic, such as where the person who uses drugs experiences harms relating to their drug use.

Global trends indicate that an estimated 269 million people - 5.4% of 15- to 64-year-olds - used drugs at least once in 2018, with 0.7% of those (estimated to be around 35.6 million people) suffering from drug use disorders (UNODC 2020). Use of drugs has increased in the last decade too, with estimates of this increase from 2009-18 thought to be over 12 per cent (UNODC 2020)[3]. Given these trends, it is unsurprising that Governments, national, regional, and supranational, would seek to address these issues.

Looking at national and regional variation around the problems associated with different substances is common in the literature, and points to diversity in the challenges faced (Ritter 2021). For opioids, the global average population use corresponds to 1.2 per cent having used in the last year (15-64-year-olds) (UNODC 2020). Consumption of opioids varies across the world, with North America thought to have a rate considerably higher than the global average at an estimated 3.6 per cent of the population having used opioids in the last year (UNODC 2020). Deaths attributed to overdose were 20.7 per 100,000 population in 2018 data, the majority of which were attributed to opioids (Centre for Disease Control and Prevention 2019, cited in UNODC 2020). Other countries with levels of opioid use higher than the global average include New Zealand, with 3.3 per cent of the population having used opioids in the last year, 2.6 per cent for Near and Middle East and South-West Asia, and 2 per cent in South Asia (UNODC 2020). Estimates show an increase in opioid use in India, with 7.7 million of the estimated 23 million users thought to have suffered with opioid use disorders (Ambekar et al. 2019 cited in UNODC 2020). Though

[3] The prevalence of use is discussed here in the context of a growing global population, with comparisons encouraged to be done cautiously (UNODC 2020); comparability is often noted to be a limitation in any international drug policy analysis, and something which will be discussed throughout this research.

below the global average, Western and Central Europe saw growing numbers of people seeking treatment for non-medical use of pharmaceutical opioids (EMCDDA 2019).

Looking to other types of drug use, amphetamine use was seen to be particularly high in North America (2.3 per cent of population aged 15-64), Australia and New Zealand (1.3 per cent) (UNODC 2020). In Europe, use of amphetamines was estimated at 0.47 per cent of the population, with the majority of countries reporting stable levels here except for Germany and the Netherlands, reporting rates of amphetamine use at 1.2 and 1.8 per cent, respectively (UNODC 2020). The most-used drug was seen to be cannabis, with the estimated annual prevalence being 3.9 per cent of the global adult population (aged 15-64) (192 million) said to have used cannabis in the past year. North America, Australia, New Zealand and West and Central Africa all reported levels of cannabis use considerably higher than the global average, with rates seen to be increasing across South America and Asia (UNODC 2020; 2021). Use of cannabis is thought to have remained relatively stable across Western and Central Europe, with around 1 per cent estimated to be daily users, compared to the global average of 4.7 per cent (over 18-year-old population) (UNODC 2020).

While it is important to note the levels of drug use across varying substances, considering this alone explains little about the reasons policymakers may be concerned about changeable rates of drug use and misuse. The problems associated with drug use are wide-ranging and varied, with differing harms observed depending on the type of drug consumed and patterns of use, as well as the dosage, purity, and route of administration of the substance (Babor et al. 2010; UNODC 2020; Ritter 2021). Central to this is that national variations in the prevalence of consumption of different

drugs may indicate differences in the relative harms and outcomes experienced cross-nationally too. In order to consider the range of harms associated with consumption of drugs, two key areas within which the main problems sit have been identified*: health-related harms* and *social and economic harms*. It is the harms associated with drugs, whether known or assumed, which provide the impetus for Governments to act, to which a more critical discussion will now be considered.

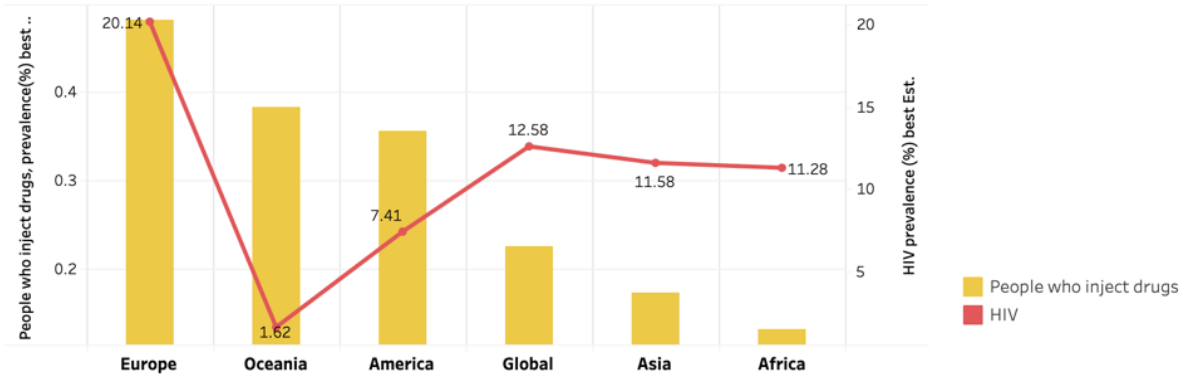
2.2.1.1 Health-related harms

Data on the various health-related problems experienced around the world suggests a multiplicity of concerns relevant to people and policymakers individually, locally, nationally, and globally; these include various issues related to problematic drug use (PDU) (i.e., drug misuse), injecting drug use (IDU), addiction, non-medical use of pharmaceuticals and recreational drug use (Gomis, 2014; Zhang and Chin 2015; Chatwin 2016; UNODC 2016; UNODC 2017; UNODC 2020). Among the many health-related harms associated with drug use are non-fatal overdose, mental health disorders and psychiatric comorbidities, chronic health problems, infectious disease transmission, drug-related morbidity and mortality, and the overall well-being of the user, their families and wider community (Babor et al. 2010; UNODC 2020; WHO 2021). Many of these outcomes indicate that the consequences for individuals engaged in drug-using behaviour are very risky - often harmful - and, therefore, problematic.

The extent to which drug-related harms are observed varies cross-nationally, with the spread and prevalence of these outcomes varying from place-to-place. For example, in recent years Sweden has reported low rates of drug use while simultaneously being observed to have levels of drug-

related deaths that were more than three times the average reported in Europe (Chatwin 2016). A similar situation can be seen in Canada, which also experienced an increase in deaths linked to opioid overdose, with a rise from 8.4 deaths per 100,000 people in 2016 to 11.9 in 2018 (Public Health Infobase 2020, cited in UNODC 2020), despite their relatively low levels of overall drug use (UNODC 2021). While lowering levels of drug use may be seen as a positive outcome, the higher levels of morbidity in these cases are indicative of a complexity in the comparability of countries by drug-related outcome alone. This points to an issue which will be discussed further throughout this chapter: that of 'success' of a national drug policy, and how or indeed *if* this can be measured. Of course, considering usage and harms related to specific substances is also of importance here, to understand which drugs are linked to varying outcomes.

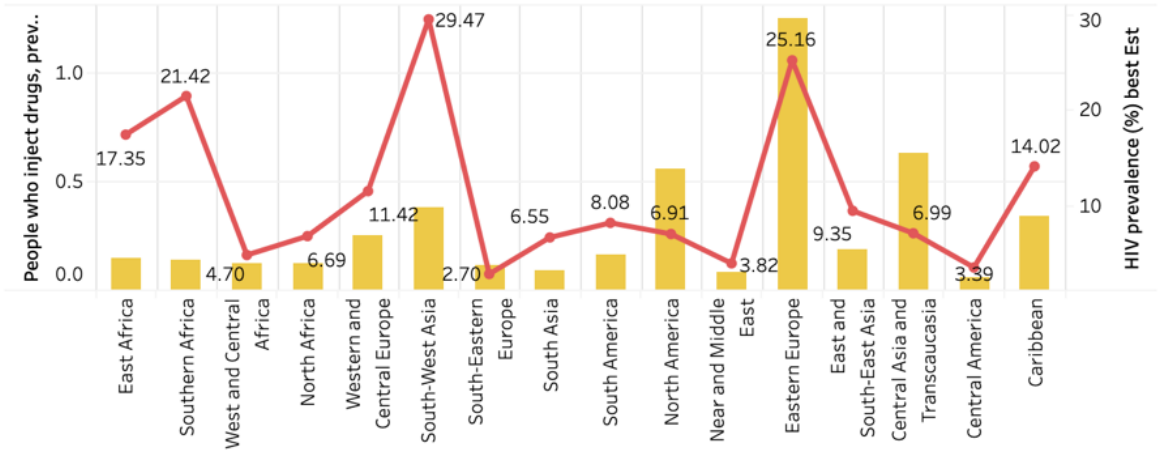
Figure 1: Regional pattern in injecting drug use and HIV among people who inject drugs



In considering the harms of specific drugs, opioids are considered most harmful in terms of the negative health-related outcomes observed by users. The risk factors associated with the high

levels of IDU of these substances are also a further cause for concern given the links to both deaths and the spreading of infectious diseases via this method of consumption (Richardson and Bell 2018; UNODC 2020). In the World Drug Report (2020), it was estimated that for people who inject drugs (PWID) 1 in 8 is living with HIV, half of the population is living with hepatitis C, and 8.3 per cent with hepatitis B (UNODC 2020). **Figures 1** and **2** from the World Drug Report (UNODC 2020), below, show how rates of injecting drug use vary regionally and sub-regionally, while highlighting that levels of HIV do not necessarily correspond to higher rates of PWID (UNODC 2021). The wider trends observed in drug-related national data also point to an uneven cross-national distribution of some of the drug-related health problems detected. These data also indicate that drug-related outcomes are not necessarily directly linked to drug-use alone, with other contextual considerations needed to further explore the possible factors associated with these outcomes.

Figure 2: Sub-regional pattern in injecting drug use and HIV among people who inject drugs



2.2.1.2 Social and economic-related harms

Alongside the well-documented potential health-related harms to those using drugs, there are also the often-stigmatised social and economic harms and their broader consequences which stretch beyond the individual. More common still is reference to the total cost of drug harms, which can broadly include reference to the societal and economic impact of drug use and associated behaviours (Spooner and Hetherington 2004; Duff 2014; Babor et al. 2018; UNODC 2020). Socioeconomic inequalities are among the key concerns listed by the UNODC in their 2020 World Drug Report, alongside poverty, marginalisation, unemployment, and conflict. Health-related harms may be exacerbated by social-harms, especially in the case of accessibility to treatment for drug use and drug use disorders (UNODC 2020). Criminality is also widely associated with drug use, impacting on not only the people who use drugs (PWUD) but the wider community too (Duke 2006; Babor et al. 2010). These key areas of concern will be discussed further here.

The 2020 World Drug Report (UNODC 2020) refers to a range of social and economic protective factors which can be considered helpful in promoting positive physical, social, and mental health, thus aiding in the prevention of substance use initiation. These include safe neighbourhoods, physical safety and social inclusion, quality school environment, access to health care, caregiver involvement and monitoring, health and neurological skill, and coping skills for emotional regulation. On the other side of this, factors considered to increase an individual's level of risk to engage in substance use and possible misuse include poverty, conflict and war, homelessness or refugee status, social exclusion and inequality, neighbourhood disorder, peer substance use and drug availability, mental health problems, trauma, and childhood adversity (UNODC 2020, Booklet

5: p7). Such characteristics, at the national level, are thought to influence patterns of drug use, drug use disorders, and drug-related deaths (UNODC 2020), with research having found relationships between economic hardship and recessions, and increased levels of drug use; this despite an often-decreased income at such times (Nagelhout et al. 2017). In one example, focusing on Luxembourg, it was found that drug-related deaths due to overdose were higher for those in lower socioeconomic positions, with rates reducing alongside increasing socioeconomic status (Origer et al. 2015 cited in UNODC 2020). However, drug use was seen to be higher in high income countries, despite harms of drug use often seen to be higher in countries with lower income status (UNODC 2020).

The relationship between drug use and income is also noted by Pickett and Wilkinson (2010) who found that higher levels of income inequality within a country is related to increased drug use, and drug use disorders. The picture becomes more complex when considering the relationship between economic downturn and drug use, and growth and drug use, with increased hardship, unemployment and poverty linked to higher levels of drug use, and economic growth and urbanisation linked to increases in volume and kinds of drugs consumed (UNODC 2020). Some research has suggested a link between increased social capital at the community-level and a decrease in drug use, regardless of an individuals' socioeconomic position, which coincides with further analyses which have found increased levels of opioid use for those within areas of high social disorganisation and low social capital (UNODC 2020). Barriers to treatment for problematic drug use (PDU) are thought to include social stigma and negative attitudes attached to drug use, as well as national economic hardship reducing the ability to finance such services, with only 1 in

8 people with a drug use disorder thought able to access treatment worldwide (UNODC 2020). There is also thought to be a link between socioeconomic inequality and access to effective drug treatment, with access to, and uptake of, treatment and harm reduction services much less available within less developed nations (UNODC 2020). What is clear is that the relationship between drugs – whether it be use or other related outcomes - and the socioeconomic makeup of a country is likely to be an important factor in further considerations of what interacts on the impact of policy.

While the health-related harms of opioid use have been discussed already, there are also numerous well-documented social and economic harms related to opioid use, particularly relating to the marginalisation and stigma attached to injecting drug use (IDU) (UNODC 2020). Unsafe injecting practices can lead to adverse health consequences for users and others, but it is thought that harms can be mitigated through the use of harm reduction practices (WHO 2021). Such measures may include promoting the use of safer injecting facilities (such as drug consumption rooms (DCRs)), offering drug injecting paraphernalia to users (including needle syringe programmes (NSPs)), opioid substitution therapy (OST) and methadone maintenance treatment (MMT), drug checking, or education programmes (Richardson and Bell 2018; WHO 2021; Ritter 2021). It is thought that the take-up of such services may be limited or avoided due to the social unacceptability of this behaviour and lack of facilities provided to this end: i.e., the safe use of drugs (Richardson and Bell 2018; UNODC 2020; WHO 2021). While this approach has become more accepted around the world, it remains controversial at the supranational level of governance, as will be discussed further in the next chapter. It is also the case that the true extent

of the harms associated with IDU are not fully known due in part to this stigma and discrimination, as well as criminalisation of use which often prevents users from accessing services and thus being unknown to authorities and service providers, or indeed accessible to those conducting research into these phenomena (UNODC 2020).

One of the most well-documented societal issues resulting from drug use, is that of crime and criminal-related activities. Engagement in criminal actions for money to enable drug use is thought to include such behaviours as property crime, theft, shoplifting, fraud, robbery, burglary, sex work, and drug dealing (Babor et al. 2010). Other societal harms linked to drug use include family breakdown, homelessness, low educational attainment, difficulties finding and maintaining employment, financial instability, social marginalisation, poverty, public disorder, and workplace problems (DeSimone 2002, Zlotnick et al. 2002, Brown and Riley 2005: in Babor et al. 2010; UNODC 2020). The association between drugs and these social harms is multifaceted, though such social disadvantages are linked to drug-use and the related harms (UNODC 2020). Babor et al. (2010) discuss the unidirectional nature of this relationship between unemployment and drug-related problems, with each impacting on the other, i.e., unemployment may lead to drug use, but drug use may also result in unemployment. Crime and public disorder are noted as being a symptom of drug use which present harms to the wider community, potentially impacting on feelings of safety and quality of life (Babor et al. 2010). Community norms are also considered as an important social factor to note, with the normalisation of risky behaviours being linked to the observed increase in prevalence of drug use in some cases (UNODC 2020).

Unpicking the relationships between the social and economic harms thought to accompany drug use and the socioeconomic inequality underpinning much of these issues is complex, with caution needed in discussing and acting on any of the findings noted throughout this section. While drug use can lead to many of the harms noted so far in this chapter, it can also be seen as a consequence resulting from such socioeconomic disadvantage. This is one such challenge presented to the study of cross-national comparative drug policy; unpicking the level to which policy is a response to national drug-related concerns, and in turn how drug-related outcomes are impacted on by the decisions taken by policymakers in national drug policy strategies. It is clear more needs to be understood about the impact of contextual variables on drug related harms and outcomes if the efficacy of differing policy approaches is to be known.

2.2.2 Drug market-related problems

Drugs are themselves a commodity with large markets attached to their production, trafficking, and sale - across a range of platforms, including physical, virtual, or social network-based markets (Babor et al. 2010). The problems to arise from the marketization of drugs are also too many to discuss here in their entirety, with market-related harms seen to include a range of criminal, social and economic consequences. Market-related drug harms may also be impacted by the primary substance produced or consumed nationally; things which differ substantially around the world (UNODC 2020). The spread of what may be considered the key drug-related problems of concern range from primarily domestic concerns for public health and safety due to drug consumption, to one concerned with these issues in the context of violent networks of organised crime involved in the trafficking and sale of drugs (Stevens 2011; Room & Reuter 2012; Gomis 2014).

In discussing some of the key market-based concerns surrounding drugs, it is useful to draw on the reference which is sometimes made to 'consumer and 'producer' nations or regions (Babor et al. 2010; UNODC), with the scale and nature of markets across different parts of the world thought to influence policy responses in terms of drug control (Caulkins and Kleiman 2018, cited in Stevens et al. 2019). In terms of production, farmers of coca and opium are vulnerable to enforcement efforts, with corruption also thought to be a key concern for others operating within these markets (Babor et al. 2010). This may result in economic costs too, but economic benefits have also been observed, with drug markets impacting on wealth of certain nations; historically, Afghanistan, Bolivia, Colombia, and Myanmar have seen drug-based income, particularly regarding opium, yield great economic benefits in relation to their national GDP (Babor et al. 2010; UNODC 2018). Other harms relate to the ecological damage from the production of these crops, and their eradication. Availability of drugs, both physically and economically, is of course another key factor in contributing to the use of drugs, cross-nationally. Looking to those considered 'consumer' countries, key issues observed are often around the selling and use of drugs, with criminalisation also be seen as a result of partaking in drug use, with links to the withdrawal of employment within the labour market, or time away from education (Babor et al. 2010; 2018). This is of course not to say that the production or manufacturing of drugs in one region should, or is not, of concern to countries where the primary focus is consumption of drugs, with the expansion of drug markets around the world thought to be driven directly by the increase of supply in producer countries (UNODC 2018). This in turn can impact on the harms associated with drug use, as an expansion of new psychoactive substances considered to have additional risks enter the market (UNODC 2018).

Criminality, corruption, and violence are also heavily associated with drug markets, with interpersonal violence, gun violence and homicides linked to market-based settings (Babor et al. 2010). Indeed, the illegality of the drug trade is considered to produce harm itself, aside from the health and social harms linked to the consumption of drug use (MacCoun and Reuter 2001a cited in Babor et al. 2010). For example, Room and Reuter (2012) highlight the 35,000 homicides attributed to the trafficking of drugs between Mexico and the US from 2007-2010, while in other countries in Europe much less violence is associated with the illicit drug market. Chandra and Joba (2015) discuss a related issue, which also stresses the inequity of challenges faced cross-nationally, in that strategies adopted in one country or region can impact on the drug-related problems encountered elsewhere. They discuss this in the context of drug trafficking, with a common problem said to be "the balloon effect" (Gomis, 2014; Chandra and Joba 2015: 778) whereby the successful closing down of one route or network can result in the strengthening of, or replacement by, alternate routes. Considering these problems more broadly, the World Drug Report (UNODC 2017) detailed findings to suggest some global trends in changes to the drug market. For example, in 2016 the production of opioids was seen to have increased by a third from the data collected in 2015, with the opioid market also thought to be diversifying and trading in both illicit and diverted licit prescription medicines. The cocaine market was also seen to have increased by 30% between 2013 and 2015, while the small but increasingly fast growth in popularity of trade and trafficking through the *dark net* has been noted in this report too. These changes could in themselves lead to a new host of drug-related problems for nations. Issues related to these markers further

demonstrate the interrelatedness of countries affected by the drug trade, and the juxtaposition of this observed in the reality of the key national concerns of Governments worldwide.

The scope of the harms associated with drugs, whether in their production, trafficking, and sale or as a consequence of their consumption, are clearly vast and variable depending on the nature of the primary drug-related challenges faced nationally. While this section has sought to consider a wide range of the key harms presented by drug consumption and marketisation, the issues touched upon here are by no means exhaustive. So far, the review has sought to consider these key issues in comparative perspective, so as to offer a good overview of the array of challenges facing policymakers seeking to control drugs across the world. The key concerns of those involved in this process will now be further explored.

2.3 Political concerns

Given the multitude of drug-related problems identified so far, it should be of no surprise that these are challenges which have resulted in widespread concern, globally, regionally, and nationally. The potential risks include concerns around the hindrance of worsening drug problems to national development and the likely burden and strain that will be put on social and economic systems, subsequently hampering the progress of other social policies and wider goals too (Bennett & Holloway 2005; Buxton 2008; Trace, 2011). However, for a long time, the overarching goal has been that of 'a drug free world', globally. This narrative still holds weight and support across some nations, while for others the emphasis has shifted in more recent years. For Costa (2007; cited in Seddon, 2010: 2) the idea of a drug free world could be considered akin to

aspirations to “eliminate poverty, hunger, illiteracy, diseases, even wars”. Thus, there is a notable amount of variation in the approaches taken by governments in seeking to address their respective drug-related challenges, suggesting that national drug policies differ in priorities (Room and Reuter 2012). To briefly outline the range of variance in this policy domain, it is useful to look at different extremes in differentiation of approach: China can be seen to treat drugs primarily as a matter for law enforcement and so prioritise the suppression of trafficking, whereas others (e.g., the Netherlands, Portugal) focus on providing help to drug users and reducing of the adverse social consequences that may be caused by drugs (Gomis 2014; Chatwin 2016). Thus, it is important to consider how drug-related problems are managed by governments in their respective national drug policy strategies. While this is something that will be discussed further in the following chapter, prior to this, it is necessary to consider other ways in which the conceptualisation of drug problems may impact on drug policy developments more broadly.

2.3.1 Morality of drug-related problems

Outlooks towards drugs are also thought to be entangled in issues of morality, i.e., whether their use is right or wrong (Fraser and Moore, 2011; Monaghan 2012, cited in Roberts 2014; Lloyd 2013), which in turn affects the way problems are defined, discussed, and addressed. The extent to which definable drug problems, and the policies implemented to deal with them, are viewed through a lens of ‘morality’ is contestable. For some it is a huge concern, and one which unequivocally impacts on policy responses, with Easton (2012: 155, cited in MacGregor 2013: 228) noting that “[a] towering cultural orthodoxy has been constructed around an accepted view that such substances are evil, a malevolent force that must be eradicated”. Lloyd (2013) points to

research from the Loughborough Media Communications Research Centre (2010) that found the language used in the UK print media to be very derogatory, including words such as 'evil', 'fiendish', and 'thug' to describe drug users. Others note the more-gentle impact of societal perceptions on drugs as a moral issue, suggesting drugs may simply be seen as a 'vice', which in turn affects the way people view the problems caused by them (MacGregor 2013). A good example of this variance is seen by looking at the perceived problems of the use of drugs by an individual. On this topic, Lloyd (2013) notes that problem drug users (PDU) should not be stigmatised or blamed for their circumstances, while others nod to the fear of those with this 'vice', and the potential wider societal impacts of drug use as being an increased risk of crime for users to fund their habit (Lloyd 2013). Most stark was the finding that a significant number of people see PDU as being to blame for the situation they're in (Lloyd 2013).

Alongside these discussions is the issue of the role played by the media on the perceptions of drug-related problems within societies. Within the field of Drug Policy scholarship, the representation of drugs and their associated harms is a big concern for those promoting the increased use of Evidence-Based Policy (EBP) in governmental decisions on how to manage the problems and harms related to drugs (Gstrein 2018). In fact, one of the key questions raised by the UKDPC in their research into the UK's national drug policy strategy was "can anything be done to facilitate a more informed, objective, and less sensationalist debate about drug policy in the UK'?" (2012: 135). Perhaps, then, another challenge facing governments here is the dichotomy of choice which exists between addressing the many and varied concerns expressed by a range of voices in this debate on drugs and their harms, and the call for a greater consideration of the evidence

presented by the research community for informing drug policy development, suggesting that the publics' values and sentiments are likely to be important to any political stances adopted (MacGregor 2013; Stevens and Ritter 2013).

While there are a range of reasons for why the moralising of this issue is often so popular with the Government of the day, two key points concerning this are summarised nicely by Matthew-Simmons (et al. 2013: 258), who states: "Public policy decisions are based on a range of factors; some of these may be technical (for instance, research evidence of policy effectiveness), others may be political (what is popular). One of the important political factors which can influence policy decision-making in democratic societies is public opinion." Given this, understanding why public opinion may be positioned in such a way as to moralise on the drug problem is perhaps impossible to untangle from the politicisation of this issue; but important to note, nonetheless.

2.3.2 Perceptions of health and crime-related problems

While some of the available data on the health-related problems encountered cross-nationally have been discussed already, it is also thought that the wider framing of a nation's drug problem can impact on public perceptions of this. With regards to health this is significant, as whether 'the drug problem' is viewed as a predominantly moral or public health concern, for example, may impact on the policy strategies adopted (Reuter et al. 1993). A public health perception is likely to be one which prioritises the health and wellbeing of both individuals and communities affected by drugs (Wincup 2016). Another way this could be framed under the domain is in the medicalization of the problem, wherein drug use/addiction can be seen as akin to a disease rather than being a

vice, or individual failure (Wincup 2016). Research into addiction has found that a range of environmental, genetic, and psychological factors are thought to contribute to this consequence of drug use, removing the notion that there is justification for simply blaming those affected by addiction (Lloyd 2013). This in turn may impact on, or be impacted by, rhetoric around national strategies of treatment or prevention, and whether these are viewed in terms of recovery, abstinence, or harm reduction, or instead deprioritised in favour of criminalisation and more punitive approaches to treatment (Duke 2006).

In the same vein as perceptions of health-related harms may vary, attitudes on crime-related drug problems can too be considered in different ways. Within the drug-crime nexus, drugs can be seen as a problem akin to unemployment or high levels of poverty in their impact on criminal activity (Reuter et al. 1993; Hucklesby and Wincup 2010; Wincup 2016). However, for others, drugs are the key determinant "responsible for wider social ills" (Reuter et al. 1993: 10). This points to the longstanding challenge, observed in the literature, surrounding the messy relationship between drugs and crime. How this is viewed can drastically impact on the measures deemed necessary to manage the problem defined (Hucklesby and Wincup 2010). This relates to Bacchi's work on problem construction through the "what's the problem represented to be framework" (2009: cited in Gstrein 2018: 15). Here, it is considered whether policies don't necessarily solve social problems, but instead actually create them through the simple act of defining them as such. However, problem construction theory presents an interesting challenge to the EBP agenda, with an approach that has gained prominence in the field of drug policy (Gstrein 2018).

Given the range of problems associated with them, it is unsurprising that drugs have been considered as in need of some sort of 'control' (McAllister 2000; Babor et al. 2010; Seddon 2010; Strang et al. 2012; Jelsma 2015). However, as Monaghan (2012: 50, cited in Roberts 2014: 954) suggests, consensus on the best approach of drug policy might be "impossible", with this being an "area of policy that defies neat solutions as there is little agreement on the nature of the problem in the first instance". This, and other methodological challenges to the progression of comparative research in the field of drug policy, will now be discussed in further detail.

2.4 Moving forward: The problem with cross-national comparison

Throughout this research, so far, it has been noted that there is a considerable amount of variation within the drug problems faced by different countries, though with some key commonalities. Although it's not yet possible to present a set of drug-related problems that can be universally agreed upon as things which either affect all nations or are viewed as '*the* problem', a few things are clearer. Firstly, that drugs - in their production, trafficking, sale, and use - are linked to a wide range of individual, societal, criminal, and economic harms. Secondly, from the data discussed above, it is evident that the key harms identified vary from place-to-place depending on the dominant market and consumption patterns of a nation or region. Finally, drug-harms are cross-national in nature, making comparative analyses of drugs and drug policy a compelling, though challenging, field of study.

Given these challenges, the relevance of any comparative research carried out on drug policies and problems has come under increasing scrutiny in more recent years. The main aims of

comparative research in this field are thought to focus on either assessing variation in the drug-related problems facing countries or measuring difference and success or failure of the various policy approaches adopted. As is clear from the discussion presented at the start of this chapter, there is a considerable body of work dedicated to understanding how drug use and other drug-related problems differ cross-nationally. To understand this further, this chapter will continue by outlining and considering some of the key aims of existing comparative drug policy analyses in order to identify the key issues, and gaps, in the literature to allow for a narrowing in the focus of this research.

2.4.1 Measuring policy success

Individual national drug policies are frequently discussed in terms of their levels of success in dealing with the problems caused by drugs. Indeed, a growing body of research is dedicating its focus to exploring the impact of various national drug strategies in dealing with problems such as drug use, drug-related crime, or drug-related health problems (Ritter et al. 2016). As Kilmer (et al. 2015: 227) notes, "cross-national analysis is part of the twenty-first century zeitgeist. Nations anxiously compare themselves with their peers to see how they are doing". However, several studies researching the impact/success of national drug policies have concluded in a similar way: drug policies may actually have very little impact on the prevalence of drug use, nor on the various drug-related outcomes they seek to address (Vuolo, 2013; Kilmer et al. 2015; Ritter et al. 2016). In reviewing the findings of further research into drug-related outcomes it is evident that a clear link between the common drug-related problems faced and policy responses adopted across countries has not been found (Boekhout van Solinge 2004; Bennett and Holloway 2010; Rolles and

Measham 2011; Watson 2012). As Wodak (2006: 52) notes, "cross-country comparisons of drug policy are usually alluring but often end up being somewhat disappointing"; perhaps accurate to a point, given that after over 100 years of international drug control little has been ascertained about the impact of national drug strategies across the world in ways that would allow for policies to be confidently transferred from one place to another. Reuter (*et al.*, 1993) points out that in 1993, twenty years into the development of this field of study, there was still no answer regarding the best way to respond to the problems of illicit drugs. It is now more than twenty years again since their paper and still we have no clear answer. However, this is not due to lack of attempts to do so; and should not be assumed to imply that there haven't been some important findings produced during this time. In fact, a lack of relationship between similar drug policy strategies adopted and the drug-related outcomes observed is an interesting finding in and of itself. For example, research exploring policy success in Sweden and the US, two countries that (up until recently) have been known for the similarly punitive natures of their drug policy approaches, particularly in their use of law enforcement measures seeking to reduce the consumption of drugs, have seen marked differences in outcomes. The punitive approach of the US saw rising levels of drug use, problematic drug use (PDU), drug-related deaths (DRD), and drug-related crime (DRC); while Sweden's experience of opting for more prohibitive drug policies is thought to have been considerably more effective than the US's, with much lower levels of drug use and problematic drug use consistently reported, as well as lower levels of drug-related crime (Stevens 2010; EMCDDA 2014). Understanding why two such similar approaches would achieve such varied outcomes is thought to be of great importance if the field is to move towards the development of

useful solutions to the drug problem (Kilmer et al. 2015). However, as will be discussed next, this aim has not been fully realised yet, and for good reason.

2.4.2 Avoiding 'success'

For Ødegård (1998: 357), and many others in the field, the key question that should be guiding comparative research in the area of drug policy is "what works and what does not work?" Though Ødegård is correct in suggesting that this would be a very useful thing to determine, whether it is in fact definitively answerable in a way that could inform drug policy development seems highly improbable. There are several reasons for why this may be the case. Firstly, given the difficulties in the conceptualisation of what constitutes a drug problem, comparability of various policy approaches is unlikely to be of as much use between nations that either face notably different challenges due to drugs, or view the problems caused by drugs in a different way to others (Lancaster et al. 2015). They are also issues which vary by contextual setting, and thus are consistently prone to changes (Lancaster et al. 2015). Related to this is the issue of there not being a clearly stated definition/criterion of what can be considered success in the drug policy arena (Kilmer et al. 2015; Chatwin 2016; Ritter et al. 2016).

Secondly, the transferability of different drug policy strategies implemented in different countries is also questionable due to the differing socio-economic contexts in which they sit. A good example to illustrate where this has been noted as problematic is the UK's Home Office report "Drugs: International Comparators" (2014). This paper explored a range of national drug policies in place across the world and considered their outcomes (i.e., 'success'), concluding that drug policy alone

could not account for the varying impacts (i.e., greater success) observed across countries opting for alternative, sometimes controversial, and perhaps successful, strategies (Home Office 2014). In justifying this conclusion, they cited issues with differences in data-collection methods alongside "historical patterns of drug use, cultural attitudes, and the wider range of policy and operational responses to drug misuse" being variables which were likely to have an impact on strategies implemented, thus preventing any direct comparisons to actually be drawn from the paper's findings (Home Office 2014: 52; Kilmer et al. 2015). The United Nations' Research Institute for Social Development (UNRISD) also acknowledged the importance of understanding "the social and political context" of the setting when developing a policy in response to any social problem, suggesting that "no one policy option is going to solve the illicit drug problem" (UNRISD 1994: 3-4). Given that, even where research and learning has been sought, no such changes in policy were forthcoming due to the lack of transferability of approaches, the usefulness of further studies which fail to account for contextual factors such as those cited by the Home Office, may be questionable.

Thirdly, a little further removed from issues of 'success', is the problem of subjectivity around definitions of the type of drug policy 'regime' followed by a country (Ritter et al. 2016). The example above of Sweden and the USA is exemplary of this, with these countries individually frequently referred to by advocates or opponents of a more punitive drug policy regime. There have been some attempts in the literature to produce typologies, taxonomies, spectrums, or continuums of drug policies around the world, so as to better explore similarities and difference in the relative 'success' of similar approaches, including: The Bewley-Taylor Classification; The

Reinman and Levine Continuum; The Punish-Help Spectrum (Boekhout van Solinge 2004); the ideological versus evidence-based policies spectrum (Boekhout van Solinge 2004); a typology of regulatory, care-oriented or prohibitive drug policy regimes (Callaghan 2015); and a restrictive-liberal spectrum by Tiberghien (2017). However, they have not done so with the rigor of other disciplines, most notably typologising within the Welfare State regime literature informed by (and expanded on many times) the work of Esping-Andersen (1990) (van Oorschot 2007).

Whether such a resource could further assist in providing further evidence for the strength of one approach over others, or indeed highlight the need for a greater consideration of other contextual issues alongside policies implemented, there may be value in the subsequent utilisation. Finally, there are some considerable concerns with the quality of the data available to those interested in comparative drug policy research. Kilmer (et al. 2015) discusses the issue with methodological difference in the way that data on drug-related variables is collected cross-nationally. To summarise, several key challenges have been identified in this analysis of the utility of cross-national comparative research of drug policy: methodological and contextual issues, which will now be discussed further.

2.4.2.1 Methodological issues

Though methodological issues have been observed, even those who have criticised the aims, methods, or quality of data selected in comparative cross-national drug policy research have not written-off the potential worth of further research in the field (Kilmer et al. 2015). Given the ever-changing range of drug-related problems, and policies which attempt to address them, learning

from other countries is still deemed to be an important and useful endeavour (Kilmer et al. 2015); it is just one that should not be pursued without due consideration to the problems outlined above. Thus, while it would not be wise to entirely dismiss these legitimate concerns expressed towards comparative cross-national drug policy research, especially given the wider issues discussed in this chapter, there does appear to be scope for comparative research to be of great significance in this field. By acknowledging the limitations of the data available to researchers there has been a rise in more innovative approaches, metrics and methodologies being used to better utilise what data is available (Friedman et al. 2016).

2.4.2.2 Contextual issues

There have been numerous references made to the importance of wider cultural and contextual influences on national drug problems and the impact of policies developed to address them, as the point made at the end of countless studies on drug policy 'success' is the conclusion that more needs to be known about the context in which policies are made. Despite it often being noted in the literature that there is thought to be a relationship between numerous socio-economic, cultural, and political characteristics of a country and the drug related problems faced (Ødegård 1998; Barton 2011; Stevens 2010; Watson 2012; Vuolo 2013), there has been little empirical research carried out to explore these claims. Given this, it seems there is something important missing from considerations on how to move forward with this issue: that of national context. The remainder of this chapter will focus on the third set of issues noted above regarding context, exploring what may be meant by 'context' in order to further understand if this might be operationalised practically within comparative cross-national drug policy research.

2.5 Context neglected?

As was noted in the previous section, it has been observed that increasingly more attention is being given to arguments around the merits of differing approaches to national drug policy. However, within these discussions, much less attention is given to the wider context within which national drug policies are developed. That is not to say it isn't touched upon at times within the relevant literature, as research often points to the likely impact of varying socioeconomic characteristics, cultures, or demographic factors on drug policy 'success' (Ødegård 1998; Watson 2012; Vuolo 2013). Despite this, reflection of national contextual characteristics remains an area within the drug policy literature that is lacking in more thorough consideration. Reuter (*et al.,* 1993: viii) noted the importance of considering a "multiplicity of factors", such as income distribution or welfare generosity, to further the understandings of what influences the impact of national drug strategies. At this time, the data available to those attempting to conduct comparative research in the drug policy field was much more limited, but the ideas were there. However, despite there being a growing body of data available in more recent years, the type of research being conducted has moved away from exploring drug policy in the wider realm of social policy into more small-scale comparisons of specific policies among a handful of countries. While this is an important element of drug policy-related study to be explored, little attention has been given to looking back to Reuter's suggestion in 1993. Similarly, MacCoun (et al. 1993; cited in Ritter et al. 2016) discussed this as being a considerable challenge to the field of comparative drug policy analysis, with the ability for states to "learn from each other") being hindered by a lack of understanding and consideration of the varying "socio-contextual" factors when interpreting findings within the field (Ritter et al. 2016: 106).

The remainder of this section will first consider the extent to which the issue of context has been considered in the field of drug policy, followed by a critical discussion of how this could be utilised in this research to further the shortfalls identified in comparative drug policy research. In order to consider this, three key areas have been observed to have come through in the literature: cultural context, socioeconomic characteristics, and the approaches taken to other areas of social policy more broadly.

2.5.1 Cultural factors

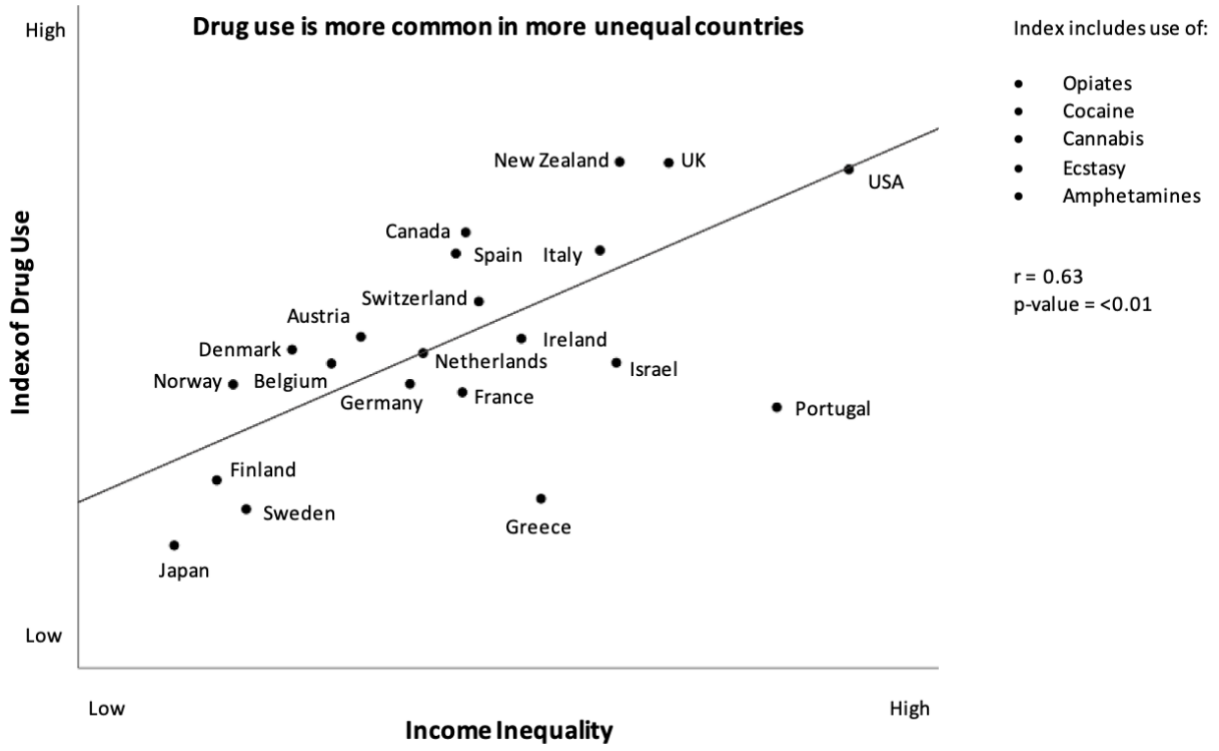
It is no doubt very clear by this point that some of the attitudes towards drugs, the related problems they bring, and the best way to deal with them through drug policies, are controversial (Plant et al. 2011; Hamilton et al. 2012) with a wide range of perspectives put forward from the public, media, and governments on what the key problems are seen to be and, subsequently, what the best way to govern these issues are. Two key narratives come through in the wider literature on the impact of culture on social policy more widely; these being the attitudes and values of the country being considered. For Ødegård (1998) it seems clear that the limitation of comparative drug policy research is to not consider cultural differences at the national level. Within his stance on this, he ascertained that 'culture' in this sphere referred to the different attitudes, values, habits, traditions, and other socioeconomic factors that could also be operationalised to better understand the culture of a nation's society, though he prioritised 'attitudes' as being the most informative measure of cultural difference (Ødegård 1998). Following this, he pointed to the idea that the key question facing researchers in the field was: how and in what directions do cultural factors and policy decisions have an effect [on drug use]?" (Ødegård 1998:363-4).

Stevens (2010: 154) too discusses the relevance of culture in drug-related research, suggesting it can be understood as "a system within which people hold each other accountable for their adherence to expected standards of behaviour", with differences observed between cultures and countries in such standards (Douglas 1992 in Stevens 2010). This perspective is shared by Vuolo (2013) who notes that even though there are increasing calls for researchers in the field of comparative drug research to investigate cultural contexts alongside the variance that has been uncovered in prevalence of drug use, this remains largely neglected. For Ødegård (1998), Vuolo (2013), and Stevens (2010), (and others) the lack of consideration given to the issue of culture is something which may be holding back the field, as it may be missing key factors which, if acknowledged, could aid better understandings of drug problems, policies, and future research.

2.5.2 Socioeconomic factors

Another term regularly dropped into conclusions on difficulties with understanding variation regarding drug-related problems and policies is the lack of research which seeks to consider the potential impact of socioeconomic factors. A few examples are given here to highlight the range of factors which fall within this area, though these are by no means comprehensive. Wilkinson & Pickett (2009) suggest that most social problems can be linked to levels of inequality. The idea here is that there is a gradient of social issues, and those that are felt most among the worst off in society, are more frequently experienced in more unequal places. This was shown to extend to the use of illegal drugs too, with their analysis here showing drug use to be more common in more unequal countries, illustrated in Figure 3 (Wilkinson and Pickett 2009). In other words, it is

Figure 3: Prevalence of drug use in countries by level of income inequality



suggested that greater levels of relative inequality may contribute to higher prevalence of drug use. Allyon and Ferreira-Batista (2018) find that higher consumption of cannabis and NPS for young-people in Europe may be related to higher levels of total and youth unemployment. Stevens (2016) also discusses the historical drivers attributable to levels of adolescent drug use as being income inequality alongside wider socioeconomic conditions, rather than the national drug policy adopted. The hindrance in the lack of rigorous analyses in place discussing issues such as the stability of families, and the wider social structures of a country in relation to unaccounted-for variation in the severity of a nation's drug-problems are often seen to be themes which arise from works commenting on comparative analyses of drug policy (Reuter et al. 1993).

2.5.3 Structural policy-related factors

While some level of control is a key aspect of any drug policy, many now also recognise that responses to drug-related problems require a multifaceted approach, considering strategies focused on drug-related crime, health, security, education, and other social policies within its remit (Hughes et al. 2006; Rhodes et al. 2005; Trace 2011). However, it has also been suggested that there is likely a connection between the type of welfare policy regime adopted by a country and the subsequent drug policy strategies implemented (Ritter 2009), with calls for research in the field to try and understand the findings "against a backdrop of broader social policy" (Monaghan 2017). Despite this, Boekhout van Solinge (2009: 25) notes: "it's rare that studies examine drug control in the broader social, political and cultural perspective; most studies of drug control are largely descriptive and typically have fallen short of probing for deeper explanations".

Some studies have acknowledged the possible relationship between the type of welfare regime adopted and drug-related outcomes. For example, Stevens (2010) suggests that countries offering lower levels of welfare support, i.e., lower decommodification, have higher levels of drug-related harms; suggesting that other social policies, namely welfare policies, may be relevant considerations when contemplating future approaches to drug policy. Massard da Fonesca (2005) discussed the work of Segre (2003) which explored "interrelationships between drug policies and broad social policies" (p. 133) in three countries: Italy, Sweden, and the USA. The findings of this paper suggest that Sweden may benefit from their approach of integrating drug policies within their wider strategies to improve "housing, employment, education, and to reduce social inequality" (p.134); the importance of social cohesion also noted as being of importance here.

Stevens (2016) considers this by looking to measures of unemployment, sickness, and pension replacement rates as a means of developing a metric for 'welfare support' for a country.

The task of identifying and narrowing down the key variables to explore any or all of these factors is not straightforward. An example of the vast range of factors that may exist is shown in the work of Rhodes (et al. 2005) that explored how social and structural factors impacted on the risks of HIV to injecting drug users (IDU). Here, they found influencing factors which included: "cross- border trade and transport links; population movement and mixing; urban or neighbourhood deprivation and disadvantage; specific injecting environments (including shooting galleries and prisons); the role of peer groups and social networks; the relevance of 'social capital' at the level of networks, communities and neighbourhoods; the role of macro-social change and political or economic transition; political, social and economic inequities in relation to ethnicity, gender and sexuality; the role of social stigma and discrimination in reproducing inequity and vulnerability; the role of policies, laws and policing; and the role of complex emergencies such as armed conflict and natural disasters". In other words, this health-related issue for IDU is one which is subject to a range of attitudinal, value-based, socioeconomic, demographic, and political factors (Singer, 2001 cited in Rhodes et al. 2005). Van Oorschot (2007) and Stevens (2016) also discuss the level of welfare support of the national government as being a potential factor relating to the cultural context of a state.

2.5.4 Summary

This section has sought to outline the relevance of a range contextual factors in further research seeking to understand more about the variance observed in both drug-related problems and the potential impact of drug policy on drug-related outcomes. There are some good examples of where 'context', of various forms, has been operationalised in social research, which will be drawn on to inform the development of the methodological approach of this research. The next and final section will seek to summarise what has been discussed in this chapter and outline the key research questions to arise from this critical review of the literature.

2.6 Conclusions: This research

A key question that could be asked of this chapter, and this research, is "why does any of this matter?" The short answer to this is that globally drug-related problems and harms are not only not improving, but actually getting worse (Barrett 2010; Trace 2011; Collins 2014; Boister 2016; UNODC 2017). This can be seen through the data which shows that drug use is increasing; the market for drugs is expanding; a vast criminal black market has emerged; drug-related health problems persist; and drug users have been heavily marginalised and stigmatised, (Barrett 2010; Trace 2011; UNODC 2020). Through considering the research exploring the varying drug problems around the world, a picture has developed which highlights numerous challenges to researchers in the field.

Firstly, while the desire to compare and learn from other countries' strategies is common within drug policy literature, this being something which is thought to be a valuable area of drug policy

research, the findings of such studies highlight two problems with this activity. One of these challenges is that it does not appear to be the case that countries experiencing the same problems necessarily follow the same strategies. Given the frequency with which the terms 'culture' and 'context' are mentioned within the concluding remarks in many of the comparative analyses which come to this deduction, it seems that, even where some variance can be accounted for with regards to drug policy, there are still issues that require further exploration into the national cultural, policy-making, and socioeconomic contexts in which strategies are developed and implemented (UNRISD 1994; Ødegård 1998; Stevens 2010; Gomis 2014; Home Office 2014). This has led to a growing debate around the question of "what works" with regards to the varying drug policies observed. However, it is argued that research eager to measure "what works" with regards to policies attempting to mitigate drug-related problems is perhaps not as useful an endeavour as hoped, with previous findings indicating that drug policy alone cannot account for the variation in national drug-related problems. There are also issues with the lack of comparability of the available drug-related data, and the problems around the lack of global agreement on what the problems caused by drugs are, not what drug policies should be seeking to do. Thus, the intrinsic worth of simply exploring what has been seen to have worked across the myriad of national drug policy strategies without acknowledging the potential importance of culture and context in accounting for any variance is questionable. The national contexts within which drug policies are implemented can be hugely diverse, with different cultural, political, socioeconomic, and structural contexts suggested as in need of consideration in "the messy real world … of drug policy" (Singleton and Rubin 2014: 936). Caputi (2016: 102) states that "policies are not formulated in a vacuum", giving weight to the idea that overly simplistic arguments of what amounts to the pursuit

of strategies fit for policy transfer, regardless of national demographics, are likely to be of little help to policymakers nor to the societies in which the problems are experienced (Barrett 2010; Trace, 2011; Singleton and Rubin 2014; Caputi 2016). This sets out the justification for the first research question identified for this research:

RQ1: What can be understood about the relationship between drug policies, drug-related outcomes, and the national cultural context in which they exist?

The first research question to have been identified within this chapter suggests further analysis is needed within the field of comparative drug policy research to consider how we can better understand the relationship between drug policies and the national context within which they exist, alongside the drug-related outcomes observed. The overarching issue that has been clearly drawn out from the previous discussion is whether contextual factors can be operationalised in drug policy research to enable this matter to be explored further, alongside a range of socio-economic factors and policy considerations.

The second issue that will be useful to address within this research is the absence of a more rigorous typology of drug policy regimes. Though there has been less discussion of this issue in this chapter, it is clear that in order to further explore the issue of national drug policy relevance in shaping drug-related outcomes, a resource which outlines the differing approaches adopted around the world will be valuable for future drug policy research. The second chapter will explore the potential of this in further detail.

Chapter 3

3 Why does difference matter? Considering global consensus and national divergence in national drug policies

3.1 Introduction

The international drug control regime, informed by the three United Nations (UN) conventions of 1961, 1971 and 1988, is in place to guide governing bodies in their formulation of national drug policy strategies, and has long been considered a key influence in the management of drug control around the world. The supervisory bodies in place to help maintain the terms of the conventions include the Commission on Narcotic Drugs (CND) and the International Narcotics Control Board (INCB). The CND offers a platform for member states to engage in debates on the global drug situation, working towards the development of resolutions on such issues (Buxton, 2008). The INCB seeks to evaluate and ensure the compliance of countries to the international drug treaties, though it has no formal authority to enforce this agenda, nor to sanction those that do not conform to it (Bewley-Taylor, 2012; Mosher & Akins, 2014).

Despite this agreed upon global governance of drug control, there appears to be a considerable amount of differentiation in the national drug policies in place (Boekhout van Solinge 2004; EMCDDA 2014). To understand what national drug policy difference means for the future of international cooperation and directive in the drug policy arena, it is important to consider further: the relevance and importance of this control paradigm; the intended interpretation of the conventions; the scope for the development of varying responses to this; as well as the types of variations which exist nationally. In order to do so, this chapter will firstly discuss the aims

presented by regional drug policy strategies and the key differences between member states of the UN. Alongside this, it will also consider the extent to which alternative national approaches to drug policies may be considered as departing, or potentially defecting, from the global drug control paradigm currently in place. The implications of what an increase in national divergence from the UN conventions may be, will also be discussed, with the ability of the international regimes aim for convergence questioned. The final section will consider why it is necessary to explore variation in national drug policies, as well as how it can be considered further within this research.

3.2 National drug strategies: Exploring divergence and convergence

Agreement, convergence, and consistency between national drug policies are important aims of the UN conventions on which the drug control regime is based (Pycroft 2015). However, they may not necessarily be attainable goals. This is partly because there does exist some flexibility in the implementation of the conventions' key aims, though the extent to which alternate approaches are encouraged and permitted is an area of contention within the UN (Bewley-Taylor 2003; Boister 2016).

3.2.1 The flexibility of international drug control

The ability of national governments to respond to the drug-related issues they face has been shown to be quite limited under the convention (Room and Reuter 2012) as, though some variation in national drug policies is considered acceptable, the strategies adopted are required to reinforce the key goal of the overarching regime: to limit the supply and demand of drugs to

medical and research purposes only (Room and Reuter 2012; Boister 2016). However, there are numerous, and increasing numbers of, examples of what is referred to as 'soft defection' (Boister 2016: 2) whereby countries' varying interpretation of the conventions allow them to implement strategies which are moving away from the punitive and prohibitionist foundations on which the control regime is thought to be based (Bewley-Taylor, 2003; 2012; Jelsma 2011). Despite this, the way in which nations have interpreted the conventions has always varied somewhat, leading to a considerable range of drug policies across the world since the international control of illicit drugs began over one hundred years ago (McAllister 2000). This suggests that not all national drug policy variance is necessarily deviant, (Boister 2016), though understanding where the line is drawn between what can be interpreted as being acceptable or not is much less clear.

3.2.2 Difference and deviation

Most regions and nations use a combination of strategies which fall under the headings of supply reduction, demand reduction, and – arguably – harm reduction, to construct their drug policies; though which they prioritise, and how, varies from place to place. Examples of different national strategies adopted under each of these areas are discussed below in order to establish the range of variation in drug policies that exists between countries. In doing so, this section will also highlight any strategies that may be considered to deviate from what is considered to be the intended interpretations of the treaties: the control paradigm.

3.2.2.1 Supply Reduction

All countries signatory to the conventions are required to implement measures aimed at reducing the supply of drugs across the world. Despite the clear focus of this area of drug policy, considerable differences exist in the execution of these goals both regionally and nationally. Across the six bodies that have developed regional drug strategies, the methods used to reduce the supply of drugs are hugely varied. For example, the Association of Southeast Asian Nations (ASEAN) and the Shanghai Cooperation Organisation (SCO) both identify their ultimate goal as being the attainment of 'a drug free world'; whereas the European Union (EU)'s approach sets no goal for this strategy (EMCDDA 2014). While drug use is prevalent in both regions, and the primary drugs of concern (in terms of trafficking and consumption) vary, neither can claim to be moving in the direction of the eradication of drugs and their consumption (UNODC 2018).

As noted above, we can see considerable differentiation in the way 'supply reduction' is interpreted regionally; with even more observed nationally, highlighted in the following examples. Vietnam's approach to this has been to suppress the production and trade of drugs through crop eradication (Windle 2016); similarly punitive approaches to supply control include those of Russia and China where strategies are focused on deterring drug market and directly targeting those involved in criminal acts or violence (EMCDDA 2014). Sweden is often cited as having one of the most punitive attitudes to drug policy in Europe, with strict laws and sanctions in place to support their moralistic goal of a drug free world (Boekhout van Solinge, 2004; Edman, 2013; Chatwin, 2016). However, developments in the Americas highlight a huge shift in some national approaches to supply reduction, with both Uruguay and the states of Washington and Colorado in the US

implementing policies of full legalisation of cannabis (Gomis, 2014; Pardo, 2014; Chatwin 2016). This is thought to have diminished the longstanding emphasis placed on law enforcement in this area (Boister 2016), directly infringing on the intentions and key aims of the international control regime. For the International Narcotics Control Board (INCB), such strategies "fall short of the control requirements of the 1961 Convention" (Boister 2016: 13). Despite this position of the INCB, these policies remain in place.

Supply reduction policies also differ in the focus of their law enforcement interventions and the criminalisation of users. For example, in the Netherlands supply reduction policies are focused on prosecutions of traffickers and dealers, rather than people who use drugs (Chatwin 2016), while Portugal decriminalised personal use of all drugs in 1999 (Boister 2016); both strategies have come under scrutiny as to their suitability within the limits of the conventions. Though both countries have been able to take advantage of flexibilities within the conventions to justify the legality of their policies, they have been challenged and condemned by the INCB on numerous occasions (Boister 2016). However, neither have ceased their use of these strategies. Conversely, in China punishments for drug use or trafficking include life sentences and the death penalty (Zhang and Chin, 2015). This raises the issue of another area which falls under the governance of the UN, suggesting that their obligations towards maintaining human rights are not being met and potentially putting the regime in contravention of other internationally agreed-upon laws (Boister 2016); another example of 'rule-breaking' condemned under the treaties of the UN continuing unaffected. More recently, Latin American countries have been putting pressure on policymakers to move away from the internationally driven tradition of utilising law enforcement measures to

control the supply of drugs, pointing to the negative consequences of this strategy, specifically the issues of geographical displacement, the emergence of a criminal black market, and the increased marginalisation and stigmatisation of drug users (Barrett 2010; Collins 2018). Once again, the INCB has stressed their disapproval of strategies decriminalising any drugs, highlighting that moves such as this undermine and threaten the drug control system in place (Boister 2016).

The failure of the UN's controlling bodies (including the INCB) to both refute or sanction nations for deviating from the regime highlights two key limitations of the current paradigm: firstly, that interpretation of the three conventions is clearly highly subjective and, secondly, that there is little the UN can do even where it considers national strategies to be infringing on the aims of the regime. What this means for the future of the international control paradigm is questionable. While the renegotiation of the treaties is thought to be necessary by some, given the rule bending and breaking observed, for others it is not an inevitability nor necessity given the changes which have occurred under the current conventions (Collins 2018).

3.2.2.2 Demand reduction

There are two key approaches adopted by countries seeking to implement strategies of demand reduction within their national drug policies: treatment and prevention. Examples of treatment strategies are considered here, to highlight the range of differentiation in this area of drug policy. While globally, it has been observed that the provision of, and access to, drug-related health and treatment programmes are falling (UNODC 2018), regionally, again, it is clear there are diverse approaches and emphases placed on this area of drug policy. The key variances lie in the goals of

the strategies implemented, as well as the extent of the provision. For example, regionally, the EU, SCO, ASEAN, and Organisation of American States (OAS) strategies' focus on the idea of recovery from dependence, and rehabilitation; though the EU's strategy also includes aims to improve the quality of, and access to, treatment services (EMCDDA 2014; Ferri et al. 2015). However, the African Union (AU) and Economic Community of West African States (ECOWAS) both seek very different goals in their demand reduction strategies, such as social development, poverty reduction and improvements in healthcare services (EMCDDA 2014; Ferri et al. 2015).

Once again we see considerable variation within this domain even before the policy reaches national-level implementation, where, unsurprisingly, these differences do continue to multiply in the range of strategies adopted. For example, Mexico and Portugal offer drug users treatment-based services which focus on supporting the individual and helping them through their addiction (Hughes and Stevens 2012; Chatwin 2013; Werb et al. 2014; Gonçalves et al. 2015), whereas China has a very extreme approach to dealing with drug users, with use being a highly stigmatized behaviour within the country (Zhang and Chin, 2015). In China, treatment facilities are also punitive in their approach, with "compulsory detoxification centres" or "education through labour camps" being the two options available to drug addicts (Zhang and Chin, 2015: 6). The aims in all three countries mentioned here are largely the same: to help people overcome their addictions; however, the methods used are extremely different. This is important to note, as the question of whether it is in fact ok to work towards the goal of 'demand reduction' through any means possible, even if they potentially breach peoples' human rights (Boister 2016), is another issue in

need of further consideration; and a particularly pertinent one to be asked of the UN's international control regime.

A further example of the complexity in considering the defining characteristics of demand reduction strategies is discussed in Duke (2006), where an almost paradigmatic shift in rhetoric surrounding drug use, the criminality of this behaviour, and use of treatment for those involved was observed in the UK. Here, treatment, rather than being something outside of the criminal justice system, became part of the strategy for reducing criminal activity, and drug use inherently discussed as related to criminality (Duke 2006). This marked a shift away from treatment as being a part of the wider programme of harm reduction under the banner of what could be considered a health-centred approach, adopted previously (Duke 2006).

That such differentiation exists in the implementation of a perceived shared policy aim is important to note when it comes to further exploring types of policies, and how deep an understanding is needed to be able to fully analyse such differences both regionally and nationally.

3.2.2.3 Harm reduction

The term 'harm reduction' is often seen as a contentious one in the area of international drug control (Pycroft 2015). In short, harm reduction strategies aim to reduce the risks and harms of drug use, without punishing the drug-using behaviour (Boister 2016), though the acceptance of this agenda is by no means universal among member states of the UN. Despite their lack of mention in all regional strategies, discounting the EU, the uptake in policies of this kind has grown

considerably in the past few decades, with most countries in the EU, many in the OAS, and several others across the remaining regions, seen to have implemented fairly extensive harm reduction strategies. A clear example of this can be seen in Switzerland, who introduced needle exchanges, drug consumption rooms and methadone programmes in the 1990s in a bid to reduce the number of drug-related deaths from AIDS (Csete and Grob, 2012; Gomis, 2014).

There is some overlap with the aims of harm reduction measures and the implementation of strategies of treatment in some countries. While programmes of treatment and prevention are often viewed in terms of their utility in reducing demand for drugs, pursuing goals of recovery or abstinence as discussed previously, it is also observed that in some places treatment and prevention are operationalised as measures prioritising further reduction of harms and risk taking for people who use drugs. One example of this can be seen in the Netherlands, where policy focuses on minimising the harms associated with drug use through a wide-ranging coverage of low-threshold drug treatment services (Boekhout van Solinge 2004; Chatwin 2016).

However, for many, including Russia, Sweden, China and Japan, harm reduction measures do not sit well alongside the strategies of supply and demand reduction, largely due to what is considered to be their contravention of the existing control paradigm (Pycroft 2015). Nevertheless, more recently, notable supporters of the current regime, China, and Sweden included, have also begun to implement some strategies aimed at reducing the harms caused by drug use (Chatwin 2016; Galeotti 2016). Though the strategies implemented in these countries are much more limited than

those elsewhere, this change is considerable bearing in mind the policy positioning of these countries.

The history of 'harm reduction', and the way in which it is defined, are also important issues to consider. Within the current paradigm, harm reduction has still not been recognised as a key area of strategy development, despite its – albeit thin – justification for inclusion under the terms of the conventions having been accepted by the UN's drug control regime (Boister, 2016). The inclusion of harm reduction measures into national drug policies is thought to present a considerable challenge to the current system, potentially "aiding and abetting in the abuse of drugs" (Boister, 2016: 5), with the INCB maintaining their long-held position in opposition of the use of such strategies.

3.3 Considering the impact of national nonconformity

Despite the aim to encourage convergence at both the global and regional levels, there remain considerable differences in drug policies implemented at the national level. What is clear is that variance is becoming more pronounced, but also more complex and contradictory. These varied national approaches, to all aspects of drug control strategies, show that the nature of difference between nations has changed, with growing numbers opting for alternative strategies in drug policies across the world (Jelsma 2011). Countries are moving beyond the confines of the control system, many re-interpreting the conventions in ways that enable them to develop policies which still remain within the parameters of the regime, with others openly defying them (Bewley-Taylor, 2003). Nations, such as Sweden, whose policies are considered as being traditionally punitive, have

begun to incorporate 'harm reduction' strategies into their national drug policies; whilst others are pushing the limits of the international conventions, moving towards policies of decriminalisation or legalisation. This indicates that the ability of international treaties to control illicit drugs may be negligible. What this means for the global governance of drug policy will be considered further throughout this section.

3.3.1 Increasing dissonance and tension

The increasing differentiation in approaches to drug policy development between nation states has led to rising tensions within 'the Vienna Consensus', as the international control system is sometimes called (Jelsma, 2011; Bewley-Taylor, 2012; Boister, 2016). Disagreements between UN members on the appropriateness of alternate strategy development and the reinterpretation of the conventions are increasingly common (Bewley-Taylor, 2012). This further confirms that there has been a recognised shift in the incidence, reason for, and impact of alternate drug policy strategies. As noted previously, this could potentially be indicative of a greater challenge to the foundation of the regime that goes beyond the stretching of the conventions, with calls for reform of the whole system (Collins 2014; Singleton and Rubin 2014).

The nature of the dissonance comes from numerous areas of variations in drug control, including growing calls from countries for the adoption of harm reduction into the language and aims of the regime, as well as bids for the sanctioning of nations deemed to be in violation of human rights (Collins, 2014). On the other 'side' of these arguments come perspectives from the INCB and those countries thought to be in support of maintaining the status quo of the regime, namely Russia,

Sweden, and China (Fazey, 2003; Collins, 2014; Feelbab-Brown and Trinkunas, 2015; Brownstein, 2016). One argument lies in the importance of maintaining consistency, accord and conventionality in the interpretation of the conventions (Bewley-Taylor 2013), while for some nations it is the defence of their rights to utilise sanctions such as capital punishment, that is given greater attention (Boister 2016). Given these emerging issues, it seems the global consensus is indeed fractured (Jelsma 2011; Trace 2011).

3.3.2 The control paradigm under threat

There is clearly a lot of tension between proponents of more flexible treaty interpretation and those wishing to hold on to the traditional purpose of the conventions. Boister (2016: 19) summarises this conflict neatly here, stating "when some States, through their practice, begin to challenge these objectives of the system, they can destabilise what many assume to be immovable". However, what this has meant for the governance of illicit drugs via the international control strategy is consequently itself negligible. It is the case that proponents of divergent policies of decriminalisation, harm reduction, legalisation, and punitive strategies of treatment and punishment have not ceded under the pressure of the regime (Bewley-Taylor 2003), but neither have they managed to move the debate very far into the realm of practical reform of drug policy governance. One reason for why this may be the case is that, even with all of the non-conformity observed in national drug policies, it is suggested that any proposed changes to the regime are being prevented by many of the same people threatening its legitimacy due to 'the Vienna consensus' (Fazey 2003; Jelsma 2003; Boister 2016). Jelsma (2003) suggests that, where officials attend meetings to discuss drug policy-related matters, they "shift into consensus mode" and

become “swept along in a ritual of rhetoric” (193). International cooperation is of course important beyond the realm of drug control, and that the regime has been in place for over one hundred years now could signify their collective commitment to maintaining this unity (Mills in Collins 2012: 25). There is thought to be a sense of collective responsibility to maintain the consensus, internationally (Bewley-Taylor 2003) as while countries could completely ignore the treaties, they don’t - they aim to work within the confines of the conventions. However, the criticism of not doing so suggests taking autonomous action that directly breaches the latitude of the treaties could itself damage international consensus considerably (Boister 2016). This presents a key challenge to the study of drug policy, in that while in practice things are changing at the national level, at the international level the status quo appears to remain, in theory (Van Hoffman 2016). Whether further national nonconformity could present a greater risk to the international consensus may lead some to question the validity of the regime altogether.

3.3.3 Questioning the use of a ‘global drug policy’

It is thought that a recent surge in national drug policy reforms among a number of Latin American countries has re-ignited calls for changes to be made to the control regime (Schultze-Kraft 2014; Feelbab-Brown and Trinkunas 2015), though what such changes could look like is unclear (Csete in Collins 2012). Should there be acceptance of more flexibility in the interpretations to the treaties; a call for the return to a more punitive, criminalisation-based method of control; or perhaps reform of the system through development of a new set of treaties? If the latter is the case, even the growing body of evidence surrounding the impact of different drug strategies across the world offers little more clarity on the situation, as Singleton and Rubin (2014) note “there’s no

shortage of alleged experts in this field and they all disagree with each other" (937), with the calls for reform themselves coming from a range of different standpoints (Csete in Collin 2012).

An important point to elaborate on here is that where policy success, or impact has been explored between countries which adopt similar strategies to each other, in the areas of supply and demand reduction in particular, the relevant drug-related outcomes have not been the same. Turning back to the example of Sweden and the US (Chapter 2), we see two countries adopting similar approaches to their national drug policy, who have not seen outcomes akin to each other. Lower use, problematic drug use (PDU) and drug-related crime (DRC) in Sweden were not mirrored in the US, with higher levels of use, PDU, Drug-related deaths (DRD) and DRC reported (Stevens 2010; EMCDDA 2014). This is just one example in which alike drug control strategies have been seen to produce notably different drug-related outcomes. Why two notably similar strategies can be seen to have such vastly different impacts is important to understand if the field is to move towards the development of useful solutions to the drug problem, especially following the fracturing up of the consensus. In order to explore this, further consideration is needed to identify comparable elements of national drug policies so that they can be analysed alongside other factors which may be influencing the drug-related outcomes which are commonly used to measure the impact of a national drug strategy. One such method for doing this is through the use of typologies.

3.4 Exploring types of drug policies

Some examples of differences observed in regional and national drug policies have been highlighted in this chapter to point to the reality and extent of the variation which exists. However,

being able to consider this variance on a wider scale, outside of individual case studies, is another way to explore the nature and extent of differentiation of drug policy around the world. The use of typologies within social research has become more frequent over the last few decades, illustrated by the list of over one hundred typologies found within the field of political science by Collier et al. (2012). One area of social policy research that has frequently utilised typologies is that focusing on comparative welfare state regimes, whilst their use is also growing in popularity in studies of crime (ESS 2013). Much of the literature outlining the nature of typologising begins by discussing the natural process for researchers of wanting to group the vast amount of information available to us into more manageable factions that can then be explored through further research (Dogan and Pelassy 1990; Hantrais and Mangen 1996; Helfgott 2008; Collier et al. 2012); as Esping-Andersen stated (1990, cited in Norris 2009: 231) "the point of generalisation is economy of explanation – to be able to see the forest rather than the myriad of unique trees". Thus, a typology may be best described as ''an organised system of types" (Collier et al. 2012: 217), providing an important step in the process of exploring relationships between cases and, following this, establishing the possible causes behind such relationships (Dogan and Pelassy 1990). Typologies are frequently used because they are considered to be accessible ways to present vast and complex information through the use of rigorous methodologies, enabling them to ''straddle the fence between parsimony and complexity'' (Miethe and McCorkle 2001: 1, cited in Helfgott 2008: 93). The ability of a typology to classify a vast amount of, often, complex information into simpler, more homogenous, groupings is thought to help enable a ''higher level of comparison'' in comparative research (Landman 2000: 5; Neuman 2006), reducing this complexity by grouping cases by similarity, or lack thereof (Landman 2000).

Table 1: Strategies and interventions by policy area and broad policy goals

Strategy	Methods	Broad Policy Goals
Prevention	School/community-based mass media campaigns on reducing access to drugs	Change attitudes Improve health literacy Persuasion: Prevent drug use
Health and social services	Treatment: coerced abstinence through probation or parole supervision; counselling; therapeutic communities Harm reduction: NEPs; HAT; DCRs; vaccinations; methadone maintenance	Reduce: use, crime, overdose, death, harms of use Improve health Prevent spread of diseases Treat drug users non punitively
Supply control	Arrest traffickers / dealers and force suppliers to operate in inefficient ways	Keep prices high and reduce availability
Prescription regimes	Regulate pharmaceutical companies, pharmacists, and physicians	Allow substances to be consumed for approved purposes
Criminal sanctions	Increase penalties for possession and use of drugs Decrease penalties for some drugs	Deter drug use / prevent normalisation and spread of drug use Prevent negative effects of criminalising less harmful drugs
Science/research	Evidence-based policymaking	Improving the knowledge on which policies work

Callaghan 2015: 9; Authors adaptation of Babor et al. 2010 and Bennet & Holloway 2010.

Several existing typologies of drug policies have been identified within the literature: The Bewley-Taylor Classification; The Reinman and Levine Continuum; the Regulatory-Care-Punitive typology; The Punish-Help Spectrum; and the ideological versus evidence-based policies (Boekhout van Solinge 2004). For the purposes of demonstrating how these types are reflected in real examples of national drug policy, 28 countries were placed within several of these typologies in Callaghan (2015). They were assigned to their groupings based on analyses of key national drug policy

strategies and broad policy goals implemented, including on prevention, health, supply control, criminality, and science and research, as illustrated in Table 1.

Table 2: Bewley-Taylor (2002) Classification of Drug Policy Typologies

Libertarian	**Prohibition**	**Regulation**
Decriminalisation: Portugal, Luxembourg, Czech Republic De-facto decriminalisation: Australia, Belgium, Estonia, Netherlands, Slovenia	Canada, Denmark, Finland, Austria, Iceland, Norway, Sweden, Slovakia, Turkey, UK, US	De-penalisation: Germany, Greece, Italy, Ireland, Treatment: France, Hungary, Poland, Spain, Switzerland

The Bewley-Taylor Classification identifies three ideal types of policy dimensions, which illustrate the different approaches taken regarding the legal status of drugs informing the policy strategy to be adopted. These three types are: *Libertarian*, i.e., legalisation of drugs, *Prohibition*, i.e., illegality/criminalisation of drugs, and *Regulation*, i.e., de-penalisation of drugs and the use of prescription regimes (Boekhout van Solinge 2004). This typology assumes a broad view of the policies adopted, limiting them only by legal status. For the purposes of this research, the Libertarian grouping will include decriminalisation, or de-facto decriminalisation of use and possession, as no countries from this sample have fully legalised drugs. Prohibition will refer to those whose policies emphasize the criminal justice aspect as a strategy, while regulation will include those who opt for treatment over punishment, or de-penalisation. Based on this

interpretation of Bewley-Taylor's Classification, Table 2 indicates how the selection of 28 countries may fit into it this typology (Callaghan 2015).

Figure 4: Example of the Punish-Help Spectrum of Drug Policies

Criminal Justice / Enforcement ◄——————————►			**Healthcare / Treatment**
US	Canada	Germany	Switzerland
Sweden	UK	Italy	Netherlands
Slovakia	Turkey	Spain	Slovenia
Iceland	Austria	Greece	Portugal
	Denmark	Ireland	Czech Republic
	Norway	Estonia	Australia
	Finland	Belgium	France
		Hungary	Luxembourg
			Poland

The Reinman and Levine Continuum (Boekhout van Solinge 2004) is similar to Bewley-Taylor's (2002) classification in that it focuses on the criminalisation aspect of drug policies. However, this typology acknowledges that prohibition is officially the current paradigm adopted internationally, proposing a continuum of policies ranging from punitive prohibition on one end of the scale (e.g., USA), to regulatory prohibition on the other (e.g., the Netherlands) (Boekhout van Solinge 2004). However, Portugal's policy of decriminalisation and the numerous de-facto decriminalisation strategies adopted recently indicate that 'prohibition' may be a more theoretical ideal than that which is practiced in reality. Placing the countries into this type of continuum is therefore more difficult and open to more interpretation, particularly given the imprecise and interpretable nature of the 'de-facto decriminalisation' strategy. However, as a rough guide it is likely to present similar

groupings as the previous typology did in Table 2, with the prohibitive countries among those at the 'punitive prohibition' end of the scale, the libertarians at the other end, and the regulators in between. This typology is useful as it enables a more gradual grouping of the countries regarding their drug policies adopted rather than trying to place them under strict headings as the Bewley-Taylor Classification does.

A third typology presented by Boekhout van Solinge (2004) is the idea of a 'Punish-Help Spectrum' which places countries in order of their policy preferences for either law enforcement and criminal justice, or health care and treatment. This is useful as throughout the literature it is often discussed that there exists a difference between countries who prioritise drug problems as a health concern and those who treat them as a criminal concern. Figure 4 offers a possible grouping of countries under this typology.

Another typology identified – the ideological versus evidence-based policies - is again on a spectrum, this time ranging from one end where policy based on ideological grounds lies, to the other end where policy is developed based on science and research (evidence-based policymaking) (Boekhout van Solinge 2004). However, this may be the most difficult of the five typologies on which to place countries. This is because it is likely almost all countries would claim that their drug policy is based on science and research. As such, this typology will not be explored further, due to the extensive amount of research needed to inform such a spectrum. However, it is included here to demonstrate the importance for the need of a clear directive on applying any such typology, to enable researchers to utilise ideas practically in further analyses of this kind.

Warner (et al. 1990) developed a typology of drug policies with the purpose being to inform governments with the numerous approaches to drug policy development available at the time. However, their research was purely classificatory and did not seek to place countries within the typology. The authors do, however, imply that the matrix developed could be useful in further comparative research in the field; particularly for countries to consult and see how other states seek to address similar drug problems (Warner et al. 1990).

Figure 5: Typology of National Drug Strategies across 28 OECD Countries

Regulatory Regimes	⟷	**Care-oriented Regimes**	⟷	**Punitive Regimes**
Netherlands	Ireland →	Switzerland	Canada →	Sweden
Belgium	Germany →	Italy	Finland →	US
Czech R	Estonia →	Slovenia	UK →	Slovakia
Luxembourg	← Australia	France	← Turkey	Iceland
	Spain →	Poland	← Austria	Norway
	Portugal →	Greece	Denmark →	
		Hungary		

Previous research (Callaghan 2015) which sought to develop a more operational drug policy typology worked from the Bewley-Taylor classification and Punish-help Spectrum to produce a new set of criteria for types of national drug policies within a more gradual spectrum of the strategies adopted. The spectrum began with regulatory regimes, which incorporate policies where decriminalisation, de-facto decriminalisation, prescription regimes, or more radical harm

reduction measures had been incorporated, with the goal being to reduce the harms of drug use. It then moved to care oriented regimes: those for whom drug use is rarely punished as a crime but treated as a health issue, with a considerable focus on harm reduction - the goal being to change the behaviour of drug users and minimise the risks of drug use across society. Finally, the spectrum ends at prohibitive regimes, including those countries where policy is driven by the legal framework they have, with a focus on prohibition and punishment - their goal being to prevent and/or eradicate drug use. Countries in between these headings are those that take strategies from the two regimes it lies between. Arrows are placed next to these countries to represent which typology they are more closely aligned to. This Spectrum is presented in Figure 5.

The work of Ysa (et al 2014) focuses on the governance of addiction across the then 27 member states of the EU, plus Norway, and produced four models of approaches to the governing of addition for legal and illegal substances across these countries, with each country placed in to one of the four models. This work initially sought to explore whether one approach, or 'European Model', could be identified across the EU when it came to the governance of addiction. This was done by classifying countries across several indicators, using a range of data, including: the welfare state regime, based on Esping-Andersen's Three World of Welfare Capitalism (1990); World Values Survey data, to account for variation in national socio-cultural factors; the OECD Better Life Initiative data, to measure the quality of life of people in each country; Sustainable governance indicators, including measures on the "quality of democracy" and "policy performance" across key policy areas (Ysa et al 2014: 10); and the Corruption Perception Index indicators (Ysa et al 2014). Public policies for the governance of licit and illicit substances were identified, with countries use

of a set of policy approaches considered in their placement in the four models subsequently identified (Ysa et al 2014). The country tables and reports produced were further supported with consideration of national policymaking processes, and input from national media coverage of government and stakeholder interactions and interviews carried out with addiction research experts (Ysa 2014). In order to identify what models existed, strategies were then placed on a scale based on key characteristics; on one end were those policies which focused on criminalisation of those using, possessing, or trafficking drugs, and a focus on supply reduction; at the other end of this scale, those whose policies focused on the wellbeing of people who used drugs, have compassion for addiction, and focus on harm reduction strategies. Cluster Analysis was used to group countries based on nineteen indicators overall, with four models identified. Country placement in each of these Models has been illustrated in Table 3.

This study by Ysa (et al 2014) was part of the EU ALICE RAP (Addiction and Lifestyles in Contemporary Europe Reframing Addictions Project) (ALICE RAP circa 2016) work, which ran from 2011-2016, and was a significant starting point for further work carried out into addiction and possible policy responses to it. Though the approach is focused on both licit and illicit substances and their governance, it presents a much more comprehensive approach to building a set of types of national policy approaches. It illustrates the potential of drawing on large-n data to explore issues cross-nationally and comparatively. While it notes ensuring comparability of the data drawn on as one of the challenges of the approach, it clearly justifies the need to sacrifice local-level detail when analysing national-level policy and practice cross-nationally, until a time when it is possible to focus on the local and regional levels (Ysa et al 2014).

Table 3: Models of Addiction Governance in 28 Countries (based on Ysa et al 2014)

	Model 1	Model 2	Model 3	Model 4
Key elements of the Model	Trendsetters Illicit drug focus; Health focus; Decriminalisation; Harm reduction; EBP	Legal Regulation Licit drug focus; Prevention; No decriminalisation; Well-being focus	Transitioning Treatment over punishment; Moving towards well-being focus; No decriminalisation	Traditional Security-based approach; Supply reduction focus; Entry points to trade routes
Countries	Belgium, Czech Republic, Germany Italy, Luxembourg, The Netherlands, Portugal, Spain	Sweden, Finland, France, Ireland, The UK, Norway	Poland, Austria, Bulgaria, Cyprus, Denmark. Slovenia	Slovakia, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Romania

Finally, more recently there has been the establishment of the Global Drug Policy Index (GDPI 2021; 2023a); an accountability tool which places countries from around the world on a scale of 1 to 100 based on how their national drug policies, and the implementation of them, align with the UN System Common Position on Drugs (the closer to 100, the more aligned they are) (GDPI 2021; 2023a). Countries are ranked across 75 indicators within the following dimensions: absence of extreme responses (e.g., the death penalty); proportionality and criminal justice responses (e.g., decriminalisation); harm reduction coverage (i.e., health responses for people who use drugs);

access to controlled medicines (i.e., to ease pain and suffering); and development (i.e., work on alternatives to illicit crop cultivation) (GDPI 2021; 2023a; 2023b). The findings of the first index, published in 2021, show that the median score was only 48 out of 100, with the authors suggesting this demonstrates how far away drug policies are from meeting the UN standards, and that reform is needed (GDPI 2021). While not developing a set of types of drug policies, it does group countries along these five dimensions in a way that is comparable and allows for cross-national comparison not only within one region (i.e., Europe) but across regions all over the world (GDPI 2021). Most importantly, it highlighted once again the variability in the approaches taken to drug policy development between different countries, in spite of the international governance systems in place.

While each of the drug policy typologies discussed in this section are of value in their own way, those initially discussed, which focused specifically on illicit drug policy, suffer in their vagueness to which they could be operationalised, and the high levels of subjectivity necessitated by the author in this process. The work of Ysa (et al. 2014) provides an exciting approach to considering variation in policies around the governance of addiction across countries but focuses on both licit and illicit drugs in doing so. The GDPI highlights the importance of considering illicit drug policies in their own right, in order to assess the variability in the approaches taken to drug policy cross-nationally, particularly when concerning discussions around the need for reform at the international level, to inform national level drug policymaking. As Warner (et al. 1990) notes, the development of a set of types which could be used as a tool to aid learning on the types of policies followed and their relative impact, could be of value to the comparative drug policy field. While

the first step in understanding how illicit drug policy strategies differ is in itself a challenge, being able to utilise a typology of this kind will not provide the answers to that broader question of 'what works and why', but it will provide a useful tool on the way to doing so. For this to be of use, a more rigorous methodology will need to be applied to this process, as illustrated by Ysa (et al. 2014) and the GDPI (2021; 20231; 2023b), that provides a replicable progression. For this, further learning from other disciplines which have sought to utilise typological analyses will be important, with the field of Social Policy providing a rich body of work on which to draw from.

3.5 Comparative welfare regimes

There is a vast body of literature dedicated to exploring the scope of welfare state regimes that exist across the world (Norris 2009). In numerous studies of the different approaches taken by countries to the provision of welfare, typologies have proven to be a useful analytic tool (Norris 2009; Ebbinghaus 2012), ''…the assumption that welfare states cluster around certain distinct regimes has become commonplace to the extent that it is taken for granted'' (Abrahamson 1999: 394-5). Well-known examples of the use of typologies in this field include Titmuss's work in 'Social Policy: An Introduction' (1974), Esping-Anderson's 'Three Worlds of Welfare Capitalism' (1990), and Castle and Mitchell's 'Families of Nations' (1993). These, as well as other studies which aim to develop models of welfare states, have utilised a regime approach to produce typologies representative of countries' shared characteristics across a set of relevant indicators (Hantrais and Mangen 1996; Ebbinghaus 2012: 2). Here, typologies, or 'models', of welfare regimes have been developed which place countries into 'types' based on common characteristics (Hantrais and Mangen 1996). Often, in comparative welfare studies, typologies are developed based on ideal-

typical regime models (Abrahamson 1999); this is thought to be of use in comparative research on welfare regimes, ''in order to conceptualise distinct typologies in which to classify empirical similarities and differences'' (Ebbinghaus 2012: 2). The considerable number of welfare regime typologies that exist in this literature means they are not all able to be included in discussions for this section, nor do they need to be given the purpose of this review to learn from the value of this approach, and the methods utilised.

3.5.1 Esping-Andersen's Worlds of Welfare

In his well-known typology of welfare state regimes, the three worlds identified by Esping-Andersen (1990) are based around what he considers to be the three dominant political movements historically across Western Europe (Ferragina and Seelib-Kaiser 2011). He renames and reworks the three models developed by Titmuss (1972)[4] and further explores how these regimes are informed (Abrahamson 1999; Powell and Barrientos 2011; Ebbinghaus 2012). Each of the worlds are considered to be ideal-types, developed through deductive reasoning, and defined by specific characteristics regarding their prevailing institutional principles and ideological qualities (Ferragina and Seelib-Kaiser 2011; Ebbinghaus 2012; ESS 2013). More specifically, the regimes were constructed by measuring the levels of decommodification, stratification and ideological bases in the delivery of this support (Hudson and Kühner 2009; Ferragina and Seelib-Kaiser 2011; Ebbinghaus 2012; ESS 2013). Countries are subsequently placed according to the nearest

[4] Titmuss developed three approaches that could be adopted by welfare states; the residual model of social policy; the industrial achievement-performance model of social policy; and the institutional-redistributive model of social welfare (1972, cited in Abrahamson 1999).

resemblance to one of the three models presented (ESS 2013). The three types will be introduced briefly, below.

3.5.1.1 Social-democratic welfare regimes

The first regime to be discussed is that of the Social-democratic welfare state regimes. Countries likely to be 'members' of this regime are discussed as having welfare services centred on the principle of universalism; here welfare is provided based on needs and permitted through citizenship; thus, welfare is considered as something that should be publicly funded (Esping-Andersen 1990; Ferragina and Seelib-Kaiser 2011). This regime places importance on the idea of social rights and entitlements from the state, limiting the individual's dependency on the market: in other words, it has high levels of decommodification (Esping-Andersen 1990; Ferragina and Seelib-Kaiser 2011; Ebbinghaus 2012). Social-democratic welfare regimes are also personified by having low degrees of stratification, meaning they attribute little importance to the ranking of society by status or wealth (Ferragina and Seelib-Kaiser 2011).

3.5.1.2 Liberal welfare regimes

Secondly we have the Liberal welfare state regimes. The main driving force behind welfare policies for countries signing up to this type of regime is that of private provision for the majority of welfare services, making people highly dependent on the market, thus allowing for low levels of potential decommodification (Esping-Andersen 1990; Powell and Barrientos 2011; Ferragina and Seelib-Kaiser 2011). Here then, the dominating belief is that the state should only intervene where necessary and provide simply for basic needs on a means-tested basis (Esping-Andersen 1990;

Ferragina and Seelib-Kaiser 2011). Thus, the degree of social stratification is much higher in Liberal welfare regimes, with wealth and status likely to impact more substantially on their place in society, and access to such services.

3.5.1.3 Christian-democratic welfare regimes (corporative/conservative)

The third word of welfare presented by Esping-Andersen (1990) is that of the Christian-democratic regimes. Countries placed into this group are those whose regimes lie somewhere in between the two types previously discussed. The main principle on which these regimes are based is that central political power should not but implemented across localities unless it is necessary: the principle of subsidiarity (Esping-Andersen 1990; Ferragina and Seelib-Kaiser 2011). They have some potential for more medium levels of potential decommodification, but due to the high levels of stratification, and the dominance of social insurance schemes likely to be in place, there may be less inclination for decommodification to occur (Ferragina and Seelib-Kaiser 2011).

3.5.2 Criticism of Esping-Andersen

Esping-Andersen's (1990) typology work is said to have "transformed and inspired social policy over the past two decades: (Ferragina and Seelib-Kaiser 2011: 583). Many studies have tried to re-work his typology, or map different fields onto his regimes identified to see how they may be applied, and whether such 'worlds' exist in other fields (Ferragina and Seelib-Kaiser 2011). However, the three worlds identified by Esping-Andersen (1990) are not uncontested, with a vast body of work emerging since - this literature dedicated to exploring whether his regimes are useful or accurate (Abrahamson 1999; Ferragina and Seelib-Kaiser 2011; Ebbinghaus 2012). Many have

contested his commitment to the three worlds identified, arguing other worlds of welfare have been omitted (Arts and Gelissen 2002; Ebbinghaus 2012). For example, one such criticism questions why he did not include the late democratising southern EU countries in his research (Greece, Portugal, and Spain) (Ferrera 1996, Leibfried 1992; cited in Ebbinghaus 2012). His work is also criticised for its disregard of Japan's individuality, failing to examine rapidly industrialising East-Asian countries (Ebbinghaus 2012), while the omission of hybrid cases which do not fit into one of the three worlds, such as Switzerland, Ireland, or Belgium, is also questioned (Abrahamson 1999; Ebbinghaus 2012). Castles and Mitchell (1993) also introduce the idea that there should be the inclusion of a fourth 'radical' model in the welfare regime typology which represents Australia, New Zealand, and the UK - countries they consider to differ from the other existing regimes. All of these issues together allowing critics to ask the question of whether these omissions were justifiable or done so for convenience, allowing researchers to ''explain away'' outlying cases (Powell and Barrientos 2011: 71). Given this, the appropriateness and usefulness of clustering nations into regimes in a typology has been questioned, as many argue that they are not realistic or representative of real-world examples of welfare regimes (Abrahamson 1999; Ebbinghaus 2012).

While the weaknesses of this method are not unaccounted for by Esping-Andersen (1990), he is not apologetic about the necessary sacrifices and compromises that must be made in order to explore welfare state regimes in this way (Ebbinghaus 2012). Justification for doing so is given by Esping-Andersen through reference to the infancy of comparative social policy research at the time, and the need for 'heuristic devices' such as typologies to help inform further work in the

field (1990; Ferragina and Seelib-Kaiser 2011). He also defends his position on having three worlds of welfare, stating that having any more would impact on the analytical usefulness of the typologies, with the risk being that as many types as countries are produced as a result (Ebbinghaus 2012). This argument says that the typological method is, arguably, necessary as a starting point for internationally comparative research, meaning an obligatory trade off needs to be made between sacrificing detail in order for a view of the field within an international context. As Esping-Andersen puts it, *"…since our intention is to understand the 'big picture', we shall not be able to dwell on the detailed characteristics of the various social programs"* (Esping-Andersen 1990: 2). Nevertheless, the comparative typological approach taken in his research began an important discussion about their utility, and other approaches to welfare state modelling.

3.5.3 Productive Welfare

Hudson and Kühner (2009) sought to explore an alternative to Esping-Andersen, and others', fundamental approach to welfare modelling of using measures of social protection, incorporating both productive and protective measures in the development of their typology. This was done to allow for an assessment of the extent to which high-income countries may have moved towards forms of welfare which prioritise production, social investment, and competitiveness, as opposed to the more traditional position of income protection and social rights (Cerny and Evens 1999, Midgley and Tang 2001, Room 2002, Evans and Cerny 2003, in Hudson and Kühner 2009). In seeking to find an appropriate method in which to combine potentially conflicting measures of both the protective and productive elements of welfare states, Hudson and Kühner looked to Fuzzy-set ideal type analysis (FsITA). This method sought to overcome some of the key weaknesses

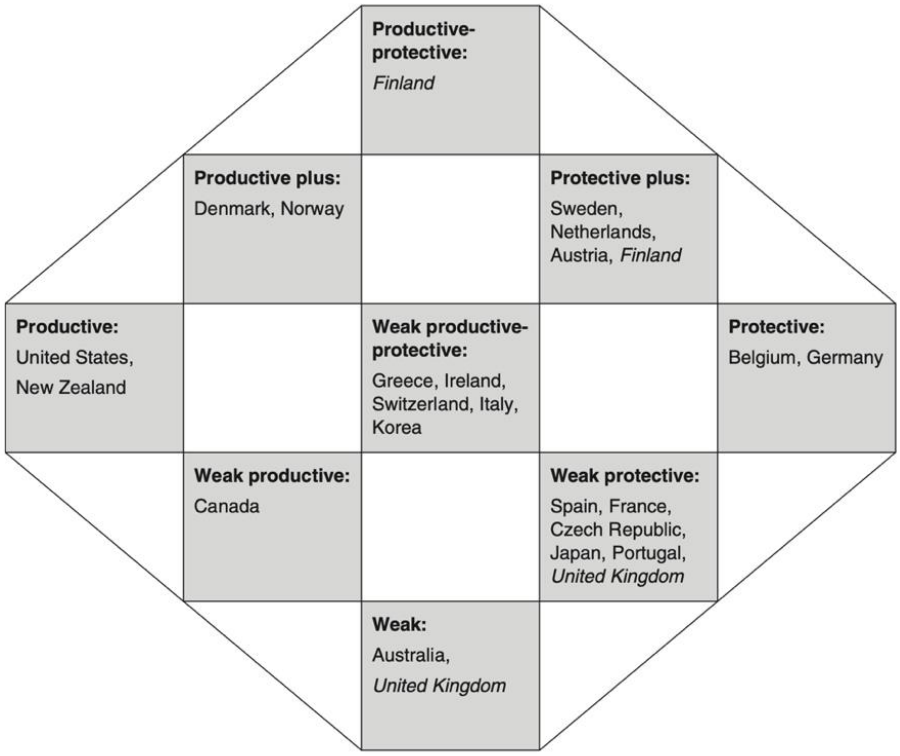
observed in other methods utilised to develop welfare regime typologies, including cluster analysis, factor analysis, and indices; methods which are thought to suffer from outlier effects, and the requirement for mean averages "that can mask important elements of cross-national diversity" (Hudson and Kühner 2009: 36). Their use of 'fuzzy logic' is thought to be able to overcome these methodological challenges, allowing the researcher to consider a range of contradictory dimensions alongside one another. Dimensions, or 'sets', were assigned conceptually rooted boundaries, and countries were assigned varying degrees of membership to each set. The authors argued that the benefits to this approach was to allow for a more nuanced positioning of cases (i.e., countries) into each set, rather than having to assign polarised positions on each of the dimensions included. It also prevented the range of diversity from being masked, as "each component matters" ensuring the "compensation effect" is avoided and differences can be explored through this analysis, rather than being hidden by it (Hudson and Kühner 2009: 38). While it is not necessary to go into the full detail of the findings of their research, it is important to note that in applying FsITA to the development of welfare regimes, many more 'types' were identified that the three presented by Esping-Andersen (1990), with nine regimes identified when considering 23 OECD Countries included in the study. The ideal types and the country memberships to each of these are shown in Figures 6 and 7.

Figure 6: Productive-protective fuzzy set ideal types (Hudson and Kühner 2009: 39)

	Education investment (E)	*Training investment (T)*	*Employment protection (L)*	*Income protection (B)*	*Model*
'Pure' ideal types					
Productive-protective	IN	IN	IN	IN	(E•T•L•B)
Productive	IN	IN	OUT	OUT	(E•T•~L•~B)
Protective	OUT	OUT	IN	IN	(~E•~T•L•B)
Weak	OUT	OUT	OUT	OUT	(~E•~T•~L•~B)
'Hybrid' ideal types					
Productive plus	IN	IN	IN	OUT	(E•T•L•~B)
	IN	IN	OUT	IN	(E•T•~L•B)
Protective plus	OUT	IN	IN	IN	(~E•T•L•B)
	IN	OUT	IN	IN	(E•~T•L•B)
Weak productive-protective	IN	OUT	OUT	IN	(E•~T•~L•B)
	IN	OUT	IN	OUT	(E•~T•L•~B)
	OUT	IN	OUT	IN	(~E•T•~L•B)
	OUT	IN	IN	OUT	(~E•T•L•~B)
Weak protective	OUT	OUT	OUT	IN	(~E•~T•~L•B)
	OUT	OUT	IN	OUT	(~E•~T•L•~B)
Weak productive	IN	OUT	OUT	OUT	(E•~T•~L•~B)
	OUT	IN	OUT	OUT	(~E•T•~L•~B)

It is interesting that, despite the heavy criticisms of typologies noted within welfare regime analyses, the works of authors such as Titmuss and Esping-Andersen have had an undeniable impact in their field (Abrahamson 1999). This is clear from the vast body of work dedicated to exploring welfare regimes comparatively, which has since emerged, particularly on the subsequent development and use of typologies within social policy research. This indicates that typologies are a fairly robust method within international comparative research, which have the potential to be of great use if developed soundly. The difference in Hudson and Kühners' approach and that of Esping-Andersen, demonstrates the range of options available to researchers seeking to build a typology of drug policy regimes, while also illustrating the importance of such methodological decisions prior to doing so.

Figure 7: Fuzzy set ideal type country memberships (2003) (Hudson and Kühner 2009: 41)



Note: Italicized countries are at the cross-over point (i.e. they score exactly 0.5).

3.6 Conclusion

The aim for convergence under a global drug policy paradigm is supported by numerous regional bodies but loses some momentum at the national level. However, given the varying national contexts in which policy is implemented, and the differences in primary drug problems faced, responses are likely to continue to diverge. While information-sharing between nations is useful, and encouraged, there remains a lack of clarity regarding why certain strategies are perceived to work in one country, or part of the world, and not another. This leads to problems regarding the generalizability and transferability of strategies to other places, begging the question of whether there is anything of use to be learned from comparative analyses which focus solely on the impact

of drug policy alone. Given this, the second research question that has been identified through the literature reviewed in this chapter suggests further analysis is needed to understand the range of variance within drug policies adopted across different countries in a way which allows this to be considered alongside other potentially influencing factors on key drug-related outcomes.

Research question 2: How can cross-national variation in types of drug policies be better understood?

As has been discussed previously, it is generally agreed that, under the current system of international governance, 'the drug problem' is not improving, and is actually getting worse (Barrett 2010; Trace 2011; Collins 2014; Boister 2016);. While it is important to seek to hold onto a system of international cooperation, as the drug problem is a transnational one, the practicality of establishing and maintaining a uniform global policy under which there could be full convergence is impeded by the considerable range of approaches observed across the world (Room and Reuter 2012). If the discussion is to be reframed around ideas of international drug policy reform, a much more solid answer to the questions around 'what comes next' needs to be considered. However, one further consideration, identified in the first chapter, questions the worth of simply exploring what has been seen to have worked across the myriad of national drug policy strategies; the potential importance of culture and context in explaining drug-related outcomes attributed to drug policies (Ødegård 1998).

The regional and national contexts within which drug policies are implemented can be hugely diverse, with different cultural, political, socioeconomic, organizational, and geographic contexts needing to be considered in "the messy real world … of drug policy" (Singleton and Rubin 2014: 936). Due to increasing discussions around the importance of considering national contextual factors in discussions of drug policy development, it has also been suggested that diversity should be celebrated, encouraged, and seen as an important component of the global drug policy system (Chatwin, 2013; Singleton and Rubin 2014), though the message from 'the top' continues to push for homogenisation. However, it has also been raised that arguments of what amounts to direct policy transfer, without consideration of national demographics, are likely to be of little help with this endeavour (Barrett 2010; Trace, 2011; Singleton and Rubin 2014; Caputi 2016). As was outlined in the first chapter, and touched upon here, some research has suggested that the culture and context within which strategies are implemented could play an important role on the drug-related outcomes experienced within a country, and thus need to be explored further in this research.

Chapter 4

4 The operationalisation of 'culture' in social research

4.1 Introduction

The previous two chapters have touched on the idea that the cultural context in which a drug policy is implemented may be of significance in better understanding the impact of such policies. More recently, alternative bodies of work have been emerging in the drug policy field exploring cultural, attitudinal, or contextual factors' importance within a range of areas across the study of drug policy (Genberg et al. 2011; Hser et al. 2007; Lee, Winters, & Wall, 2010; Raikhel & Garriott, 2013; Tucker, Ellickson, Orlando, Martino, & Klein, 2005; Werb, 2013; Windle & Wiesner, 2004, cited in Werb 2018). As was discussed in the first chapter, there has been much less attention given to the importance of cultural aspects of a nation or state when evaluating drug policies cross-nationally. As culture can mean different things to researchers in different fields, the purpose of this chapter is to identify the ways culture can be defined by considering how it has been used in other bodies of work. Following this, the operationalisation of 'culture' within this research will be discussed further, with the next chapter outlining the method which will be used to do so.

4.2 What is culture?

'Culture' is a construct with a wide range of definitions that are subject to a variety of interpretations (Jo 2010; Kirkman et al. 2017) with Taras (et al. 2009) noting little evidence of a shared understanding of this, citing Kroeber and Kluckhohn's work (1952) which identified 164 definitions of culture in their research. In the same way that there is variation in ideas on what

constitutes a 'drug problem', there is also variation around what characteristics of culture are relevant to its definition and measurement. Jo (2010) suggests culture can be understood as many things, including values (from personal to global), languages, rituals, or religions. Koltko-Rivera's (2004) review of the literature focused on 'culture' suggests there are no substantive topical differences between the range of terms used which they consider analogous to culture, some of these being: contexts, values, beliefs, schemas, philosophies, and norms. This can be seen within numerous disciplines, as research around cultural contexts is often thought by some to be considering issues akin to each other but utilising different terminology and language to do so (Taras et al. 2009: 358). Others point to the inability to agree upon a definition leading to vast chasm between opinions, with some arguing culture explains nothing, and others, everything (Hofstede 1980; MacSweeney 2002; Jo 2010). There is also a concern that the word 'culture' is often used more simplistically, with many applying it merely as a word synonymous with 'country' or 'nationality', for example (Hofstede 1980; Schaffer and Riordan 2003, in Taras et al. 2009). While this research will seek to utilise 'culture' as something which may be indicative of the characteristics of a country, it will not be used as a proxy for this; these terms are used to discuss different things within this research.

There are important questions around whether national culture is still a relevant thing to try and measure. Beugelsdijk et al. (2005), somewhat inadvertently, contributes to this discussion in their research into the potential unification of Europe. They discuss arguments which suggest cultural convergence is an inevitability, given the level of collective decision-making apparent at regional and international levels; the European Union (EU) being a good example of this (Beugelsdijk et al.

2005). However, in opposition to this are sceptics of cultural convergence among nations of the EU, who see a more deeply embedded range of national identities formed through historical events, religious traditions, and cultural experiences and heritages; emphasised more so today through studies of path dependency. One theory suggests that countries undergoing the same or similar experiences should generate the same or similar responses in terms of experiences, attitudes, and values observed (Beugelsdijk et al. 2005: 6-7). For others, comparisons of this sort are thought unlikely to yield any useful findings. In defence of the comparative international approach to research, Hofstede (1980: 17) notes:

> *"Comparing apples with oranges, cross cultural psychologist Harry Triandis once said, is okay as long as we possess a fruitology, a theory of fruits . . . Any comparison of values and attitudes across nations is in some way a comparison of apples to oranges, and without its fruitology it risks being a fruitless effort. Three basic questions have to be resolved: (1) the nature of the criteria for comparison; (2) to what extent nations are a proper unit for such a comparison; and (3) the functional equivalence of the nations concerned with respect to the criteria considered".*

Hofstede's comment here suggests there is value in comparison of culture where this is done methodically and with clear purpose. To do so, it is important to consider how culture can be clearly defined, what units of criteria could be used for this, and whether defining culture is appropriate at the country-level.

4.2.1 Defining 'Culture'

Despite the lack of specificity in what culture means to those exploring it within the social sciences, there have been commonalities found regarding what kind of understanding there is of 'culture', and what features are likely to be included. According to Taras (et al. 2009), there is general agreement that culture *"is a complex multi-level construct . . . shared among individuals belonging to a group or society . . . formed over a relatively long period . . . [and] is relatively stable"* (358). The idea that national culture takes a long time to develop suggests culture, in this context at least, has longevity, i.e., it is relatively stable across long periods of time. Granato (et al. 1996) also suggests that cultural factors are slow to develop and to change. For Hofstede (1980: 1) culture could be defined as a *"collective programming of the mind [which] manifests itself not only in values, but in more superficial ways: in symbols, heroes, and rituals",* seeing 'culture' as something which could be indicative of a country's character, utilising elements of cultural relativism to justify this approach. However, others offer more developed definitions of what culture means for their research. Some consider shared beliefs, values, and behaviours to be an important part of the makeup of a national culture, i.e., suggesting *"culture resides within individuals"* (Bond 2004, Kirkman et al. 2017: 4), while others consider culture to be something which instead impacts on individuals', i.e., *"culture resides outside individuals and to which they react"* (Schwartz 2014, Kirkman et al. 2017: 5). Beugelsdijk (et al. 2005) proposes that the cultural characteristics of nations are difficult to change due to their path-dependent development; this being dependent on the cultural history, as well as the extent to which there has been outside pressure placed on nations to change and conform.

Hayden (1988) went further than this and considered 'culture' to be a more abstract concept, based in tradition; something which is unaffected by society (which he defines as a 'set of sociotechnical relationships' (416)). For Hayden, society changes frequently – but culture is unchangeable, with societal beliefs and values only ever conforming and serving to reinforce the ideals of a given culture: this point said to be of particular importance to policymakers. The example given by Hayden in his paper is useful to understand his perspective more fully:

> *"… if we have a culture with a strong emphasis on dominating nature, we cannot solve environmental problems by designing programs to live in harmony with nature. Instead, we should design programs that allow us to dominate without adverse repercussions"* (Hayden 1988: 418).

In other words, Hayden argues we should not be designing policies to tackle a problem which, to be successful, relies on attitudes and beliefs that are at odds with the cultural values of a country, as doing so would waste time and resources. This position is controversial - particularly given the example chosen by Hayden which today is something many policymakers will be grappling with - as it appears to depend on culture as potentially being immovable to certain issues. On the issue of what we may now call 'climate change' or the 'climate crisis', however, there is clearly an argument to be made about the shift in attitudes around concern or this issue, at all levels (local, national, regional, international), with evidence suggesting there has been an overall increase in levels of concern on climate change (Pidgeon 2012). Taking the UK as an example, a study carried out in 2005 found only 8% of those surveyed believed individual responsibility for climate change would help to tackle this, with the main justification for this being external actors having more

responsibility to react to this (Poortinga et al., 2006, Spence et al., 2010b cited in Pidgeon 2012: 89). Compare this to the findings of the more recent Office for National Statistics (ONS) Opinions and Lifestyle Survey (OPN) 2021, 75% of adults were found to be concerned about climate change (ONS 2021), with the majority of those who were concerned being much more likely to have made changes to their lives in order to help (ONS 2021). For those for whom there was little or no concern, and thus no lifestyle changes, however, the most common reason for this inaction remained the belief it would not have the necessary impact while the culture allows for external actors, such a 'big polluters', to continue their behaviour unchallenged (ONS 2021). While slightly off-topic, this is a good example of where shifts in attitudes may be seen to have changed over time, and where wider factors can also influence the attitudes and behaviours at a national level. While Hayden did suggest values and attitudes were changeable, in this example it could be argued that it is in fact these attributes which define the cultural context of a nation, which would sit more closely to the ideas presented by Taras (et al. 2009), wherein culture is seen as something which may be slow to develop and change but is not entirely immovable.

Exploring how culture has developed, and what can be used to identify variations of cultural characteristics, is often done through discussion of concepts of values, attitudes, or beliefs though, again, what constitutes 'culture' and thus which values, attitudes or beliefs should be observed, also varies (Taras et al. 2009; Kirkman et al. 2017). For Beugelsdijk (et al. 2005: 6) *"it is assumed that people have experiences, develop attitudes, and form values in response to the forces or pressures which their environment creates",* suggesting values are created by a range of other contextual factors. Hayden's definition which states culture should be considered as separate and

sitting above that of the changeable nature of society and its values, beliefs, and attitudes, does not feel well-matched alongside the wider (and more recent) literature which perceives culture as something much more closely related to these concepts. The idea that culture is a product of collective values, attitudes and practices shared by individuals' is highly applicable to the idea of utilising a measure of culture at the national level; though it does also suggest that culture could be measured across different levels. Looking to the drug policy literature, and how these considerations could be applied to this research, will be explored further throughout the remainder of this chapter.

4.2.2 Drug-related works

How culture has been discussed within the drug policy field is of course important too. For drug policy studies, culture is commonly discussed – but perhaps less so in the comparative international context. How we define harm, problem drug use, what is acceptable and what is not, are likely influenced by inherent understandings of these concepts from the researcher and their own background (Babor et al. 2009). For some 'cultures', all forms of drug use may be deemed problematic, and thus severe sanctions deemed justifiable; for others, the use of drugs in a social setting may be normalised, perhaps valued as a social experience, and thus be seen as uncontroversial (Babor et al. 2009). In a similar way, accounting for outcomes may too be discussed as being impacted upon by 'cultural contexts', but these may be referring to factors at a local, national, or regional level (Robins et al. 1974, in Babor et al 2009; Richardson and Bell 2018). A 'culture of violence' is often observed around drug markets in some countries, with concerns elsewhere more focused on a 'culture of drug-related crime' or 'risk-taking behaviours'

(Babor et al 2009; Richardson and Bell 2018). In these examples, culture is used somewhat analogously with a 'climate' or 'pattern' of particular behaviours around drug-related concerns. Given the different usage of the word 'culture' here, it is important to clarify that this is not the meaning adopted in this research. Defining a specific 'culture of' a drug-related behaviour occurring nationally is considered different to the broader conceptualisation of what defines a national 'culture', which are discussed as including factors outside of drug-related matters alone.

Looking to some of the earlier literature which discusses culture and comparative research in the drug field, Ødegård (1998) adopts a different approach to that of more modern research. In his work, Ødegård did not find patterns on attitudes to drugs based around traditional geographical, religious, or cultural considerations - something he took to be indicative of other non-traditional contextual factors having an influence on this too. Potential important variables included economic climates, unemployment rates or the impact of political institutions, for example, suggesting emphasis be placed on socio-cultural factors, or social conditions, and their interrelationships with the establishment of a policy. The argument presented in Ødegård's work is that in order to understand more fully why a particular policy may work in one place and yet not in another, it may be necessary to ''characterise nations along a cultural dimension'' (Reuband 1995, cited in Ødegård 1998: 360). This suggests that the usefulness of comparative research in the drug policy arena may not be to offer up a finding conclusive of one strategy being better than all the rest, but rather to offer explanation as to whether other variables need to be considered when looking to policymaking in this field. At the very least, it may help to explore the debate on whether context matters and is something states need to consider when developing their own

national drug policies. As Lijphart (1971, cited in Ødegård 1998: 365) states, "[the comparative method is] a method of discovering empirical relationships between variables. But this does not mean that the aim is to establish and verify law-like relations". Given the on-going international discussions of drug policy reform, the need to understand more about drug policy 'successes', and growing calls for research to provide evidence of 'successful' policy regimes, the ideas Ødegård (1998) puts forward are some that may be worth considering within the realm of drug policy once more.

It is already known that a one size fits all approach to drug policy is not appropriate, largely because of the hugely varied outcomes to occur between countries adopting similar drug policy strategies (Stevens 2010). This idea of 'policy pluralism' (Collins 2014) considers further understanding of variation in outcomes as being crucial to furthering the success of drug policy, advocating the need to understand that different things work for different places, at different times, and in different contexts. A 2014 paper, carried out by the EMCDDA, explored the variations in drug policies at the regional level, considering ''socio-geographical variety'' in the development of such strategies. However, there has been much less attention given to the importance of cultural aspects of a nation or state, when evaluating drug policies across the world. Limited research has considered whether the geographical and social contexts may have had an influence on the development of different country's national drug policy strategies, and even fewer which consider the outcomes of these varying types of drug policies on a large scale and alongside such important contextual considerations. That is not to suggest that this issue is not discussed in the Drug Policy literature, with increasingly more frequent mentions of the importance of context appearing within the field.

More recently, there have been several cross-national comparative analyses of drug policies which reference the importance of considering contextual factors alongside policy impact. In a study exploring the drug policies of Sweden and Australia, Moore et al. (2014) discuss the importance of considering the differing socio-demographic characteristics of the two countries alongside any review of their drug policies; while Vuolo (2013) also noted the importance of considering cultural and structural factors when exploring cross-national differences in drug-related outcomes, concluding that such considerations should be considered within drug policy research into studies of drug use. Other references to this have been discussed in previous chapters, alongside an early reference made to the importance of addressing this matter in order to inform potential policy change - with the UK Home Office case demonstrating calls from policymakers which suggest not enough it known about the impact of cultural and contextual factors on drug policy. Csete and Grob (2012) discuss a similar issue, with the case of Switzerland[5] being an example of the reluctance of UN bodies, including the INCB, to consider the perceived success of alternative strategies of drug policy as anything other than individual scenarios, unique to the context in which they were implemented. For the UN, as with the Home Office, the outcomes observed were not necessarily caused by the drug policy strategy alone, and thus able to offer little in terms of the policy's generalizability.

Stevens (2016) carried out research utilising fuzzy set qualitative comparative analysis (FsQCA) to study relationships between adolescent cannabis use and income inequality, alongside a context

[5] Switzerland became the epicentre of HIV following an open drug scene and injecting drug use epidemic. The Governments response to this focused on a public health approach, including radical measures of harm reduction such as Heroin-assisted treatment (HAT) – a major departure from the long-held punitive approach which preceded it (Csete and Grob 2012).

of what he calls 'social conditions' which included wealth, welfare support, urbanisation, and youth unemployment, all at the national level. The findings of this work suggested social conditions should be further considered in future research on this topic, with findings suggesting high levels of inequality and urbanisation are 'consistent with usually being sufficient to cause high adolescent cannabis use" in the developed countries considered (Stevens 2016: 419). While not referencing 'culture' here, Stevens refers to the importance of exploring social conditions to further understandings of the complex interrelationship between drug policy, use and outcomes. Perhaps it could be argued that a measurable concept of national culture could also fall under this heading.

The discussion of culture in the field of comparative drug policy work is often one which refers to the terms 'cultural context', 'cultural or structural factors', or 'social conditions', for example. Despite the many references which have been given to the importance of further exploring the impact of culture, this is usually discussed as akin to exploring socio-economic contexts and variables rather than defining 'culture' as a matter for consideration in and of itself. Given this, it is suggested that to do so could be a valuable endeavour, particularly if considered alongside other socio-economic variables (or contextual factors) in seeking to understand whether, or which, other factors should be considered in the development of national drug policies. It is also the case that 'culture' has not been measured quantitively for consideration within comparative drug policy research. As with the typology, it is necessary to look to the wider literature to consider what other approaches could be considered for such an objective. There are some significant pieces of work that have looked at how cultural factors could be measured and explored quantitively. Some examples of research that demonstrate the quantitative measurement of culture will now be

further explored in order to consider the approaches taken in previous research, and options available for future research.

4.3 Quantifying culture

The idea of quantifying culture into a measurable variable is not unheard of across the social sciences. However, it is not something that has been given as much attention by researchers in the field of drug policy as it has with other disciplines. Given that the study of 'culture' in cross national comparative research is a relatively under-developed area within the drug policy literature, it is first necessary to look at how 'culture' has been measured in other areas of the social sciences.

Originally studied qualitatively within anthropology and archaeology, there has been a notable shift to other disciplines identified wherein a focus on quantitative methods and modelling of culture has been observed (Taras et al. 2009). Efforts to quantify culture and operationalise this in quantitative research methodologies seem to have developed predominantly in the field of Business and Management research (Adkisson 2014), with the schools of Economics and Psychology also said to have made more notable strides in the exploration and operationalisation of this concept (Taras et al. 2009). Culture is explored in different ways within disciplines. Management scholars are likely to consider culture as a means of exploring national attitudes to work/work-related values. Much of the focus on cross-national cultural studies within the field of Economics has been to see whether cultural factors influence economic development, or vice versa, and if this can then be measured and compared cross nationally. Work by Mathers and

Williamson (2011) explored this by looking to data on trust, respect, individual self-determination, and obedience to build a cultural index which could be compared with economic freedom indices to study any relationship with economic growth. For others, economic development is seen as an important explanatory variable in value-based cultural research (Beugelsdijk et al. 2005; Inglehart and Baker 2000), as a changing culture may also be looked at to inform predictions and probabilistic trends which may occur as a result, alongside considerations that economic growth can also shape culture.

For those within the fields of sociology or social policy, much more consideration is given to exploring culture through examining heritage and history, as well as the attitudes of populations towards societal and political issues (Inglehart et al. 2004, in Taras et al. 2009). This body of work has progressed further, and now seeks to explore culture through the consideration of people's values, beliefs, and attitudes, which can themselves be used to develop an overall picture of a national 'identity' or 'culture'. In order to better understand the uses, and usefulness, of quantifying culture within social research, some examples of research in these key areas will be explored further.

4.3.1 Cross-cultural Business and Management

One of the most notable publications within this field is Hofstede's "Cultures Consequences" (1980), with this text often cited as being seminal in its contribution to the measurement of culture and consideration of the definitional and methodological challenges in attempting to do so (Kirkman et al. 2006; Taras et al. 2009). In this book, Hofstede (1980) carried out research into

work-based values, producing a theoretical model of measurable indices of culture ranked across several dimensions identified. These dimensions were each related to an aspect of culture thought to be representative of the fundamental problems of societies: power distance; uncertainty avoidance; individualism; masculinity; and long-term orientation. While the output was new and significant, the approach taken was also unusual for the time, with few in the school of business and management having employed quantitative analysis of a large international sample. Within this work, Hofstede notes the infancy of the study of culture within the social sciences, and in doing so hopes to encourage others to approach this endeavour in alternative ways (Hofstede 1980). Thus, while his ideas are of great significance in guiding quantitative cross-national cultural research, particularly in the schools of Business and Management, it is thought important to consider both applying and altering these strategies suggested where appropriate, as many in his field have done since this original work was published (Kirkman et al. 2006; Kirkman et al. 2017).

Following this book, many more scholars began considering culture in their analyses of work-based values, some emulating his approach, some critiquing it, and others largely dismissing it in pursuit of their own measure of culture (Taras et al. 2009). Kirkman et al. (2006) reviewed the impact of Hofstede's work, discussing 180 studies (though suggesting there were many more) across the areas of Business and Psychology which had utilised Hofstede's framework of cultural values in the twenty-five years since its publication. However, in their more recent 35-year review of the field they found little progress had been made towards exploring culture comparatively; this thought to be due to the primary focus being on the impact of culture, not country, on outcomes (Kirkman et al. 2017). Given this, Kirkman et al. (2017) also note the need for future research to

explore the impact of culture comparatively; particularly hoping for researchers in this field to move towards considering the question: why do cultural values sometimes have very different effects in one country versus others?

Some of the criticisms of Hofstede's work are important to note here too, with the plausibility of, and evidence basis for, the existence of national cultures questioned (McSweeney 2002). The utility of seeking to operationalise culture is directly interrogated by Wallerstein (1990, in McSweeney 2002), sharing his scepticism for any finding to arise from work which seeks to do so. The bases for these concerns appear to stem from the justification for Hofstede's premise, and immovability of his position, that there are distinguishable and definable dimensions of cultures, and a hierarchy in which national cultures can be placed (McSweeney 2002). Their concerns are understandable, with Hofstede's objective to definitively capture and measure all aspects of all national cultures into five dimensions clearly an ambitious one; perhaps one which seeks to "measure the unmeasurable" (MacIntyre 1971, Smelser 1992: in McSweeney 2002: 90). However, approaching a measure of culture from a less fixed, immovable position could address some of these concerns. Work carried out in field of Social Policy has sought an alternative approach to operationalising culture, exploring comparable values which are proven to have longevity, rather than seeking to develop a set of types of cultures.

4.3.2 Social Policy

As has been previously discussed, Social Policy research exploring comparative welfare states is a field that has been paid a lot of attention (Pfau-Effinger 2005). Much of the research in this area

has dedicated itself to explore the "specific profiles of welfare state institutions and the constellations of social actors" to explain cross-national differences in such policies (Pfau-Effinger 2005: 3). However, this has often resulted in a lack, or marginalisation, of consideration of cultural differences in countries; something which is also argued in this field may contribute to explanations regarding variation of policy inputs, and potentially to related outcomes. An important contribution to this body of work is that of Jo (2010; 2011) and the further application of this method in Hudson et al. (2015). Jo (2010; 11) identified a similar gap in research on welfare states, with the study and measure of culture and its effect of social policy having been little explored. In their approach, Jo notes that culture is an often overlooked or neglected factor in welfare state development literature, which they argue is central to the evolution of policies in place, and for considering changes in, and the future of, provision of welfare (Jo 2010). It was also posited that culture impacted on policymakers, who would be influenced by the political, economic, and cultural contexts in which they were operating. Seeking to account for the limited empirical research which has explored this, Jo (2010) points to the lack of data available for such work, while also pointing to the widespread struggle to define an agreed upon definition and measure of culture. This is what their work seeks to introduce.

Within the field of social policy, culture is observed as being theorised in an abstract ("e.g., universal values: individualism/collectivism or liberalism/socialism" or concrete ("e.g., situational values: public opinion on a specific issue") way (Jo 2010: 2,6). In seeking to build to a measure which could assist in the operationalisation of culture, Jo (2010; 2011) utilises the concept of 'social values' as a mid-level approach, which it is argued may be representative of values which

are more distinct at the national level. Utilising variables and data collected across two decades within the European Values Study and World Values Survey, Jo (2010) sought to identify a set of values that represented a stable measure of national culture in the 22 OECD countries included in the study. These dimensions were identified through a process of elimination to identify characteristics of cultures which remained stable over time, "independent of economic and political context" (Jo 1022: 8).

To identify stable values, the EVS and WVS's were examined with only questions asked in all three waves included (1981/2, 1990, 1999/2000). Of 900 possible questions, 90 were asked in all waves, of which 83 were asked in all countries included. The responses were then considered, aggregated to the national level, and where there was consistency in responses over the three waves these questions were used to inform the final dimensions identified. It is argued that this almost 20-year timeframe exploring the collated responses to these 83 items at the national level allows for a stable and comparable measure of culture to be operationalised quantitatively in comparative analyses (Jo 2010). The stability in the values identified is not said to be absolute, but rather "dynamically stable" or "permanent enough" to allow for useful comparison (Jo 2010: 83). The six cultural variables (dimensions) identified are: religiosity; traditional ethical values; legal permissiveness; tolerance; traditional family values; and optimism. These are not presented as to be exhaustive and inclusive of all possible aspects of what could define a national culture; rather, they are pragmatic selections, chosen for their data availability and stability (Jo 2010). While the detailed findings of the work are not necessary to discuss at this point, the broad outline of these are that culture (as measured by stable social values) is an important variable in the consideration

of welfare studies, particularly in the shaping of welfare policies and influence on policy change (Jo 2010; 11).

In advocating for the approach taken within this research, perhaps particularly pertinent to those who believe culture is not one thing that can be definitively defined, Jo (2010) notes the importance of "clarify[ing] the scope and level of culture appropriate to the aim of each piece of research" (31). This points to the idea that Jo's approach to exploring social values as a proxy for culture is perhaps not one which would suit all research seeking to explore culture in its respective fields; however, this does not take away from the potential use of such a method where it is applicable to the research being conducted.

4.4 How to define culture

Looking at how to pin down a definition of culture is somewhat intimidating. It is clear, from the literature, that this is an endeavour inherently influenced by the field and, poignantly, the background and 'culture' from which the researcher originates. Deciding on the best way to define culture for the purposes of this research is thus the key justification for the approach adopted here. One thing that is clear from exploring the range of approaches taken is that definitions and rigor is important in overcoming some of the challenges represented by seeking to apply a measure of a national culture. Given this, it is important to define how 'culture' will be used within the remainder of this research, and why the method chosen has been selected.

As is clear from the literature reviewed, culture can mean a lot of different things: but, for clarity,

throughout the remainder of this research 'culture' will be used as a term presenting values, beliefs, and attitudes of populations at the country-level. This has been decided so as to reflect Jo's (2010) method of quantifying culture using the values surveys discussed, as this approach is strengthened by evidence which demonstrates relative stability in national cultural contexts over several periods of time, as well as allowing for a systematic and definable measure to be adopted. As has been observed through previous works discussed which have sacrificed purity for the sake of utility, it is clear this compromise is not always accepted. However, finding a way to define culture which seeks to be grounded and sincere in its representation, will only be useful if it can be operationalised to enable further analysis of the research questions identified through the literature review chapters of this thesis.

4.5 Conclusion

It is clear that exploring a measure of culture alongside other factors which may impact on drug-related outcomes could be of interest in the study of drug-policy. While the assumption that 'culture' does not simply exert a determining influence on drug use, related crime, or related deaths should be made clear, understanding more about their potential interacting impact of culture alongside other potentially influencing socioeconomic factors may provide useful insights for researchers and policymakers alike. Thus, the second research question identified here is:

Research Question 3:

How can variation in cultural context (societal values) be explored within cross-national drug policy research?

To explore how cultural context relates to drug-related outcomes and policy, a stable measure of culture should be utilised for this research. This will enable the researcher to consider culture alongside other socioeconomic variables, to see where this sits alongside other more commonly assessed variables not included in the creation of the quantifiable culture measurement. Incorporating a measure of culture into a regression analysis will allow an exploration of how different types of drug policy strategies perform in different contexts. Important to note again is that the aim here is not to assess any drug policies in terms of success or failure, but only how they compare to each other when 'types' of policies are considered together with national cultural characteristics, and if any significant findings can be observed.

The next chapter will further consider the methodology to be used in this research to utilise this measure of culture, alongside the methods adopted to produce a typology of drug policy regimes, and the building of a dataset for a regression analysis which will allow all factors to be considered alongside each other.

Chapter 5

5 Methodology: FsQCA, quantifying 'culture', & regression modelling

5.1 Introduction

Several questions have been identified which suggest further analysis is needed within the field of comparative drug policy research. The overarching issue that has been clearly drawn out from the previous discussion is whether contextual factors can be operationalised in drug policy research and the extent to which they are seen to impact upon drug policy and related outcomes. To recap, these are:

- **RQ1**: What can be understood about the relationship between drug policies, drug-related outcomes, and the national cultural context in which they exist?

In order to address this question, two further research questions were identified, which set the parameters for the empirical work to be carried out through the remainder of this thesis:

- **RQ2**: How can cross-national variation in types of drug policies be better understood?
- **RQ3**: How can variation in cultural context (societal values) be explored within cross-national drug policy research?

The research questions identified in the previous chapters highlight the need for a comparative cross-national methodological approach to be taken. There are a range of methods available to

researchers in the social sciences wishing to carry out research of this kind. For this study, the methods have been determined by those deemed best suited to the research questions (RQs) identified and making best use of the somewhat limited drug-related data available. In exploring other relevant works within the broader discipline of social policy which have sought to explore issues akin to this, the methods applied are some which are perhaps less common in the drug policy literature explored. These methods are outlined briefly below, and will be discussed in further detail throughout this chapter:

- **RQ2:** Fuzzy-Set Ideal Type Analysis (FsITA) to build a typology of Drug Policies
- **RQ3:** Utilising Jo's (2010) method of building a quantifiable measure of culture using stable societal values, as applied by Jo (2010)
- **RQ1:** Building a new dataset and using regression analysis which incorporates socioeconomic variables, drug-related outcomes, the measure of culture produced for RQ3, and the typology produced for RQ1.

5.2 Typology

To address the first second research question – *"how can cross-national variation in types of drug policies be better understood?"* – a typological approach has been chosen; typology development being one way of exploring variance in cases, and a useful tool for further comparison of similarity or dissimilarity. Given the discussion of the different kinds of national drug policies/strategies observable across the world, the development of a typology of drug policy regimes is timely. In exploring the use of typologies in the drug policy literature it was found that there have been few

attempts at this, and none which go beyond developing types on a theoretical basis for their conclusions and regimes identified. This research will seek to develop a typology based around the use of more rigorous methods, with an approach which will be replicable outside the countries selected for inclusion in this thesis. There are of course many challenges and limitations in any and all approaches available for this task, but in the absence of a more systematic approach to the development of such a typology it was considered best to begin by exploring quantitative comparative methodologies.

As discussed in Chapter 3, the purpose of a typology can be to illustrate how something - in the case of this research, drug policy regimes - can be ordered based on examples within the real world (Dogan and Pelassy 1990). The main challenge for developing a typology of drug policy regimes is that such a thing has not been attempted before in a way that utilises quantitative methods. This may be due to the limitations of the data available, which has historically drawn concerns within the field of comparative drug policy analysis. However, one of the key strengths of typologising lies in the ability to do so in a field where little previous research of a similar nature has been carried out (Norris 2009). In fact, typologies are often considered to be of most use in less developed fields where the research is of a more exploratory nature, seeking to "identify patterns of outcomes across cases" rather than more mature fields (Norris 2009: 230). They are able to "provide new insight into underlying dimensions… refining concepts and measurement and also in organizing explanatory claims and causal inference" (Collier et al. 2012: 217-218).

However, the use of typologies in social research is not always met with enthusiasm, with debates

surrounding the worth and usefulness of findings in their contribution to the literature (Norris 2009). Despite their frequent use in comparative research, typologies are often dismissed as having limited utility due to the way in which they are most often produced; criticized for the use of outdated methods using categorical variables during construction (Collier et al. 2012). A common response to these concerns is that typologies should be viewed as a jumping off point rather than an end in themselves and seen as complimentary to other research methods which may follow (Neuman 2006); in other words, a "steppingstone to explanation" (Cousins 2005; Arts and Gelissen 2002 in Norris 2009: 231). Certainly, it is the case for this research that the development of a typology will be helpful to serve as a useful resource for those seeking to find out more about the variance in drug policies and drug-related outcomes. As Collier (et al. 2012) explain, those who criticise the use of the typological method may not be aware of the numerous challenges a researcher faces when trying to conceptualise and categorise information quantitatively, not least cross-national comparative research.

The kinds of shared characteristics required for consideration within the development of a typology vary considerably depending on the issue being looked at. Typologies are often developed through processes of deduction, wherein the 'types' formed by the researcher are guided by previous research and the development of groupings based on "perceptions of reality" (Dogan and Pelassy 1990: 170). Typologies can also be developed inductively through the use of empirical data, or preferably through a combination of both inductive and deductive reasoning (Dogan and Pelassy 1990). However, even if typologies are constructed around empirical data and statistics, the researcher still has to be creative - resourceful even – in developing them further

through their own understanding of the cases to produce what we may consider to be a typology, with classification of cases alone not often considered as enough (Dogan and Pelassy 1990). Because of the unavoidable creative and subjective input required from the researcher when developing a typology, ensuring that the 'types' identified are done so through rigorous and largely inductive methods, should be a priority wherever possible, particularly to reduce researcher bias. A possible solution to one of the more difficult aspects of developing a typology, that of assigning cases to their 'types' in the typology, may be resolved by the use of fuzzy-set Qualitative Comparative Analysis (FsQCA) (Ebbinghaus 2012).

5.2.1 Fuzzy-set Qualitative Comparative Analysis (FsQCA)

Typology development is one way of exploring variance in cases, and a useful tool for further comparison of similarity or dissimilarity. In exploring the use of typologising in the drug policy literature it is also clear that there have been few attempts at typifying the variation observed across national drug policies. Fuzzy set analysis is an increasingly popular method, with qualitative comparative analysis (QCA) (see Ragin 2000) employed in a range of disciplines across the social sciences (Hofstede 2001; Kvist 2006; Hudson and Kühner 2009; Yamasaki and Rihoux 2009). The reason for its growing popularity is the ability to allow for a more nuanced approach to the categorisation of cases into different groups. For example, in seeking to identify whether a country's drug policy (the case) can be considered in support of 'harm reduction' in their drug policy, we might ask "what is this a case of?" (Elman 2009:122). Rather than having to dichotomously place our case into either a 'yes' or 'no' categorisation for the purposes of analyses, fuzzy-set analysis allows for a scale of case membership to different sets to be identified

qualitatively and applied quantitatively (Hudson and Kühner 2009). In other words, we do not have to say 'yes – in support' or 'no – not in support' where neither is the case; we can say 'yes, in some ways, and no in other ways' and assign an appropriate score based on the understanding of the policy. One of the key benefits to this, over crisp-set analyses, is that it is more reflective of real examples, or 'cases', where clear cut-off points generally do not exist (Hudson and Kühner 2009). This approach is also considered particularly useful when researching comparatively, where the information available is vast but is not identical across the cases being considered (Rihoux and Ragin 2009). To ensure this is applied purposefully, it is therefore essential that the researcher has a strong understanding of the area being explored, as substantive and theoretical knowledge are key to guiding best practice for this method (Rihoux and Ragin 2009). This enables the researcher to handle such vagueness – or fuzziness – in a systematic way (Smithson and Verkuilen 2006).

5.2.1.1 Fuzzy set ideal type analysis (FsITA)

Fuzzy set ideal type analysis is the method chosen for this research. A subset of FsQCA, it enables the researcher to explore similarity and difference between real life cases through comparison with ideal types (Kvist 2007). The idea put forward is cases (e.g., national drug policy) can be typologised based on membership of "multiple, conceptually rooted, dimensions" (Hudson and Kühner 2009: 36). Following the identification of ideal types, cases can be explored to see which ideal type they are most closely aligned to. The benefit of this approach, for this research, is it ensures cases are classified along a spectrum of the differences between each other, rather than along a scale which includes types to which no cases may correspond.

The development of ideal types is done by first identifying the key dimensions of the area under consideration (Kvist 2007). The ideal types developed are based on the possible combinations of membership to the dimensions identified, and so clarity on the conceptualisation of the dimensions chosen is essential. Rihoux and Ragin (2009) note that this is a process which should be done very carefully, with great thought and consideration given to all decisions taken. It is advised that there should not be a large number of dimensions, as this would result in a large number of property spaces which could in fact hinder analysis and impede on the utility of the findings. An example of this work in practice is seen in Hudson and Kühner (2009) who identify four key dimensions of welfare states: education investment; training investment; employment protection; income protection (See Figures 6 and 7 in Chapter 2). These dimensions are identified based on the authors knowledge and understanding of their field; they are critical to the analysis, providing the building blocks for the rest of the process.

Following the identification of the dimensions which will make up the ideal types, the cases can be placed into the typology. This should be done through assigning cases degrees of membership to each of the dimensions, or 'sets' identified (Hudson and Kühner 2009). It is this - the varying degree of membership to each set - that makes the method 'fuzzy', as this allows the researcher to assign values to each case beyond that of crisp set dichotomies (Kvist 2007). While crisp set qualitative comparative analysis (CsQCA) could be utilised, for example, by assigning each case either a '1' to show those cases with membership to the set or a '0' to show those without membership to the set, this would not be particularly useful as it requires all-or-nothing judgements to be made about case-membership to each dimension. Therefore, there are clear

benefits to using fuzzy sets here instead, as the nature of the approaches adopted within each of the dimensions will likely vary from nation-to-nation. In other words, countries may be considered as having varying degrees of membership to each set based on the type of approach selected from within the range of possible options identified. Using fuzzy set analysis, the researcher utilises a method which allows them to "measure and compute theoretical concepts and analytical constructs in a manner that remains true to their formulation and meaning" (Kvist 2007: 474), thus allowing a more considered and realistic placing of cases in membership to the 'sets'.

Table 4: Creating scores for QCA sets

Crisp set	Four-value fuzzy set	Six-value fuzzy set	Continuous fuzzy set
1 = fully in the set	1 = fully in the set	1 = fully in the set	1 = fully in the set
		0.8 = mostly, but not fully, in	More in than out: $0.5 < X_i < 1$
	0.67 = more in than out		
		0.6 = more or less in	
			0.5 = neither in nor out
		0.4 = more or less out	
	0.33 = more out than in		
		0.2 = mostly, but not fully, out	More out than in: $0 < X_i < 0.5$
0 = fully out of the set	0 = fully out of the set	0 = fully out of the set	0 = fully out of the set

Source: Hudson et al. (2015) adaptation of Ragin (2008)

A further strength of this method is the requirement for researchers to define cut off points for the scores ascertaining degree of membership to a set (Hudson and Kühner 2009). When assigning values, it is therefore essential that what each score means is clearly defined. This next step in this

process is the calibration of the fuzzy sets and requires the researcher to make an assessment on the "conceptually rooted floors and ceilings for set membership" (Hudson and Kühner 2013: 308). It is important to note that the term 'fuzzy' within this method is not used to suggest that the sets developed are "imprecise or ambiguous" (Kvist 2007: 477), as the requirement for a comprehensive understanding of the subject matter ensures the researcher is able to carefully develop the dimensions and thresholds informing where each of the cases sit (Kvist 2007; Rihoux and Lobe 2009, in Byrne and Ragin 2009). The assigning of these thresholds is not a 'mechanical' process, but rather 'case driven' (Rihoux and Lobe 2009, in Byrne and Ragin 2009). Table 4 shows several options available for scoring cases within QCA sets, though it is to the researchers' discretion how values are assigned, and what scale is most appropriate for the data being utilised. In selecting the most suitable scale, each score must be clearly defined with regards to what this value is indicative of within the dimension assigned. For example, what does it mean to be assigned a '1' on a four-value fuzzy set, in the context of this research? It may be considered that a country is 'fully in' that set, but what we define as 'fully in' for each dimension is crucial.

Table 5: Property spaces example

Ideal types	Dimension 1	Dimension 2	Dimension 3	Model
A	IN	IN	IN	(1*2*3)
B	IN	IN	OUT	(1*2*~3)
C	IN	OUT	IN	(1*~2*3)
D	IN	OUT	OUT	(1*~2*~3)
E	OUT	IN	IN	(~1*2*3)
F	OUT	IN	OUT	(~1*2*~3)
G	OUT	OUT	IN	(~1*~2*3)
H	OUT	OUT	OUT	(~1*~2*~3)

Based on the dimensions identified, the potential property spaces, or 'types', for each case can then be considered. If, for example, 3 dimensions are included, the possible combinations of ideal types will be eight. These example eight ideal types, and their criteria for inclusion of cases to their set, are shown in Table 5. Using FsITA, cases included in this analysis will then be placed into the 'ideal type' to which they were most closely aligned along the scores for each of the three dimensions considered. For clarity, the symbols used in the 'model' column of the table are used to signify the following: OUT indicated by ~ means a country is not included in this set, whereas IN, indicated by * means the country is included in this set. The 'model' column illustrates all possible combinations of the fuzzy sets (Hudson and Kühner 2009); though that is not to say that there will necessarily be cases which fall into every one of these sets identified. Throughout this progression, given the unavoidable scrutiny which can accompany any subjectivity in decisions taken by the research, it is essential that the process is made as transparent as possible for others to follow the choices taken in this creative and iterative process (Rihoux and Lobe 2009, in Byrne and Ragin 2009). This can become a strength of the process if utilised well.

5.2.2 Variables

The cases used throughout this research are countries, and while the ideal selection of countries to be used would have included a combination of cases from all around the world, limitations in the data available prevented this preference from being selected. This was initially considered due to the more diverging, perhaps arguably what could be called polarised, approaches to drug policy development in different regions of the world. However, key to this research is the requirement for a cross-national and comparable approach, which requires rich information to inform the

dimensions of types of drug policies to be developed. Another matter in need of consideration was the comparability of the strategies in place within the wider regional context, and what may be considered to be the prevailing focus of national Governments geographically. As discussed in Chapter 2, the primary concern for a nation may differ around the world, regarding the production, trafficking, or consumption of drugs. While there is not set of definable properties which simply place a country neatly into one of these three clusters of primary concern, it is often discussed in the literature that different countries in different regions experience challenges less dissimilar to those in other parts of the world.

Given these challenges, it was decided that a narrowing of the focus to one region wherein there is also considerable variation in the national drug policies in place would be more pragmatic. The region selected was Europe, as this met all of the criteria necessary, as outlined above. The countries selected within this region, for inclusion in the typology development, were those who are signed up to report to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). While not akin to the supranational governance of the UN, having countries which are ascribed to be operating within the regional governance structure compensates for this narrowing of the countries selected. It is thought this may be useful when returning to the previous debate on the utility of global governance of drug policy. Given the decision to limit cases to include only European countries, it the case that this typology of drug policies is only seeking to represent those which exist on the spectrum of countries included. However, it is thought that the dimensions included in the building of the typology are applicable outside of the EMCDDA and could be used as a basis for exploring types of policies adopted in other regions, or cross-regionally.

5.2.3 Data

The main sources to be drawn on for informing the development of the typology of drug policy regimes will be the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA 2019). The EMCDDA are the principal authority on drug policy in the EU and offer a clear breakdown of national drug strategies and laws across (at the time of writing) 30 countries. This includes 28 European member states (at the time of writing), as well as Norway, and Turkey. The work done by the EMCDDA is also used to inform the EU drugs action plans, guiding EU policies around treatment, prevention, and harm-reduction strategies (EMCDDA 2019). All of the countries included work with the EMCDDA and share information on their national drug policies and drug-related outcomes, so that this can be collated to represent a clear picture of the drug phenomenon across Europe (EMCDDA 2019). Within the information shared for these countries is a clear breakdown of the key elements of the national drug policy strategies. It is these individual country-level profiles which will be explored in order to identify the key comparable elements of national drug policy strategies in this region. While the data presented from each of the 30 countries can vary, the method adopted here is suited to building this into a comparable format, informed by the variance across the countries included.

5.3 Culture

To address the third research question identified in the literature review – *How can variation in cultural context (societal values) be explored within cross-national drug policy research?* – Jo's (2010) approach to building a quantifiable and comparable measure of culture using stable societal values will be applied. In order to utilise Jo's method, the countries included will be the

same as those used for the typology development, so as to enable further analysis of these countries drug policies alongside 'culture' and other variables in the regression analysis to follow.

Jo's operationalisation of a quantitative measure of culture has been selected for several reasons. The availability of the data for this method is an important matter; in cross-national comparative analyses, exploring more than a few countries is often very challenging due to the unavailability or incomparability of the data available. Here, however, we have data for all countries to be included in this section of the research, from within a single source – the European Values Study. While there are limits to this approach acknowledged in Chapter 4, the stability of the variables selected in Jo's (2010) work provides a strong justification for the argument that these elements (societal values) of national culture can be usefully compared cross-nationally with this approach.

There are other versions of Jo's work, in collaboration with other researchers, which present slightly different groupings of the values, incorporating additional items (questions) into marginally different categories of societal values (see Hudson et al. 2015). While this research from Hudson et al. (2015) was drawn on to inform the methodological approach, and understand the application of this approach, the original application of Jo's research was selected as best suited to this work. In Hudson et al. (2015) the final make-up of the categorisations was very similar, with the exception of two new categories for 'Political Activeness' and 'Political Orientedness', and a few other items identified within some of the categories. Future research may wish to include these social values where possible, but it was decided not to include them in this research and

instead work with Jo's original 2010 groupings, due to the accessibility of methodological steps taken to illustrate their work in the original paper.

In Jo's (2010) research developing a quantitative measure of national cultures, the 85 items (questions from the EVS data) suitable for inclusion in this analysis were considered using Principal Component Analysis (PCA). This process eliminated another 18 items which showed poor correlation with other items. The 65 items which remained were grouped into thematic categories. These are presented in Table 6. Of these ten, the six highlighted in grey were found to reflect stable societal values.

5.3.1 The Data

The data used for this section of the research will be the European Values Study (EVS). While Jo (2010) utilised the EVS and World Values Survey (WVS) the countries to be included for this research are all European, and thus all captured within the EVS's sample.

5.3.2 Variables

Though following in Jo's footsteps, the objective is not to replicate their findings, but to apply the method to the aims of this research. While the aim of the original study was to identify a stable measure of culture, that has now been produced. Jo (2010) identifies six categories, which each contain within them a varying number of questions from the WVS and EVS. These categories are: Religiosity; Conservative social norms; Permissive values on adherence to laws; Optimistic values; Traditional family values; and Interpersonal tolerance. The questions identified as stable measures

Table 6: 10 groups of 65 items available for three waves of EVS-WVS data

Category	Items	Answer scale
Religion	- Important child qualities: religious faith - Confidence: Churches - How important is God in your life - Get comfort and strength from religion - How often attend religious services - Religious person - Believe in: God ; Heaven; Life after death; Hell	0~1 (mentioned) 1~4 (none at all) 1~10 (very) 0~1 (yes) 1~8 (never) 0~1 (yes) 0~1 (yes)
Morality1	- Justifiable: Suicide; Homosexuality; Abortion; Divorce; Euthanasia - Woman as a single parent can be approved*	1~10 (always) 0~1 (yes)
Morality2	- Justifiable: Claiming untitled benefits; Avoiding a fare on public transport; Someone accepting a bribe; Cheating on taxes	1~10 (always)
Politics	- Political action: Signing a petition; Lawful demonstrations; Joining unofficial strikes; Joining in boycotts; Occupying buildings or factories - Interest in politics - Self-positioning in political scale - How often discusses political matters with friends	1~3 (would never) 1~4 (very) 1~10 (right) 1~3 (never)
Confidence	- Confidence: The Civil Services; Parliament; The Press; Labour Unions; The Police; Armed Forces	1~4 (none at all)
Work	- Important in a job: good pay; Not too much pressure; Good job security; A respected job; Good hours; An opportunity to use initiative; Generous holidays; That you can achieve something; A responsible job; A job that is interesting; A job that meets one's abilities	0~1 (mentioned)
Tolerance	- Not like to have as neighbours: Heavy drinkers; People with a criminal record; Immigrants/foreign workers; People of a different race; Emotionally unstable people	0~1 (mentioned)
Family	- One must always respect and love one's parents - Parents must always do best for their children - Child needs a home with father and mother - A woman has to have children to be fulfilled - Marriage is an out-dated institution - Future changes: More emphasis on family life - Woman as a single parent can be approved*	0~1 (agree) 0~1 (agree) 0~1 (agree) 0~1 (agree) 0~1 (agree) 0~3 (bad thing) 0~1 (yes)
Optimism	- Satisfaction with your life - Feeling of happiness - How much freedom of choice and control	1~10 (satisfied) 1~4 (not at all) 1~10 (a great deal)
Autonomy	- Important child qualities: good manners; Independence; Imagination; Determination Perseverance; Obedience - Future change: Greater respect for authority	0~1 (mentioned) 0~3 (bad thing)

(Jo 2010: 93); * Placed in two categories.

over the three waves (20-year period) they were asked are therefore those that will be used to inform the national culture variables to be used in this analysis. All of the items identified by Jo as being representative of stable societal values were identified in the most recent wave of the EVS to which all 30 countries had data available. This was the 2008 wave. The items included in each category, and their code and answer scale, are shown in Table 7.

Table 7: Jo's EVS stable societal values used in this research

Category	Code	Items (Questions)	Answer Scale
Religiosity	V129	How important is God in your life	1 (Not at all) ~ 10 (Very)
	V130	Do you get comfort and strength from religion	1 (Yes) 2 (No)
	V119	Do you believe in: God	0 (No) 1 (Yes)
	V114	Are you a religious person or not	1 (Yes) 2 (No) 3 (Atheist)
	V205	How much confidence do you have in: Church	1 (A great deal) 2 (Quite a lot) 3 (Not very much) 4 (None at all)
	V122	Believe in: Heaven	0 (No) 1 (Yes)
	V109	How often do you attend religious services	1 (More than once a week) ~ 7 = (Never/practically never)
	V120	Believe in: Life after death	0 (No) 1 (Yes)
	V178	Important child qualities: Religious faith	0 (Not mentioned) 1 (Mentioned)
Conservative social norms	V242	Do you justify: Divorce	1 (Never) ~ 10 (Always)
	V241	Do you justify: Abortion	1 (Never) ~ 10 (Always)
	V240	Do you justify: Homosexuality	1 (Never) ~ 10 (Always)
	V243	Do you justify: Euthanasia	1 (Never) ~ 10 (Always)
	V244	Do you justify: Suicide	1 (Never) ~ 10 (Always)
Permissive values on adherence to laws	V247	Do you justify: avoiding fare on public transport	1 (Never) ~ 10 (Always)
	V234	Do you justify: cheating on tax If have the chance	1 (Never) ~ 10 (Always)
	V233	Do you justify: claiming benefits not entitled to	1 (Never) ~ 10 (Always)
	V239	Do you justify: Accepting a bribe	1 (Never) ~ 10 (Always)
Optimistic values	V66	How satisfied are you with your life	1 (Dissatisfied) ~ 10 (Satisfied)
	V8	Taking all things together, how happy are you?	1 (Very happy) 2 (Quite) 3 (Not very) 4 (Not at all happy)
	V65	How much freedom of choice and control	1 (None at all) ~ 10 (A great deal)
Traditional family values	V148	Children need both parents to grow up happily	1 (tend to agree) 2 (tend to disagree)
	V149	A woman has to have children to be fulfilled	1 (needs children) 2 (not necessary)
	V167	Love and respect parents always/earned	1 (agree always) 2 (agree earned)
Interpersonal tolerance	V46	DLA neighbour: People with a criminal record	0 (not mentioned) 1 (mentioned)
	V52	DLA neighbour: The emotionally unstable	0 (not mentioned) 1 (mentioned)
	V49	DLA neighbour: Heavy drinkers	0 (not mentioned) 1 (mentioned)

The dataset procured from the EVS is presented at the individual level; that is, each case is an individual person who has completed the survey. The country of origin was identified for each case, so these can be collated to provide a country-level variable for each of the items. In other words, each of the questions (items) listed above are aggregated into a measure of the mean for all responses of individuals from the same country, producing a 'culture-level' item.

5.4 Regression Analysis

The aim of the regression analysis will be to control for factors which have already been noted in the literature as impacting on drug related outcomes. As well as including the two sets of variables above, for the FsQCA Typology and the social values measure of culture, a range of socioeconomic variables will be included in the regression, to enable further consideration to be given to the possible relationships between variables on drug related outcome data.

5.4.1 The Data

In order to return to addressing the original research question - *What can be understood about the relationship between drug policies, drug-related outcomes, and the national cultural context in which they exist?* – a dataset of dependent and independent variables will be built. The data and variables to be used in building the dataset for the regression analysis are presented in Table 8.

5.4.2 The Variables

As with the previous methods set out, the aim was to include all of the original thirty European countries for the regression. The dependent variables will be those in the 'Drug-related outcomes'

category, while all other variables identified will be treated as independent, representing the wider contextual factors thought to be associated with exerting influence on drug-related outcomes.

The development of the variables to be included in the 'Typology' and 'Culture' categories have been explored in detail throughout the earlier sections of this chapter. The ideal types identified in the FsITA will be included, as well as the items which make up the stable (culture-level) societal values identified by Jo (2010).

Table 8: Data: variables and sources

Category	**Variable**	**Source**
	Independent Variables	
Typology	Type of drug policy identified	EMCDDA (2018) – Country profiles data
Culture	Stable societal values	EVS data – 2008 Wave
Socioeconomic	Long-term unemployment rate	OECD (2018)
	Educational attainment	OECD (2018)
	Income inequality	OECD (2018)
	Dependent Variables	
Drug-related outcomes	Any drug use (lifetime, 15-64-year-olds)	EMCDDA 2022 (2013-18)
	Cannabis use (lifetime, 15-64-year-olds)	EMCDDA 2022 (2013-18)
	Drug-related deaths (overdose)	EMCDDA 2022 (2016-18)
	Drug law offences	EMCDDA 2022 (2016-18)
	Treatment (all entrants, all drugs)	EMCDDA 2022 (2015-18)

The socioeconomic variables included were selected following the key 'contextual' factors that may be seen to impact on policy and drug-related outcomes, as identified in the literature reviews. While there were many other factors which could be included, the gaps in the data available for the countries being included was limiting. For the three OECD variables – unemployment,

education, and income inequality – data was only available for 26 of the 30 countries it was sought for. Given that alternative variables akin to these were unable to be identified, the decision was taken to continue the regression analysis with the 26 countries for whom all data was available.

In identifying the drug-related outcomes to be included, data is much scarcer for all thirty countries included in this study. Those included in the table are those for which there was data available for all countries. The most recent year data is available for all of the countries will be used, or as close to this as possible, to seek to account for other extenuating circumstances that may influence these cross-national drug-related outcomes. Data is available for all countries within the years bracketed, but going back no further than 2013, and not beyond 2018, so as to remain relevant to the time period used to inform the national drug policy typology development.

Lifetime prevalence of drug use was chosen rather than data which showed either last month or last year prevalence of use. All adults were chosen, due to the missing data for several countries in measures of young adults' use of drugs (across lifetime, last year, or last month prevalence of use). Prevalence of use by type of substance (across lifetime, last year, or last month's prevalence) is also measured, but again due to missing data the only variable which could be included was Cannabis use across the lifetime, for 15-64-year-olds. There is also data available for other drug-related outcomes, but for each of these there were too many countries with missing data: drug use and prison (prevalence of use before and inside prison); drug related infectious diseases (HIV, AIDS, HEP B, HEP C); seizure of drugs (by drug, quantity, and market-level); price, purity and potency of drugs sold; and problem drug use (by drug, method of use, and gender).

Unfortunately, this section of the research was not completed in time and has, regrettably, had to be omitted from this thesis.

5.5 Limitations

The limitations of cross-national comparative research, and the methods adopted, have been pointed out throughout this and previous chapters, but in applying them to this research there is a key limitation to note regarding the datasets used. For the EVS, the data used is from 2008, whereas the other data to be used from the EMCDDA and OECD was from around, or as close to, 2018 as possible. This discrepancy between the data sets was sought to be minimised by ensuring all other data used was from around the same time (2018); however, for the EVS data, 2008 was the most recent year for which data was available for all countries included in the study. Given this, it is the case that the data used is not guaranteed to be capturing the situation from a single moment in time, with changes in national Governments, broader social policies, and drug policies likely to have occurred during this period. Therefore, conclusions drawn should be considerate of this limitation. However, it is important to note that Jo's (2010) work established that the values selected for this research were those which were shown to be stable over time. This provides some confidence in the stability of this measure of 'culture', and thus the utility of operationalising this approach within this research, despite the gap between the datasets used.

5.6 Conclusion

In applying these methods to address the research questions identified in the literature review chapters, it is hoped we will be better equipped to understand any variance which exists in both

drug policy selection and outcomes observed when considering other cultural and contextual factors. In is hoped this will be of use for future drug policy scholarship to determine if any other variables, outside of drug policy alone, might account for any kind of measurable impact in dealing with drug-related problems. However, for now the questions here are ones that seek to identify and better understand those potentially significant contextual factors. What is crucial to ensuring this research does what it intends is caution and consideration. Ritter et al. (2016) wisely note that asking a question about whether one national policy is more effective than another national policy is asking too much of the field. Instead, they highlight the importance of any future research being able to take a "more sensitive, contextual and nuanced" approach to the study of comparative drug policy research, advising that this is more likely to be the objective which could make a valuable contribution to the field. It is hoped that in the careful consideration given to adopting the methods chosen, and acknowledgement of the limitations of a study of this kind, will allow for pragmatic learning in the field and spur further conversation into the utilisation of this approach.

Chapter 6

6 Findings: Comparing national drug policies: A typology of drug policy regimes

6.1 Fuzzy set ideal type analysis

This chapter will set out the steps followed in the development of a fuzzy set ideal type analysis of drug policy, and the findings produced from this process. The purpose of this chapter is to identify the ideal types, and then to score the thirty countries selected for inclusion in this analysis along each of the dimensions identified to be key components of drug policy in European countries. Following this, discussion of the findings will be presented. While the steps required of the method were set out in Chapter 5, it was decided that the application of these steps to this research would be best suited for inclusion in this chapter to allow for a deeper exploration of the method in practice, alongside the analysis of the findings.

6.1.1 Conceptualisation of the dimensions

The first step in the process of developing the ideal types is the conceptualisation of the dimensions. In considering the consistent elements that can define the approach of a drug strategy, three key dimensions of drug policy have been identified: the extensiveness of the 'harm reduction' measures in place; the level of criminalisation of drug users; and the conditionality of the treatment programmes in place. These dimensions are of course contestable, and it is acknowledged that they do not encompass exhaustive coverage of all the elements which may contribute to existing national drug policies. However, for the purposes of this approach, these dimensions have been carefully selected as those which address three of the key strategies to

which variation can be observed within drug policy development for countries in Europe. The ideal types developed are based on the possible combinations of membership to the three dimensions, and components, identified. As the fuzzy method demands conceptual clarity for each of the dimensions included the conceptualisation of these three dimensions is presented as follows:

- Harm Reduction

For the 'harm reduction' (HR) dimension, the extensiveness of the harm reduction measures in place is considered through the overall extent of the HR measures available (i.e., the range of services and whether they are extensive/low-threshold or not), and the overall aims of the harm reduction programmes in place (i.e., whether they are primarily promoting harm reduction or not).

- Criminalisation

For the 'criminalisation' dimension, the strength of criminalisation measures in place is considered through the extent to which there is an absence of criminalisation in authorities' responses to drug use and possession of drugs for personal use (i.e., whether someone is likely to face imprisonment for these behaviours or not).

- Treatment

For the 'treatment' dimension, the conditionality of the treatment programmes in place is considered through the flexibility of the treatment programmes available (i.e., if they are

voluntary and easy to access or not) and the extent of the treatment programmes available (i.e., whether the range of options is extensive or not).

These three dimensions are informed by the literature reviews carried out at the start of this process. Reflecting on the first two chapters, several key areas of concern for drug policy were identified: demand reduction, and supply reduction, and – perhaps more controversially – harm reduction. Within these three areas of concern for policymakers, a range of different issues and objectives could be identified. As has been discussed previously in this research, there are many other aspects of national drug policies which are not encompassed by these three dimensions. For clarity, each of the key terms used to inform these dimensions (above) will be clearly defined and discussed further in the discussion below.

For supply reduction, several different levels of action towards the criminalisation of those involved in the production, manufacturing, trafficking, supply, possession, and use of drugs can be observed around the world. Other approaches in this subset of strategies are likely to be commonplace among regional and national drug policies across the world but identifying a means of comparing these approaches is complex. This is because in many countries policies will be particularly responsive to the supply or trafficking of specific substances – for example, 86% of the opium produced in 2017 came from Afghanistan, while Myanmar's production decreased to 5% in the same year (UNODC 2018). For these countries, policies which seek to respond to opioid production are likely to be of great concern for their national Governments, where other regions and countries may be more concerned with the manufacturing, trafficking or consumption of

substance derived from this. However, for the purposes of building a set of types considering key differences in national drug policies, it was thought that a measure of the criminalisation and imposed sanctions towards the use and possession of drugs for personal use provided an associated indication of the overall approach to the criminalisation of drugs nationally, given the more universal agreement (and thus less varied) approaches adopted in matters of production, trafficking, or sale of drugs. A further reason for this decision, was the data available to inform this dimension. Indeed, it may be of value to consider expanding this dimension to include other elements of supply control in future research, where comparable data is available.

For demand reduction, much of the focus for national drug strategies is seen to sit within the area of treatment. Policies of 'treatment' here are defined as services which are targeted to help people who use drugs to access support, whether this is in a detention centre, healthcare setting (whether inpatient or outpatient), in the community, or in prison. This has been informed by the range of forms of 'treatment' identified by the EMCDDA country profiles. For some countries, 'treatment' can be focused on supporting a person who uses drugs to reduce their consumption or reducing harms linked to their drug use; for others 'treatment' can be something seeking the aim of abstinence from drug use altogether or pursuing the goal of reducing criminal behaviour. There are several notable variations in the approaches taken to these policies, cross-nationally, which stem within the intended goals of such programmes. The provision of treatment can be easy for the person wishing to seek such services to access, i.e., low threshold (low TH), with very few or no requirements for those wishing to access services. Alternatively, treatment can be something which is very controlled in its access, and either have a high threshold for entry, or indeed be

considered compulsory in its nature. In exploring the EMCDDA country profiles, it was also noted that the use of treatment in prisons is commonly adopted cross-nationally, but again the extent and nature of this provision is variable. As such, this was also included as a key component of the 'treatment' dimension.

Finally, the inclusion of harm reduction was decided upon, despite it not being recognised as a key policy objective in terms of the global governance of drug control, and indeed for some being considered as the antitheses of what national drug policies should seek to implement. However, to exclude this dimension on that basis alone would be to ignore what has become a key element of national drug policy in Europe and, increasingly, around the world. It is also clear in exploring the range of approaches taken by the countries included, as to what can be defined as 'harm reduction', that significant variation regarding the provision, availability, and universality of such programmes can be observed, thus justifying further the need for its inclusion. In this research, harm reduction is defined as being measures which seek to minimise the risks and harms caused by drug use, by providing services to allow safe use of drugs. Reference made to the following harm reduction measures and services, within the EMCDDA country reports, are considered to fall under this title of harm reduction: take-home naloxone programmes (THNP); opioid substitution treatment (OST); methadone maintenance (MMT); heroin assisted treatment (HAT); drug consumption rooms (DCRs); needle and syringe exchange programmes (NSPs/NEPs); and testing or vaccination for HIV or other infectious diseases.

The extensiveness of the harm reduction measures in place is considered by first looking at NSPs

alone and then the broader range of harm reduction services in place, and how widespread the coverage is thought to be within each country. The conditionality of the harm reduction measures offered is also considered when placing countries in this dimension by looking at the aims of the harm reduction services in place. For some countries, harm reduction could be seen as a policy seeking to prevent harms related to drug use without preventing the drug use itself, whereas others incorporated harm reduction services in pursuit of stopping drug use. Though the term 'recovery' is of course contentious within the wider discussion of drug policy, for the purposes of this analysis, 'recovery' will be used within the Harm Reduction and Treatment dimensions to refer to strategies where the priority or overall goal is on stopping drug use, as this is the term used within much of the EMCDDA reporting. It should be stressed that this is not to imply that 'recovery' from drug use is, nor should, always be defined as such.

6.1.2 Calibration of set membership

Following the identification of the dimensions which make up the ideal types, the cases were placed into the typology. This has been done through assigning cases degrees of membership to each of the three dimensions, or 'sets' identified above (Hudson and Kühner 2009). For the purpose of this research, a six-value fuzzy score has been selected for each of the three dimensions, with the theory-driven thresholds for membership to each defined individually. The six-value fuzzy set was selected for the final calibration of cases within each dimension as it allows for more variance to be identified by the researcher. While the use of the continuous fuzzy set scale is often considered to be the best approach to scoring cases, it is not thought to be appropriate for QCA application where the researcher is not using any continuous scale

quantitative data. Given this, the selection of this scoring was based on the appropriateness for the cases included, in seeking to capture the differences observed. Were this research to be reapplied to include countries from other parts of the world, the type of variation would likely be much greater, and the scale – and how countries were scored on the scale selected – would need to be adjusted accordingly.

6.1.3 Scoring cases

Prior to assigning the final six-value score to be used in the FsITA, a four-value fuzzy set was used to help structure and inform levels of variance of cases for each component of the three sets. For example, in the *harm reduction dimension*, three key components were identified as important indicators of variance cross-nationally: the extent of the needle syringe programmes (NSPs) in place; the range of other harm reduction (HR) strategies available (i.e., whether these were extensive or limited in scope); and the primary aim of the national harm reduction strategy (i.e., whether it was focused on harm reduction alone, or recovery-centred). Each of these components were assigned a four-value score for each case, and these were then considered alongside each other to help inform the overall degree of membership to the set in the six-value fuzzy score. This was repeated for the other two dimensions, *criminalisation,* and *treatment.*

Table 9: Harm Reduction set components: 4-value scores

Accessibility & extent of HR		**Number & extent of HR**		**Conditionality of HR**	
1	most extensive	1	Most extensive HRMs	1	HR focus
0.67	fairly extensive	0.67	Fairly extensive HRMs	0.67	More HR than recovery
0.33	less extensive	0.33	Less extensive HRMs	0.33	More recovery than HR
0	least extensive	0	Least extensive/none	0	Recovery focus

Table 10: Criminalisation set components: four-value scores

Punishment - drug use		**Punishment - possession for personal use**	
1	Least punitive	1	Least punitive
0.67	Less punitive	0.67	Less punitive
0.33	Fairly punitive	0.33	Fairly punitive
0	Most punitive	0	Most punitive

Table 11: Treatment set components – four-value scores

Conditionality of Treatment		**Accessibility of Treatment**		**Extent of Treatment in prisons**	
1	Least coercive	1	Most accessible	1	Most extensive
0.67	Less coercive	0.67	Fairly accessible	0.67	Fairly extensive
0.33	More coercive	0.33	Less accessible	0.33	Less extensive
0	Most coercive	0	Least accessible	0	Least extensive

As has been noted previously in discussing FsITA, conceptual clarity and transparency are essential for any QCA method. Thus, what the four-value scores were indicative of are also presented in Tables 9, 10 and 11. Observable variance in national drug policy strategies in analysis of the EMCDDA individual country-level data informed the scoring of countries included, with the decisions for the calibration of cases to the three sets outlined in Table 12. The four-value scores assigned through the process of deciding on the final six-value score are shown in Table 13. The raw data used in the development of the dimensions are presented in the Appendix within Tables 28 to 33. These tables have not been included in the main body of the thesis as they are very lengthy and extensively wordy tables which contain information for all 30 countries, across the 8 aspects of policy included within the three dimensions (sets) identified. The information gathered in these tables has come from the EMCDDA and is presented in abbreviated form. There is some

Table 12: Calibration of the drug policy fuzzy sets

Dimension	Components	Set
Harm Reduction	Countries were initially given 4-value fuzzy scores across the following areas of HR: - Extent of NSPs in place - Range of other HR strategies (DCRs, THNPs, HAT) - Primary aim of HR strategy. These three scores were then considered alongside each other to help inform the overall degree of membership to the set in the 6-value fuzzy score	Fully in = 1: extensive & non-conditional harm reduction Mostly in = 0.8 More in than out = 0.6 More out than in = 0.4 Mostly out = 0.2: minimal & highly conditional HR Fully out = 0: no harm reduction strategies in place
Criminalisation	Countries were initially given two 4-value fuzzy scores: one for their approach to punishment of drug use and one for their approach to punishment of possession of drugs for personal use. These two scores were then considered alongside each other to help inform the overall degree of membership to the set in a 6-value fuzzy score	Fully in = 1: very unlikely to face criminalisation & imprisonment for drug use/possession of drugs for personal use Mostly in = 0.8 More in than out = 0.6 More out than in = 0.4 Mostly out = 0.2 Fully out = 0: highly likely to face criminalisation & imprisonment for drug use/possession for personal use
Treatment	Countries were initially given 4-value scores across the following areas of treatment: - Range of treatment options - Conditionality in access to treatment - Accessibility of treatment available in prisons. These three scores were then considered alongside each other to help inform the overall degree of membership to the set in the 6-value fuzzy score	Fully in = 1: extensive non-conditional treatment available Mostly in = 0.8 More in than out = 0.6 More out than in = 0.4 Mostly out = 0.2 Fully out = 0: limited highly conditional treatment available

Table 13: Country fuzzy membership scores

Country	Harm Reduction 4-value scores			**HR 6-value**	Criminalisation 4-value scores		**C 6-value**	Treatment 4-value scores			**T 6-value**
	NSPs	HRMs	Aim		Use	PPU		Extent	Conditionality	Prison	
Austria	0.67	0.33	0.67	**0.6**	1	0.67	**0.8**	0.67	0.67	0.67	**0.6**
Belgium	0.67	0.33	0.67	**0.6**	0.33	0	**0.2**	0.67	0.67	0.33	**0.6**
Bulgaria	0.67	0.33	0.67	**0.6**	0.67	0.67	**0.6**	0.67	0.33	0.33	**0.4**
Croatia	1	0.33	1	**0.8**	1	1	**1**	0.67	0.33	0.67	**0.6**
Cyprus	0.67	0.33	0.33	**0.4**	0	0	**0**	0.67	0.33	0.67	**0.4**
Czechia	1	0.33	0.33	**0.6**	1	0.67	**0.8**	0.33	0.67	0.33	**0.4**
Denmark	1	1	1	**1**	1	0.67	**0.8**	1	0.67	1	**0.8**
Estonia	0.33	0.33	0.33	**0.4**	0.33	0.67	**0.4**	0	0.33	0.67	**0.2**
Finland	0.33	0	0	**0.2**	0	0.33	**0.2**	0.33	0.33	1	**0.4**
France	0.67	0.67	0.67	**0.6**	0	0.33	**0.2**	0.67	0.33	1	**0.6**
Germany	0.67	0.67	0.67	**0.6**	0.67	0.33	**0.4**	0.67	0.67	0.33	**0.6**
Greece	0.33	0	0.33	**0.2**	0.33	0.67	**0.4**	0.67	0.67	0.33	**0.6**
Hungary	0.67	0	0	**0.2**	0	0	**0**	0.33	0.33	0	**0.2**
Ireland	1	0.33	0.33	**0.6**	0.67	0.67	**0.6**	0.67	0.67	1	**0.8**
Italy	0.67	0.33	0	**0.4**	0.67	0.33	**0.4**	0.67	0.33	0	**0.4**
Latvia	0.33	0	0	**0.2**	0.33	0.33	**0.4**	0.67	0.33	0.33	**0.4**
Lithuania	0.67	0.33	0.33	**0.6**	1	1	**1**	0.67	0.67	0	**0.6**
Luxembourg	0.67	0.67	1	**0.8**	0.67	0.67	**0.6**	0.67	0.67	1	**0.8**
Malta	0.67	0.33	1	**0.6**	0.67	0.67	**0.6**	0.67	0.67	0.33	**0.6**
Netherlands	1	0.67	1	**0.8**	1	0.67	**0.8**	1	1	1	**1**
Norway	0.67	0.33	0.33	**0.4**	0	0.33	**0.2**	0.67	0.33	1	**0.6**
Poland	0.33	0.33	0.67	**0.4**	0.33	0.33	**0.4**	0.67	0.33	0.33	**0.4**
Portugal	1	0.33	0.67	**0.8**	0.67	0.67	**0.6**	0.67	0.33	1	**0.6**
Romania	0.33	0.33	0.67	**0.4**	0.33	0.33	**0.4**	0.67	0.33	0.33	**0.4**
Slovakia	0.33	0	0.67	**0.4**	0	0	**0**	0.67	0.33	0.33	**0.4**
Slovenia	0.67	0.33	1	**0.8**	1	1	**1**	0.67	1	1	**0.8**
Spain	0.33	0.33	0.67	**0.6**	0.67	0.67	**0.6**	0.67	0.67	1	**0.8**
Sweden	0.33	0	0	**0.2**	0	0	**0**	0.33	0	0.67	**0.4**
Turkey	0	0	0	**0**	0	0	**0**	0.67	0	0	**0.2**
UK	0.67	0.67	0.33	**0.6**	0.33	0.33	**0.4**	0.67	0.67	0.67	**0.6**

crossover in the way different countries reported their information, which means data did not always fit neatly into the areas identified, particularly in discussions on harm reduction and treatment, and criminalisation of drug use and possession.

6.1.4 Fuzzy set ideal-type analysis

The use of the 4-value scores may seem confusing, given that the final scores given do not necessarily equate to the equal value being assigned in the 6-value scoring. However, this approach was adopted for several reasons. The initial 4-value scores were to be indicative of the strength of membership to the three criteria for each dimension, in order to guide the researcher in the decision of which score to assign to the 6-value set membership. This was done to add further conceptual clarity and transparency to the process, and to aid in understanding on what components added to the scoring of each case across each dimension. However, in this iterative process, the knowledge gathered for each country resulted in a deeper understanding of the wider comparisons between cases. Given this, the development of the 6-value score was not done arithmetically, but instead using the figures as a guide alongside the understanding of the researcher. This is why some countries which score 0.67 in all three components may receive the same 6-value score as others scoring two 0.67's and 0.33 for the same dimension, and likewise why some countries scoring 0.67, and two 0.33's might end up with different 6-value scores. A strength of FsITA is that the researcher can bring their own knowledge of the difference between cases, relevant to the dimensions, into the ranking of the cases; this is particularly important where (in the cases of several countries in this typology) their scores were identical, but borderline in their membership of the four value sets.

Based on the three dimensions identified, the potential property spaces, or 'types', for each case were then considered. Given the number of dimensions included, the possible combinations of ideal types of drug policy regime were eight. These eight ideal types, and their criteria for inclusion of cases to their set, are shown in Table 14. Using FsITA, cases included in this analysis were then placed into the 'type' to which they were most closely aligned along the three dimensions considered.

Table 14: Property spaces for ideal types of drug policy regimes

Ideal types	Harm Reduction (H)	Criminalisation (C)	Treatment (T)	Model
Universal care-driven & non-punitive	IN	IN	IN	(H*C*T)
Conditional care & non-punitive	IN	IN	OUT	(H*C*~T)
Universal care-driven & punitive	IN	OUT	IN	(H*~C*T)
HR-driven & punitive & coercive	IN	OUT	OUT	(H*~C*~T)
Treatment-driven & non-punitive	OUT	IN	IN	(~H*C*T)
Non-punitive & conditional	OUT	IN	OUT	(~H*C*~T)
Treatment-driven & punitive	OUT	OUT	IN	(~H*~C*T)
Conditional & punitive	OUT	OUT	OUT	(~H*~C*~T)

6.1.5 Findings

As shown in Table 15, five of the eight property spaces - or 'ideal types' - have been assigned cases. A discussion of these five 'types', and the placing of the countries within them, will now be considered.

Table 15: Truth table: Drug policy regime sets

Ideal types	H	C	T	Model	Real types
Universal care-driven & non-punitive	IN	IN	IN	(H*C*T)	Croatia, Malta, Portugal, Lithuania, Spain, Ireland, Luxembourg, Austria, Denmark, Slovenia, Netherlands
Conditional care & non-punitive	IN	IN	OUT	(H*C*~T)	Bulgaria, Czechia
Universal care-driven & punitive	IN	OUT	IN	(H*~C*T)	France, Belgium, UK, Germany
Harm reduction-driven & punitive & coercive	IN	OUT	OUT	(H*~C*~T)	-
Treatment-driven & non-punitive	OUT	IN	IN	(~H*C*T)	-
Non-punitive & conditional	OUT	IN	OUT	(~H*C*~T)	-
Treatment-driven & punitive	OUT	OUT	IN	(~H*~C*T)	Greece, Norway
Conditional & punitive	OUT	OUT	OUT	(~H*~C*~T)	Turkey, Hungary, Poland, Sweden, Slovakia, Cyprus, Finland, Latvia, Romania, Estonia, Italy

6.2 Ideal Types

While the types identified above are interesting to explore, it is important to place these findings in the context of the wider drug policy literature. In order to further explore the accuracy and utility of the types identified in the fuzzy set analysis, it is necessary to return to the original literature explored on typologies which have already been identified in Chapter 3. The first step is to identify any cases placed into surprising sets, based on past understandings of how countries may be grouped.

To do this, Figure 8 provides a reference point for analysis, with an outline of the spectrums and categorisation of the previous and new 'types' identified. Figure 9 provides a further illustration of the placement of countries into each of these 'types'. The positioning of the letters (used to indicate the placement for that 'type') is illustrative of the overall focus of the national policy, and whether this is more closely aligned to the regulatory/harm reduction types (left), care/treatment types (central) or punitive/prohibitive types (right) previously identified and used to inform typological development to date.

Figure 8: Drug Policy Typology Scales

Healthcare / Treatment ⟷ **Criminal Justice / Enforcement**		
HC/T		CJ/E
Libertarian L	**Regulation** R	**Prohibition** P
Decriminalisation De-facto decriminalisation	De-penalisation Treatment	
Regulatory Regimes ⟷ **Care-oriented Regimes** ⟷ **Punitive Regimes**		
R RCC	C CCP	P

Ideal types	**H**	**C**	**T**	**Model**
Universal care-driven & non-punitive	IN	IN	IN	(H*C*T)
Conditional care & non-punitive	IN	IN	OUT	(H*C*~T)
Universal care-driven & punitive	IN	OUT	IN	(H*~C*T)
Treatment-driven & punitive	OUT	OUT	IN	(~H*~C*T)
Conditional & punitive	OUT	OUT	OUT	(~H*~C*~T)

To explore the case membership to the five types utilised in the FsITA, each set will be discussed to see where key similarities may be observed between cases. While each of the sets has been assigned a name within the truth table, to highlight the key features across the three dimensions

used, the discussion of these groupings will consider the overall motives which sit alongside the approach taken by the cases included within it. This will be followed by a discussion of any particularly surprising findings within the set memberships. For each set, this will be done by first looking to the previous placements of countries in other typologies identified in Chapter 3, followed by further discussion of what can be taken from this analysis.

Figure 9: Country placement across four Drug Policy Typologies

Country	FsQCA	R – C – R	L – R – P	HC/T – CJ/E
Austria	H*C*T	CCR	P	CJ/E
Belgium	H*~C*T	R	L	HC/T
Czechia	H*C*~T	R	L	HC/T
Denmark	H*C*T	CPP	P	CJ/E
Estonia	~H*~C*~T	RCC	L	HC/T
Finland	~H*~C*~T	CPP	P	CJ/E
France	H*~C*T	C	R	HC/T
Germany	H*~C*T	RCC	R	HC/T
Greece	~H*~C*T	C	R	HC/T
Hungary	~H*~C*~T	C	R	HC/T
Ireland	H*C*T	RCC	R	HC/T
Italy	~H*~C*~T	C	R	HC/T
Luxembourg	H*C*T	R	L	HC/T
Netherlands	H*C*T	R	L	HC/T
Norway	~H*~C*T	P	P	CJ/E
Poland	~H*~C*~T	C	R	HC/T
Portugal	H*C*T	RCC	L	HC/T
Slovakia	~H*~C*~T	P	P	CJ/E
Slovenia	H*C*T	R	L	HC/T
Spain	H*C*T	RCC	R	HC/T
Sweden	~H*~C*~T	P	P	CJ/E
Turkey	~H*~C*~T	CCP	P	CJ/E
UK	H*~C*T	CPP	P	CJ/E

6.2.1 Universal care-driven & non-punitive: *stay safe, don't worry, here if you need us*

The first set identified is shown in Tables 16 and 17. Here, it can be seen that all cases have been scored as having membership to all three dimensions, suggesting that all countries included can

be considered to have more extensive and non-conditional harm reduction measures in place, were unlikely to face criminalisation or imprisonment for the use or possession of drugs for personal use and had more extensive treatment facilities with fewer conditions attached to their use.

Table 16: Truth table: Universal care-driven and non-punitive set

Ideal types	H	C	T	Model	Real types
Universal care-driven & non-punitive	IN	IN	IN	(H*C*T)	Croatia, Malta, Portugal, Lithuania, Spain, Ireland, Luxembourg, Austria, Denmark, Slovenia, Netherlands

In first considering the countries included in this set, there are some unexpected findings when we look to previous placements across the four typologies identified. Austria and Denmark are almost consistently defined as having a more punitive, criminal-justice focused approach to their national drug policies; yet in this set we see them placed alongside countries such as the Netherlands and Portugal, known and extensively analysed across drug policy research as being examples of approaches which have departed from the more traditionally punitive strategies historically promoted under the auspices of the three UN Conventions informing the international drug control regime. While it is the case that both countries are either 'fully in' or 'mostly in' all three dimensions, Austria scores much lower on the 4-value score for the range and accessibility of broader harm reduction provision in place. However, the development of their NSPs, available in low-threshold settings across the majority of provinces, alongside the overall aims of the harm

reduction strategy, and prioritisation of treatment over punishment for use of drugs have pulled them up in other aspects of this dimension. This follows through in Austria's provision of treatment, with compulsory or coercive treatment not mentioned in their overall strategy, further supported by the flexibility of the services in place. In the harm reduction and treatment dimensions, Denmark scores higher still. Despite elements of conditionality in the treatment

Table 17: Universal care-driven & non punitive set

Country	Harm Reduction 4-value scores			**6-value**	Criminalisation 4-value scores		**6-value**	Treatment 4-value scores			**6-value**
	NSPs	HRMs	Aim		Use	PPU		Extent	Cond.	Prison	
Croatia	1	0.33	1	**0.8**	1	1	**1**	0.67	0.33	0.67	**0.6**
Malta	0.67	0.33	1	**0.6**	0.67	0.67	**0.6**	0.67	0.67	0.33	**0.6**
Portugal	1	0.33	0.67	**0.8**	0.67	0.67	**0.6**	0.67	0.33	1	**0.6**
Lithuania	0.67	0.33	0.33	**0.6**	1	1	**1**	0.67	0.67	0	**0.6**
Spain	0.33	0.33	0.67	**0.6**	0.67	0.67	**0.6**	0.67	0.67	1	**0.8**
Ireland	1	0.33	0.33	**0.6**	0.67	0.67	**0.6**	0.67	0.67	1	**0.8**
Luxembourg	0.67	0.67	1	**0.8**	0.67	0.67	**0.6**	0.67	0.67	1	**0.8**
Austria	0.67	0.33	0.67	**0.6**	1	0.67	**0.8**	0.67	0.67	0.67	**0.6**
Denmark	1	1	1	**1**	1	0.67	**0.8**	1	0.67	1	**0.8**
Slovenia	0.67	0.33	1	**0.8**	1	1	**1**	0.67	1	1	**0.8**
Netherlands	1	0.67	1	**0.8**	1	0.67	**0.8**	1	1	1	**1**

programmes available, the goal of harm reduction has become a strategy implemented across multiple areas of the national drug policy (Bjerge et al. 2015; EMCDDA 2018). There are a wide range of measures in place in Denmark, including drug consumption rooms (DCRs), take home

naloxone programmes (THNPs), syringe vending machines (SVMs), opioid substitution treatment (OST), and needle syringe programmes (NSPs).

The focus on reducing harms and offering extensive treatment to people who use drugs is extended into the prison system for both Austria and Denmark, though more extensively in the latter. However, the previous positioning of both countries as being on the more punitive end of the spectrums of drug policy typologies does not hold weight in terms of the measures used in the FsQCA criminalisation dimension. Both do not mention drug use as an offence in their laws, with punishments for possession for personal use likely to be a fine or short-term prison sentence, depending on the quantity or kind of drug in question. However, there are provisions in both countries for more punitive measures to be implemented for other drug-related crime, which have not been included in this dimension for reasons set out previously. Nevertheless, when comparing this level of drug-related crime, it is clear that neither opt for overly punitive measures. Further consideration of the criminal justice approach to both Austria and Denmark will be considered following the results of the regression analysis.

Several countries in this set were not included in previous research which assigned countries along the different dimensions of past typologies: Croatia, Malta, and Lithuania; hence their omission from Figure 9. As such, there is less that can be discussed about appropriateness of their placements comparatively. However, some low scores across several criteria illustrate the picture is much less clear cut here, and points to the need for further research to be carried out, exploring

addition sources in order to understand – and perhaps confirm or even re-evaluate – their scores and positioning in these sets.

The other countries assigned to this set are not unexpected, with the Netherlands, Luxembourg, Slovenia, and Portugal all having been previously placed in types known for extensive harm reduction, treatment, and non-punitive approach to drug use. However, Ireland and Spain are perhaps more universal in access, and extensive in their coverage, of harm reduction measures than has been previously identified, when compared to other countries in the EMCDDA.

6.2.2 Conditional care & non-punitive: *stay safe, don't worry, but do as you're told*

Table 18: Conditional care & non-punitive set

Country	Harm Reduction 4-value scores			**6-value**	Criminalisation 4-value scores		**6-value**	Treatment 4-value scores			**6-value**
	NSPs	HRMs	Aim		Use	PPU		Extent	Cond.	Prison	
Bulgaria	0.67	0.33	0.67	**0.6**	0.67	0.67	**0.6**	0.67	0.33	0.33	**0.4**
Czechia	1	0.33	0.33	**0.6**	1	0.67	**0.8**	0.33	0.67	0.33	**0.4**

For this set, all cases have been scored as having membership to the harm reduction and criminalisation dimensions, but not treatment. This means that all cases can be considered to have more extensive and non-conditional harm reduction measures in place, were unlikely to face criminalisation or imprisonment for the use or possession of drugs for personal use and had less extensive treatment facilities with more conditions attached to their use.

Table 19: Truth Table: Conditional care & non-punitive set

Ideal types	H	C	T	Model	Real types
Conditional care & non-punitive	IN	IN	OUT	(H*C*~T)	Bulgaria, Czechia

Only two countries were placed into this set, as shown in Tables 18 and 19: Bulgaria and Czechia. Unfortunately, Bulgaria is another country which has not been previously placed across the four typologies shown in Figure 9, but Czechia was. For Czechia, the placement within this set is largely unsurprising, though is reflective of the problem observed in other typologies grouping together harm reduction and treatment into one classificatory group in the remit of healthcare. For Czechia, it is in fact their low scores in the conditionality of access to treatment, and availability of treatment in prison, that moves them into this set. While some treatment is available, this is not extensive nor universal in its coverage either in or outside of prisons, with a focus on abstinence also noted in their reporting of this strategy. Indeed, the shortcomings in their treatment provision is highlighted as being an area in need of improvement and was noted as in the national strategy for drug policy reform 2014-20 (EMCDDA 2018).

6.2.3 Universal care-driven & punitive: *stay safe, here if you need us, but watch your back*

Here all cases have being scored as having membership to the harm reduction and treatment dimensions, but not to the criminalisation dimension. This highlights that all cases can be considered to have more extensive and non-conditional harm reduction measures in place, were likely to face criminalisation or imprisonment for the use or possession of drugs for personal use and had more extensive treatment facilities with fewer conditions attached to their use.

Table 20: Universal care-driven & punitive set

Country	Harm Reduction 4-value scores			**6-value**	Criminalisation 4-value scores		**6-value**	Treatment 4-value scores			**6-value**
	NSPs	HRMs	Aim		Use	PPU		Extent	Cond.	Prison	
France	0.67	0.67	0.67	**0.6**	0	0.33	**0.2**	0.67	0.33	1	**0.6**
Belgium	0.67	0.33	0.67	**0.6**	0.33	0	**0.2**	0.67	0.67	0.33	**0.6**
UK	0.67	0.67	0.33	**0.6**	0.33	0.33	**0.4**	0.67	0.67	0.67	**0.6**
Germany	0.67	0.67	0.67	**0.6**	0.67	0.33	**0.4**	0.67	0.67	0.33	**0.6**

Table 21: Truth Table: Universal care-driven & punitive set

Ideal types	**H**	**C**	**T**	**Model**	**Real types**
Universal care-driven & punitive	IN	OUT	IN	(H*~C*T)	France, Belgium, UK, Germany

France, Belgium, and Germany are placed in similar positions across all four typologies in terms of their approach to healthcare and harm reduction measures in place. However, along the criminalisation dimension, all three are considered to be more punitive in nature than not, which puts them at odds with the more liberal or regulatory labels previously applied. In exploring this further, the evidence is much less ambiguous as to the reason the countries were scored as they were along the criminalisation dimension, as all three consider possession of drugs for personal use to be a crime, while both France and Belgium also consider drug use to be an offence under their drug laws. While the punishments are variable for these actions, the maximum sentences and fines are much higher because of this definition. Though Germany does not consider use to be an offence, it does allow for up to five years in prison for those caught in possession of drugs. While there is discretion in the implementation of sanctions for use and possession across all three countries, what is legally permissible in terms of punishment is arguably not indicative of countries

with more liberal attitudes to the criminalisation of drugs, as has been previously indicated in drug policy placement according to the dimensions outlined in previous typologies.

The UK's position across the four typologies is more varied, though leans towards a health *and* criminal justice groups across all types. This suggests the placement of the UK fits with previous understandings of the defining qualities of the UK's drug policy strategy.

6.2.4 Treatment-driven & punitive: *get better, watch your back, but here if you need* us

Here all cases have being scored as having membership to the treatment dimension, but not to harm reduction or criminalisation. This highlights that all cases can be considered to lack extensive and non-conditional harm reduction measures, were likely to face criminalisation or imprisonment for the use or possession of drugs for personal use and had more extensive treatment facilities with fewer conditions attached to their use.

Table 22: Treatment-driven & punitive set

Country	Harm Reduction 4-value scores			**6-value**	Criminalisation 4-value scores		**6-value**	Treatment 4-value scores			**6-value**
	NSPs	HRMs	Aim		Use	PPU		Extent	Cond.	Prison	
Norway	0.67	0.33	0.33	**0.4**	0	0.33	**0.2**	0.67	0.33	1	**0.6**
Greece	0.33	0	0.33	**0.2**	0.33	0.67	**0.4**	0.67	0.67	0.33	**0.6**

Table 23: Truth Table: Treatment-driven & punitive set

Ideal types	**H**	**C**	**T**	**Model**	**Real types**
Treatment-driven & punitive	OUT	OUT	IN	(~H*~C*T)	Norway, Greece

The grouping together of Norway and Greece is interesting, given their positioning across the other typologies. While Norway is often placed alongside other countries considered to have a more punitive approach to their national drug policy, this appears to have masked the developments made in their treatment programmes for people who use drugs, which places them more distinctly into this set. While the conditionality of the treatment options in place pulls the score down, in terms of the measure for this dimension, the availability of treatment both in and outside of prison – inclusive of vaccinations, counselling, OST, and other support – is perhaps more extensive than anticipated. While some of this may appear indicative of a wider provision of harm reduction, this is not the case, with little development of harm reduction measures in place outside of NSPs – though these are considered to be low-threshold overall - and an overarching rhetoric which prioritises prevention, intervention, and recovery, as opposed to harm reduction for its own sake.

Greece, on the other hand, has been better defined in this group in terms of its more extensive focus on treatment (at least outside of prisons), but perhaps with this aspect of the national drug policy overshadowing the more limited availability of harm reduction measures in place. The focus on Greece's drug policy is similar to Norway, with key pillars of drug supply and demand reduction, and no mention of harm reduction outside of steps seeking prevention of blood-borne viruses such as NSPs. The punitive nature of Greek drug policy has also varied in its typological placement, with the FsITA set finding a much less progressive approach towards drug use and possession for personal use than is observed in other countries in the EMCDDA. While drug use and possession are considered criminal offences, there is no mention of possession for personal use being

differentiated between quantities of drugs which elsewhere would not be considered for personal use. However, there is discretion afforded to the judge, and the punishment for use is unlikely to lead to a conviction, though could include a prison sentence.

6.2.5 Conditional & punitive: *get better, watch your back, and do as you're told*

For this set, all cases have been scored as having no membership to any of the dimensions. This means that all cases can be considered to lack extensive and non-conditional harm reduction measures, people were likely to face criminalisation or imprisonment for the use or possession of drugs for personal use and had less extensive treatment facilities with more conditions attached to their use.

Cyprus, Romania, and Latvia have not been included among those previously placed into the typologies presented in Figure 9, and as such will not be included in this part of the analysis. There are several countries included in this set which will be of little surprise when considering their past positioning in the other typologies, these being Sweden, Turkey, Slovakia, and Finland. While each of these countries have previously well-defined preferences towards drug policies which prioritise a more punitive or prohibitive approach, it is nonetheless interesting to see the occasional higher score for some countries. Finland and Sweden, for example, are both shown to have fairly extensive treatment provision in prison settings, though interestingly this is not observed outside of these settings. In Finland, OST and a range of other harm reduction measures, albeit focused on recovery, are available within prisons, with Swedish prisons also able to provide OST and other support for those who need it.

Table 24: Conditional & punitive set

Country	Harm Reduction 4-value scores			**6-value**	Criminalisation 4-value scores		**6-value**	Treatment 4-value scores			**6-value**
	NSPs	HRMs	Aim		Use	PPU		Extent	Cond.	Prison	
Turkey	0	0	0	**0**	0	0	**0**	0.67	0	0	**0.2**
Hungary	0.67	0	0	**0.2**	0	0	**0**	0.33	0.33	0	**0.2**
Poland	0.33	0.33	0.67	**0.4**	0.33	0.33	**0.4**	0.67	0.33	0.33	**0.4**
Sweden	0.33	0	0	**0.2**	0	0	**0**	0.33	0	0.67	**0.4**
Slovakia	0.33	0	0.67	**0.4**	0	0	**0**	0.67	0.33	0.33	**0.4**
Cyprus	0.67	0.33	0.33	**0.4**	0	0	**0**	0.67	0.33	0.67	**0.4**
Finland	0.33	0	0	**0.2**	0	0.33	**0.2**	0.33	0.33	1	**0.4**
Latvia	0.33	0	0	**0.2**	0.33	0.33	**0.4**	0.67	0.33	0.33	**0.4**
Romania	0.33	0.33	0.67	**0.4**	0.33	0.33	**0.4**	0.67	0.33	0.33	**0.4**
Estonia	0.33	0.33	0.33	**0.4**	0.33	0.67	**0.4**	0	0.33	0.67	**0.2**
Italy	0.67	0.33	0	**0.4**	0.67	0.33	**0.4**	0.67	0.33	0	**0.4**

Table 25: Truth Table: Conditional & punitive set

Ideal types	**H**	**C**	**T**	**Model**	**Real types**
Conditional & punitive	OUT	OUT	OUT	(~H*~C*~T)	Turkey, Hungary, Poland, Sweden, Slovakia, Cyprus, Finland, Latvia, Romania, Estonia, Italy

Turkey's scores are much starker, and definitive, in their placement within this set. Previous typology placement has also identified a 'care' element to Turkey's approach to drug policy, which is perhaps reflected in the one dimension in which they score above 0 – that of treatment provision (outside of the prison setting). Given the difference in the strength of their membership to this set, as compared to other countries, it is perhaps worth considering what else may be impacting on their national drug policy approach. This, again, will be of interest in the analyses to follow.

Italy, Hungary, and Poland are much more surprising inclusions within this set, with all having been much more closely aligned with the health, treatment, and regulatory types, as shown in Figure 9. Hungary's membership to this set is perhaps less questionable, given the 4-value scores assigned to them in the majority of areas. Though they do score highly in terms of the NSPs available, the limited extent of this and additional provisions alongside the overall aim of their approach to harm reduction is indicative of one focused on recovery, via conditionality and coercion into treatment. However, Italy and Poland present scores which are less consistent, representative of less coherence across all three dimensions, and the eight criteria which fall within these. While both present elements of harm reduction, slightly less punitive approaches to drug use and possession, and the provision of treatment, they cannot be considered to sit alongside those for whom treatment and harm reduction are more universally provided and less conditional, as they have been in previous types.

6.3 Conclusion

Within this process, many countries were placed predictably, along the same lines as previous types. Other countries were placed in less expected types, with explanation for these placements discussed in further detail. Unfortunately, there were some countries which could not be included in this analysis, as they were not previously assigned membership to any of the other types. The placement of countries, predictably and unpredictably, raises several points for discussion.

Firstly, it is worth considering whether the cases of inconsistency in placement are indicative of the justification for this approach or a failure of the method. The argument in favour of the

approach would point to the rigidity of other, perhaps better known and established, types of drug policies being identified within their expected sets. The strength of this approach is the ability of the researcher to systematically score countries along set dimensions based on detailed analysis of qualitative data informing the researcher's knowledge and understanding of the cases included. Doing this in a way that guides the reader through this analysis, ensuring conceptual clarity and transparency in this approach, it is hoped any such inherent unconscious biases will have been discounted, and that the types identified are entirely guided by the information on national drug policies, as presented within the EMCDDA data. For countries placed in sets which differ from previously defined types, it can be argued that the typology developed presents a more rigorous and replicable placement of cases, and as such provides a more stable set of types that will be of value in future cross-national comparative analyses.

Of course, the limitations of the findings are important to note here too. The dimensions identified, and the scales on which cases were scored, are the prevailing factors influencing the membership of countries to each set, and it cannot be dismissed that slightly different decisions taken in the scoring of cases, or other criteria considered in each dimension, could have resulted in some countries being placed differently. This is why attention was given to the conceptualisation of the dimension, grounded in the literature reviewed at the start of this research. There is a good argument to be made for the inclusion of these dimensions in the policies observed.

In pursuing a more in-depth review of the elements that make up a national drug strategy through the use of qualitative comparative analysis, it is hoped future research will be able to learn from

and utilise this method in order to explore types of drug policies in other regions. There is potential for this typology to be further developed, to incorporate additional variables to more extensively inform the main dimensions identified in conceptualising drug policy strategies, as more data becomes available to researchers. This is likely to include a broader focus on the national legislative responses to other drug-related activity (trafficking, sale, possession of larger quantities) as well as the calibration of a dimension on prevention-based approaches to national drug strategies.

As noted at the start of this paper, further research is required to explore what can be understood about the relationship between drug policies, drug-related outcomes, and the national cultural context in which they exist. It was hoped the typology presented here could offer a useful first step towards addressing this question. However, due to this part of the analysis not being completed nor presented, the final discussion of this work will be concluded in Chapter 8.

Chapter 7

7 Regression Analysis

The plan for this chapter was to present the regression analysis, pulling together the typology, measure of culture, contextual socioeconomic variables, and drug-related outcomes. The use of 'culture' was to be operationalised by following the work of Jo (2010) and aggregating country-level culture variable of stable societal values, using EVS 2008 data. The aim of this was to explore any significant relationship between the measure of national cultural context and the drug-related outcomes, alongside considerations of the type of drug policy in place and wider socioeconomic contexts. It was hoped the extent to which cultural variance may be seen to impact upon drug-related outcomes could be ascertained. This, in turn, could help future drug policy scholarship consider if other variables, rather than a drug policy alone, might account for any kind of measurable impact in dealing with drug-related problems. In doing so it was hoped we will be better equipped to understand why variance exists in both strategy selection and outcomes observed.

Unfortunately, I have been unable to complete this section of my research, and as such have had to omit this from the work submitted. This has impacted on the ability of the researcher to present the discussion which would have been considered. As such, the main discussion of the key findings is presented in Chapter 6. The Conclusion presented in Chapter 8 will be the next and final point of discussion for the work which has been completed for this thesis.

Chapter 8

8 Conclusion

This research set out to explore gaps in the literature within the field of comparative cross-national analyses of drug policy. The original research questions identified in this review of the literature were presented, and were planned to be addressed using a three-step process encompassing different methodologies: the development of a typology of drug policy regimes across thirty European countries using fuzzy set ideal type analysis; the operationalisation of national culture within comparative drug policy research using Jo's (2010) approach to quantifying stable measures of societal values; and the development of a new dataset from which multiple regression could be utilised to further understand relationships between the type of drug policy followed, cultural context, and socioeconomic contexts on drug-related outcomes. While it is frustrating not to be able to present a more comprehensive and complete overview of the intended output for this research, drawing on what has been achieved as well as what has not will be considered in this concluding chapter.

As this paper is drawn to a close, the only research question that has truly been addressed is **RQ2: How can cross-national variation in types of drug policies be better understood?** In seeking to address this question, the utility of developing a typology of different drug policies was considered. This approach was judged to be appropriate for this research, based on the few attempts which have been identified that also attempt to place national drug policy strategies into definable sets, and the strength of this approach in relatively new applications. One of the weaknesses identified

in previous attempts to develop a typology of this kind was the lack of rigour and real-world application of the sets. In seeking to develop a new typology, it was therefore deemed essential to ensure a method was chosen which addressed these shortcomings, and one that would necessitate transparency and replicability in its approach.

Fuzzy set ideal type analysis (FsQCA) was used to identify variance in approaches to national drug policy across the reporting countries of the EMCDDA in 2017. The dimensions used were centred around policies responding to the problem of drug use, and the range of responses observed within national drug policy regimes. Eight ideal types were identified in this process, five of which were seen to draw the membership of countries included in the analysis. Each of these sets was analysed alongside previous work which sought to place countries within three other typologies identified in the drug policy literature. While several key considerations were discussed in the conclusion to Chapter 6, the key issue for discussion in this concluding chapter is whether the research question was able to be answered.

The strength of this approach to typology development is the requirement for the researcher to develop an in-depth understanding of the cases being explored. Comparing this approach to that of previous typologies identified, it is clear much less rigor is asked, or demanded, of the researcher wishing to try and place countries within the options provided. They can be done with perhaps only a surface level of understanding of drug policies, and as such can overlook important elements which are indicative of variation in the national strategies adopted.

The development of this typology necessitated the narrowing of the countries selected to consider one region: Europe. This was due in part to the method chosen as well as the limitations of the comparable data available. Future research could explore the utility of this approach further by applying this to the development of typologies of drug policies in other regions, or cross-regionally. This would help to address two further issues noted in the shortcomings of the findings produced: whether the dimensions identified are operational outside of countries in Europe, and whether there is utility in applying this to countries across different regions.

A key issue to consider is whether there is value in comparative cross-national research. While Esping-Andersen (1990) argued that the approach of comparing policies at the national level was of value, a necessary starting point, in cross-national research of lesser-explored phenomena, it is also the case that drug policy is not an area of study in its infancy. It is a field rich in research, particularly when considering analyses of specific strategies and policies adopted in pursuit of a range of drug-related outcomes. Works which have looked at the impact of specific policies at a local or national level are clearly of great value to the field and provide much richer detail in seeking to understand these matters. However, Esping-Andersen also defended the requirement not to delve too deeply into the details of the policies implemented, with the sacrifice of such detail necessary in work seeking to understand the 'big picture' (1990:2). Though hesitant to appear in disagreement with the author of such a seminal piece of work, it is clear that this argument does not apply to the development of a typology of drug policy regimes. For this cross-national comparative research to be of any value, being able to present such synthesised information is only possible once the researcher has dove into the detailed accounts of these

policies: the application of Qualitative Comparative Analysis via FsQCA allowed this research to do just that.

The need to understand how drug policy impacts upon drug-related outcomes, and whether other elements of the national culture or socioeconomic status of a country are important to consider in future drug policy development, unfortunately remains unanswered. It was hoped that further analysis of these types could be considered alongside the drug-related outcome data, and other contextual variables, to be included in the regression analysis. This would have presented the opportunity to consider again whether there is a notable relationship to be observed between different approaches to national drug policies and the outcomes observed. However, what has been produced is a typology which will assist in the pursuit of this objective, should other researchers wish to explore this further.

Appendix

Table 26: Data – Accessibility and extent of Needle Syringe Programmes (NSPS)

CC	Extent of NSPs	Score
AT	NSPs available in 7 of 9 provinces through fixed low-TH settings, outpatient drug services, & outreach workers; SVMs operating; Includes info on safer use, safer sex, condom distribution, basic medical care, vaccination programmes against HEP A & B, free HIV testing, & viral hep, & counselling. Access to treatment for chronic HEP C	0.67
BE	NSPs available at HR low-TH projects & pharmacies in French (8 cities) & Flemish (19 cities) communities. Not available in German speaking community. Those that exist in Flemish & French communities distribute safe injecting equipment, syringes, collect used needles, & facilitate referral of PWID to other prevention treatment services. NSPs available through fixed sites, mobile services, or pharmacies. At least one 'drop-box' available in every Flemish province to collect used injection materials in public places	0.67
BG	7 HR programmes active (2016) run by NGOs providing services at 8 fixed and 122 outreach sites across the country/in shelters. Help PWID & focus on high-risk groups. Services include: info & training on safe injecting practices; info on safe sexual behaviour; training on prevention of overdoses; prevention of infectious diseases; testing for blood-borne infections; & supplying sterile	0.67

	injecting equipment. Most services are provided through outreach workers in street or shelters & institutions,; drop-in centres are available	
HR	Overall HR extensive in coordination (integral part of public health activities, promo by MoH). HR progs available at both fixed sites and in mobile vans. Give out needles, syringes, & safer injecting equipment; offer voluntary anonymous & free counselling & testing. also print & distribute material about safer drug use. Focus recently on health-related risks among clients.	1
CY	Syringe exchange provided through low TH drop-in centre, but little used since 2014. Most illicit drug users get syringes/safe injecting equipment from pharmacies (available for purchase). 5 SVMs dispensing kits with syringes & safe injecting equipment installed across country (2017). Also: overdose prevention, counselling for risk reduction, sex ed; outreach team testing for infectious diseases, vaccinations, referral for treatment; info & ed; medical care when necessary. Aim=preventing spread of infectious diseases	0.67
CZ	Extensive reach in NSPs; low TH; Providing clean needles, syringes & other paraphernalia, condoms, testing for infectious diseases, counselling, healthcare, hygienic services, referrals. 2 cities SVMs. Special street bins for safe disposal installed in Prague. Mostly NGO delivery, funded through grants	1
DK	SVMs operating. NSPs available since 1986. Syringe provision is administered through: free dispensing of syringes & syringe sales in pharmacies, treatment institutions, drop-in centres & through SVMs in public places. Some	1

	municipalities also dispense needles & syringes at shelters & hostels. The provision of sterile water & other injecting equipment is also common	
EE	Gov't funded NSPs since 2003; coverage & quality said to have improved over the years; 15 fixed and 23 outreach syringe programme sites, mostly located in Tallinn & the eastern part of the country, where the problem of IDU is concentrated. Offer: clean injecting equipment; counselling & health education; free diagnostic testing for drug-related infectious diseases (via HIV testing centres & other locations) in 9 cities	0.33
FI	NSPs available through health counselling centres. Needles & syringes also available for purchase without medical prescription at most pharmacies: pharmacies play a key role in needle & syringe provision in areas with no health counselling centres. Vaccination for HEP A & B free for PWID as part of the general vaccination programme	0.33
FR	SVMs operating; HR include: NSPs, advice on safer drug use & general health promotion activities, such as condom distribution. A state-subsidised kit containing sterile syringes & other paraphernalia is also available from pharmacies for a small fee or from dispensing machines for free. HR being expanded recently: specific 'sniff & base kits' as well as foil are also being made available to drug users at HR sites	0.67
DE	NSPs provided through low TH services and counselling facilities; SVMs operating; reduction seen in prison-based SEPs following centre-right gov't elected.	0.67

GR	HR includes provision of: clean needles & syringes, condoms, printed health ed & info materials, & training in safe use & first aid for drug users; services offered testing for infectious diseases in low-TH facilities in Athens; free vaccination for HEP A & B viruses. 6 fixed locations in Athens & Thessaloniki; 7 sites regularly serviced by teams of outreach workers & mobile units. HR service coverage outside Athens is low	0.33
HU	SVMs operating in 3 cities; Needles and syringes are available throughout the country through NSEPs that operate both separately & are integrated within the treatment system in conjunction with other low-TH community services. HR delivered at fixed locations, by mobile units, & outreach activities. as well as sterile needles & syringes, counselling on safer injecting, other injecting paraphernalia, & condoms. Decreasing funding & closure of services thought to have reduced access to HR services	0.67
IE	HR delivered by LAs & community-based organisations; NSPs are central element of HR - delivered through fixed-site facilities, outreach syringe provision, & pharmacy-based programmes; usually provide range of sterile injecting equipment & materials, including different sizes & types of needles/syringes, alcohol swabs, & citric or acetic acid. Condoms, stericups/cookers & sterile water, non-toxic foil, syringe identifiers & tourniquets also available. Pharmacies in each local & regional Drug & Alcohol Task Force area (apart from counties Dublin, Kildare, & Wicklow, served by mix of fixed site & outreach NEPs) take part in NSPs distributing packs containing	1

	injecting equipment for either 3 or 10 sterile injections. 111 pharmacies providing needle exchange (2016). In areas without a clinic or mobile unit staff distribute injecting material with 'backpacking' (a process whereby paraphernalia are delivered by staff directly to known drug users). Weakness noted in limited uptake of DUs to be tested for HIV/HEP's	
IT	HR outreach at local levels operated by both public & private social & health organisations, with some funding of National Drugs Fund; usually include NSPs, info dissemination, & counselling. HR more extensive in north/central Italian regions: usually located in the larger cities. HRMs delivered through mobile units, fixed sites (drop-in centres & reception units), outreach programmes, & SVMs. New guidelines for screening & diagnosis of infectious diseases have been prepared to increase the practice of testing in addiction treatment centres	0.67
LV	19 low-TH centres, called HIV preventive points (2016): provide a wide range of low-TH services; distribute needles, disinfectants, & condoms, offer information, conduct outreach work, & provide risk reduction education. Voluntary HIV counselling and testing, & testing for HEP C & other infectious diseases. Services delivered at fixed locations, through mobile NSPs & outreach workers. Coverage of syringes distributed considered to be low	0.33
LT	14 low-TH units, including 2 mobile outreach needle/syringe distribution & exchange points, in 10 cities; mostly operated by NGOs or municipal social services; 5 integrated within public drug treatment institution: i.e., mental health centre/centre for addictive disorders. Low-TH units: NSPs; condoms;	0.67

	health ed & info; hygiene & care services; & treatment of small wounds; 4 units provide HEP B & C testing & consultations or take a rapid HIV test. New facilities opened in 2015/16 = increased uptake of NSPs	
LU	National NSP is decentralised; consists of 5 fixed sites and 3 SVMs situated in towns most affected by IDU. Syringes available from drug counselling centres, drop-in centres for sex workers & at-risk populations, low-TH centres, & in prison. Testing for blood-borne infectious diseases, vaccinations & counselling on safe use practices are also provided. New mobile outreach services designed for drug users in an urban environment launched September 2017. Uptake of NSPs increasing since 1993	0.67
MT	NSPs at 7 fixed locations across the country. HR includes access to clean injecting equipment, testing & counselling for HIV, HEP B & C virus, risk awareness & HBV vaccinations. Blood screening & counselling for infectious diseases provided at Substance Misuse Outpatient Unit & also at prison & the sexual health clinic. A special HR centre for women who inject drugs is operated by Caritas and provides intensive therapy to clients who cannot achieve abstinence in the short term; sheltered accommodation & protection from violence & sex work also provided	0.67
NL	SVMs operating; NSPs established in the Netherlands over 30 years ago & available in all major cities. HR mainly implemented by street drug workers & at treatment centres. No national monitoring of the number of syringes & needles distributed	1

NO	SVMs operating; low-TH facilities offer health checks, vaccinations (including the provision of free HEP A & B vaccines), distribution of clean injecting equipment, foil, overdose prevention interventions, nutritional & hygiene guidance, & follow-up and referral to other parts of the health service	0.67
PL	HR interventions mainly conducted by NGOs, primarily cover only larger cities, & include outreach & street-based services. 12 NSPs in 12 Polish cities (2016)	0.33
PT	Nationwide network of HR, including NSPs, low-TH substitution programmes, drop-in centres/shelters, refuges, contact units & outreach teams: consolidated in areas of intensive drug use . NSP = 'Say No to a Used Syringe'; involves pharmacies, primary care health centres and NGOs, & includes several mobile units	1
RO	NGOs provide HR services for people who inject drugs (PWID), such as NSPs in fixed locations & via street outreach workers & mobile teams: services only cover the capital, Bucharest, & the adjacent Ilfov County	0.33
SK	HR, provided through fixed sites or mobile outreach; primarily serve PWID & high-risk groups. HR programmes provide access to clean injecting equipment, counselling & info on safer drug use, screening for drug-related infectious diseases & support services. Estimated that minority of PDUs are reached by existing HR: pharmacies main source of needles/syringes for PWID. Slovak Anti-Drug Strategy (2013-20) endorses provision of effective risk reduction measures for PWUD. 4 NGOs operate HR in 5 towns; in addition to NGOs	0.33

	providing HR, 3 public drug treatment centres provide needle/syringe exchange services. NGO-run HR licensed & funded by the Gov't	
SI	Operates pharmacy based NSPs. SVMs operating; HR programmes provide sterile injecting equipment, info, & counselling at fixed sites & at various outreach locations in Ljubljana & other major regions and cities. Syringes & other injecting paraphernalia (alcohol wipes and ascorbic acid) made available through day-care centres & outreach & mobile services, & available at 3 pharmacy-based exchange sites	0.67
ES	Some difficulty obtaining needles due to limited access (distance & times they operate); Most HR include a socio-sanitary service that offers preventive educational interventions, clean needles, syringes & other paraphernalia, testing for drug-related infections, vaccination against HEP A and B, & emergency care/assistance for PWID. Overdose prevention provided in 7 of the 19 autonomous communities and cities	0.33
SE	Prescription required for obtaining needles/syringes or considered criminal offence; limited availability (age restrictions and only available for 2 hours a day); 10 low-TH centres; Pharmacies in Sweden may sell needles or syringes only to people with a prescription for medical use - numbers increased threefold since 2015. Easier to initiate an NSP too due to change in law	0.33
TR	HR interventions not available in Turkey	0

GB	HR includes info on safer injecting & safer sex; provision of injecting equipment; promotion of safe disposal of used equipment; infection counselling; support and testing; vaccinations against the HEP B virus; referral to drug treatment; treatment for HIV and HEP C; provision of take-home naloxone, & training of drug users and their family members on its use. Safe injecting equipment provided principally by pharmacies & specialist treatment agencies & also provided through detached street outreach workers * mobile van units. In Wales, a SVM available in a community-based centre for the homeless. Services are available across all regions of the UK	0.67

Table 27: Data – Number and extensiveness of Harm Reduction Measures (HRMs)

CC	#HRMs	Details of Harm reduction measures	Score
AT	1 HRM	Intro of a THNP being discussed in one province; OST provided through primary healthcare services. Flexible treatment available to suit needs of individual. Detoxification primarily carried out in inpatient but increasingly becoming outpatient. Slow-release morphine prescribed as OST med. OST available & provided by public health authorities, hospitals, residential treatment providers & prisons. Reduction of DRH is focus of all areas of drug-related service provision in the country. Implementation of HR rests exclusively with the provinces, & comprises diverse measures oriented towards low-TH assistance & reducing the risk of drug use. HR & outreach work - delivering street-based assistance as well as referral to treatment. The promotion of safer use & risk reduction in recreational settings is considered important to reduce # of emergencies occurring at parties. (Check-it!) and Tyrol (Z6) provide info & drug-checking services to users in Vienna	0.33
BE	1 HRM	New DCRs planned for 2019; Outpatient care provided by consultation & day-care, medical & social care centres. Also provide OST. HR include peer support & NSPs - available at low-TH HR projects & pharmacies in French & Flemish Communities. Re. prevention & control of infectious diseases among PWID, special emphasis given to counselling & testing	0.33

		for HEP C. Several services distribute overdose prevention information material & engage in overdose prevention assessment with clients	
BG	1 HRM		0.33
HR	1 HRM		0.33
CY	1 HRM	Considering THNP; OST available in centres with outpatient counselling	0.33
CZ	1 HRM	Gelatine capsules available as alternative to injection of methamphetamine. OST available - initiated by a medical doctor - access to OST of concern due to regulatory & systematic factors	0.33
DK	4 HRM	5 DCRs in 4 municipalities; THNPs available in a number of municipalities; HAT available since 2010 in 5 locations for hard-to-treat opioid users	1
EE	2 HRM	THNPs available in 2 worst affected areas; extended to prisoner before release. Education alongside syringe kits & prescriptions of naloxone	0.33
FI	1 HRM	HR services delivered through outreach work and local health counselling centres; some at treatment units. Outreach work involves street patrols: aim of mediating between drug users & care system. Peer work is used in several locations and focuses on reaching most excluded groups of drug users. Health counselling centres provide sterile injecting equipment to prevent infectious diseases - located mainly in cities with more than 100 000 inhabitants & are available at 38 locations. The key components of the Finnish HR services are	0

		provision of injecting equipment; rapid, anonymous point-of-care testing for HIV, & vaccination; referral to treatment services; case management; & provision of info on drug-related diseases & risks, such as overdoses. The first national HEP C strategy adopted 2016.	
FR	3 HRM	2 DCRs in 2 cities; THNPs available through hospital-THNP in form of nasal kits. Priority for prisoners recently released & DUs who have gone through opioid withdrawal treatment	0.67
DE	4 HRM	24 DCRs in 15 cities (2 of these are mobile DC vehicles) in 6 or 16 Lander; number of THNPs increasing but activities remain local in scope; Focus on housing older drug users; HR specifically targeting migrants; planned provision of these services differs considerably between the Lander (between cities & rural areas)	0.67
GR	1 HRM	Since 2011 HIV outbreak among PWID in Athens, HR service provision has been scaled up. Low-TH facilities & outreach programmes focus on prevention of infectious diseases & overdose death: also, on management of health problems among DUs. All DUs attending a drug treatment programme have right to free medication if they are HIV or HEP C +ve or have other serious health problems. PWID also an important target group. Aim to creating awareness of HEP C, improving services and better monitoring	0
HU	1 HRM		0

IE	2 HRM	New DCRs planned for 2019; Successful trial of THNP of pre-filled syringes & training thought to have prevented 5 overdoses in 2015	0.33
IT	2 HRM	Study indicated Naloxone is available in a number of HR units	0.33
LV	1 HRM	Aim is prevention of drug-related infectious diseases & HR. Plan to tackle HIV, STI and HEP B/C - addresses needs of PWID through creation of new facilities; expansion of outreach staff; improved liaison between HR & wider health care services; targeted vaccination of vulnerable groups; scaling up of needle and syringe provision; introduction of new treatment options for opioid dependence; & treatment for PWID. HR implemented through a network of low-TH centres. Mainly financed by municipalities while the state provides some complementary resources to ensure their operation	0
LT	2 HRM	Small scale pilot of THNP began in 2016 where naloxone ampoules were given to patients finishing drug treatment programmes; emergency training in administration of Naloxone also given	0.33
LU	3 HRM	1 low TH DCR; HAT introduced for most vulnerable drug users in 2017	0.67
MT	1 HRM		0.33
NL	3 HRM	31 DCRs in 25 cities; HR is a central feature & aimed at reducing DRDs, drug-related infectious diseases & emergencies. Methadone & heroin programmes, NSPs, supervised DCRs, sheltered living projects & treatment of drug-related infectious diseases are widely available for	0.67

		people with PDU patterns. HR - goal to establish & maintain contact with difficult-to-reach DUs. Outreach activities also feature in programmes for reducing drug-related public nuisance - a collaborative venture between treatment & care facilities, police, & civil groups. Comprehensive plans for HIV, HEP B, C and advised that drug users should actively be offered testing.	
NO	3 HRM	2 DCRs in 2 cities; 14 municipalities participated in the implementation of the national overdose strategy 2014-17, with numbers thought to have increased in 2018 when extended. Naloxone kits distributed in the participating municipalities	0.33
PL	1 HRM		0.33
PT	1 HRM	New DCRs planned for 2019	0.33
RO	1 HRM	Aim - practical measures to prevent infectious diseases & reduce DRDs among PWUDs. Policy to expand HR activities. Gov't provides funding for clean injecting equipment & other paraphernalia, rapid tests for HIV & HEP C + info. HO = OSTs, NSPS, free voluntary counselling, free HEP A & B virus vaccinations, support & info, risk reduction counselling, condoms, & referrals to other services. HIV testing is free for everyone, while the costs of screening for the HBV & anti-HCV tests are only covered for people with health insurance & a small group of non-insured. Treatment of TB & HIV is universal for anyone infected, but levels of access to treatment for HCV remain low	0.33

SK	1 HRM		0
SI	1 HRM	Reducing DRH among main objectives Most recent Gov't policy calls for extension of the HR network – calls to include THNP and DCRs. New programmes developed at local level mainly aimed at PWIDs, PWUDs, & young at-risk DUs. NGO drug testing & counselling service for users of NPS; street outreach targeting young people. Free vaccination against the HEP B & free testing for HEP and HIV available to all drug users in contact with Centres Treatment for HEP C also free of charge	0.33
ES	3 HRM	13 DCRs in 7 cities; Reduction of DRH & risk = aim. Gov't pol: PWID identified as priority population. National priorities include support for NSPs, voluntary counselling, & testing for infections & HEP vaccination. HR available through country, but service profiles vary in different autonomous communities	0.33
SE	1 HRM		0
TR	0 HRM		0
GB	3 HRM	Naloxone programmes in Scotland, Wales, and NI; include distribution of Naloxone in non-clinical settings, such as hostels, & facilitating the distribution of naloxone kits to those at risk of overdose & to their families & carers. Naloxone also commonly distributed by Las in England	0.67

Table 28: Data – Conditionality of Harm Reduction Measures (HRMs)

CC	Conditionality/aims of hr	S
AT	Treatment over punishment, aims = society as free of addiction as possible. Views addiction as a disease. Strategy addresses illicit drugs & licit substances alongside non-substance-related addictive behaviour. 3 fields of intervention: (i) prevent addiction; (ii) help with addiction (HR, treatment, rehabilitation, & reintegration); & (iii) security	0.67
BE	Main goals are prevention & reduction of risks for PWUDs, the environment, & society. 3 pillars: prevention & early intervention in drug consumption; HR, treatment, & reintegration; & enforcement. 5 principles of Belgian drug policy (i) a global & integrated approach; (ii) evaluation, epidemiology, & scientific research; (iii) prevention for non-users & PDUs; (iv) treatment, risk reduction & reintegration for problematic users; & (v) repression of producers & traffickers	0.67
BG		0.67
HR	In HR NSPs, voluntary option to enter into treatment/testing. Free & confidential. Treatment primarily implemented in the healthcare system & some psychosocial treatment available through social welfare system in communities, & in prison/ probation systems. Main objectives for HR include continuous support for existing programmes & expansion of coverage & diversification of HR towards new target groups & new types of services. HR programmes as integral part of public health activities & are promoted by Gov't. Since 1996, when the first HR launched, geographical coverage has expanded	1

CY	Aims to reduce the demand for & supply of drugs & reduce the health & social risks & harms caused by drugs & alcohol; strategy is built around five pillars: prevention; treatment & social reintegration; HR; supply control & regulation; & international cooperation. HR = key pillar of strategy. HR as part of treatment continuum; MSPs aim to prevent spread of infectious diseases	0.33
CZ	originally focused solely on illicit drugs but revised in 2014 & 2016 to address alcohol & tobacco use & gambling; four pillars: prevention; treatment & reintegration; HR; & supply reduction; 3 supporting domains: coordination & funding; monitoring, research, & evaluation; & international cooperation. In the area of illicit drugs, the strategy defines 4 key objectives: (i) to reduce the level of experimental & occasional drug use; (ii) to reduce the level of problem & intensive drug use; (iii) to reduce potential drug-related risks to individuals & society; and (iv) to reduce drug availability, particularly to young people	0.33
DK	HR embedded in all relevant areas of Danish drug policy	1
EE	Seeks to prevent & reduce consumption of narcotic substances, & health & social damage caused by DU; its main objective is to reduce DU & the resulting harms; structured around 7 pillars: (i) supply reduction; (ii) universal primary prevention; (iii) early detection and intervention; (iv) HR; (v) treatment & rehabilitation; (vi) resocialisation; & (vii) monitoring; emphasis on the reduction of drug-related infectious diseases & drug-induced deaths among PWID	0.33
FI	Covers 5 themes: (i) national coordination of drug policy; (ii) prevention & early intervention; (iii) addressing DRC; (iv) drug treatment & HR; and (v) EU drug	0

	policy & international cooperation. HR services established in the late 1990s and are implemented by municipal bodies. Emphasis on expansion of HR coverage & continuity	
FR	HR aim = protect PWUDs from injecting-related infections; also, to prevent DRDs from overdose. Lots of Gov't funding behind HR in place. HR is one of the four pillars of the Gov't drug policy which is primarily financed by public funds. Aim is to reduce mortality and morbidity among DUs. PWID also target population for strategy to reduce HIV, HEP B and C, and STIs. Also committed to universal access to innovative treatments for HCV infection. Treatment for HIV, HBV & HCV infections & STDs is provided on an anonymous basis & free of charge at specialised centres. The costs of HIV & HCV screening are covered by National Health Insurance; screening for HBV reimbursed at a rate of 65 %. Specialised drug treatment centres provide free screening for HIV & HCV & free vaccination against HBV for any DU attending such a centre.	0.67
DE	Aims to help people avoid/reduce consumption of licit & illicit substances, & addictive behaviours (e.g., gambling). Based on 4 pillars: (i) prevention; (ii) counselling, treatment & help in overcoming addiction; (iii) harm reduction measures; & (iv) supply reduction. Covers 6 distinct areas: (i) alcohol; (ii) tobacco; prescription drug addiction and prescription drug abuse; pathological gambling; (v) online/media addiction; & (vi) illegal drugs; main aim to reduce mortality & morbidity among drug users & reduce spread of infectious diseases	0.67

GR	Places equal emphasis on reducing drug demand & supply; 5 pillars: (i) demand reduction (prevention; info& awareness raising; early detection & intervention; HR; treatment; & social rehabilitation); (ii) supply reduction; (iii) coordination; (iv) training, monitoring, research, & evaluation; & (v) international cooperation	0.33
HU	Current National Anti-Drug Strategy defines HR as an entry point to, an integrated part of, the entire treatment chain operating on the basis of a recovery-based approach	0
IE	Strategy sets out vision for protection of public safety, for harms caused to society by substance misuse to be reduced, & for those engaged in substance use to improve quality of life; vision underpinned by 5 strategic goals: (i) to promote & protect health & well-being; (ii) to minimise the harms caused by the use & misuse of substances and promote rehabilitation & recovery; (iii) to address the harms of drug markets & reduce access to drugs for harmful use; (iv) to support participation of individuals, families & communities; & (v) to develop sound & comprehensive evidence-informed policies	0.33
IT	2 pillars: demand & supply reduction, across 5 areas of intervention. Demand reduction activities include prevention, treatment, rehabilitation, & reintegration; supply reduction covers evaluation & monitoring, legislation, supply reduction & juvenile justice. HR approach consolidated in early 1990s following need to contain the spread of infectious diseases among injecting heroin users. HR services provided by the national health system to people with dependencies.	0

LV	3 main goals: (i) to reduce the tolerance of illicit drug use in society; (ii) to reduce the harm caused to society through illicit drug use by making effective healthcare services available for drug users; & (iii) to reduce the availability of illicit drugs. Action plan built around 4 pillars: (i) prevention of drug dependence & drug use; (ii) healthcare of drug-dependent patients & drug users; (iii) reduction of drug supply; & (iv) cross-cutting direction on policy coordination, monitoring, data collection & information analyses	0
LT	In 2006, consolidated the legal basis for the implementation HR for PWID & defined the mandatory package of services. The legislation aims to facilitate the development of HR services in Lithuania & to ensure that PWID can exchange needles & syringes & obtain condoms, disinfectant tissues, bandages, health ed/info & counselling at low-TH units. HR financed mainly by state and municipal budgets. Universal vaccination against HBV provided since 1998 to infants & 12-year-olds; special HBV immunisation programmes targeting PWID are not available	0.33
LU	Strategy is built around the 2 pillars of drug demand & drug supply reduction: 4 themes of HR, research & info, international cooperation, & coordination. Aim=high level of protection in terms of public health, public security & social cohesion: supported by 6 objectives, including HR & health of society. HR has been a part of the national drugs strategy for 15+ years, & minimising negative health & social consequences of drug use is highlighted as an important element. Legal framework for the HR measures, such as needle and syringe	1

	exchange, supervised injection rooms & the possibility to introduce medically assisted heroin distribution; was established in 2001, although some HR interventions already initiated & developed previously	
MT	Seeks to (i) improve the quality & provision of drug-related services; & (ii) provide a more coordinated mechanism to reduce the supply of & demand for drugs. Main aim = to ensure security, health protection, well-being, & social cohesion; strategy is built around 6 main pillars: (i) coordination; (ii) the legal & judicial framework; (iii) supply reduction; (iv) demand reduction, including HR; (v) monitoring, evaluation, research, information, & training; & (vi) international cooperation & funding. HR focus: One of the main objectives of the Gov't Drugs Policy adopted in 2008 was to achieve a high level of health protection & social cohesion by preventing and reducing drug-related harm to health and society. One of its aims is to ensure that vulnerable groups receive adequate health & social services, including HR services where whom abstinence is not immediately viable or realistically possible	1
NL	Aims to discourage & reduce drug use, certainly in so far as it causes damage to health & to society, & to prevent & reduce the damage associated with drug use, drug production & the drugs trade'; 4 major objectives: (i) to prevent drug use & to treat & rehabilitate drug users; (ii) to reduce harm to users; (iii) to diminish public nuisance caused by drug users; and (iv) to combat the production & trafficking of drugs	1

NO	Priority = activities for prevention, early intervention, treatment, & aftercare for individuals with substance abuse problems. Restrictions on alcohol consumption, combatting drugs through prohibition & targeting drug trafficking & organised crime. Aim of HR is to improve health & allow PWUD a more dignified life, including the prevention of overdoses & drug-related infectious diseases. The national overdose strategy for 2014-17 called for the scaling-up of activities to prevent overdose risks & promotes emergency assistance & treatment for DUs. In June 2016, Gov't presented a national strategy on HEP which prioritises the prevention & treatment of infection among vulnerable groups, including PWID. Municipalities responsible for the organisation of HR measures on the basis of local needs. Cooperation between local public health and social services constitutes the backbone of service provision, but private non-profit organisations are important partners	0.33
PL	Strategy sets out the priorities in HR. Main goal - improving the quality of life of drug users - 2 actions were set out: support for HR programmes in the community & increasing the number & variety of specialist treatment programmes in penal institutions, youth detention centres & hostels for minors, including OST & HR. Needle & syringe programmes are co-financed by local & national Gov't. Local Gov't fund services such as the night shelters, hostels, or day-care centres within their territories	0.67
PT	5 objectives & built around 2 pillars of drug demand & supply reduction. Defined a set of indicators & targets that are to be achieved 2013-20). Three	0.67

	management areas — coordination, budget, & evaluation. Priority = risk and HR: to promote & develop existing risk & HR intervention model. NGOs instrumental in the creation of an infrastructure of health & social service providers under & HR has become an integrated part of approach & services provided by the national network of health service providers. Treatment for infectious diseases available on National Health Service of Portugal & is available free of charge.	
RO	Expanding focus of HR more recently; HR to prevent spread of infect diseases seems to be promoted (as well as preventing DRD)	0.67
SK	2 pillars: (i) demand reduction & (ii) supply reduction, & 3 cross-cutting themes: (i) coordination, (ii) international cooperation & (iii) research, information, monitoring & evaluation. Strategy builds on awareness of drug problems, including poly-substance use, stimulant (including methamphetamine) use, the need to control medications containing psychoactive or drug precursor ingredients, the challenges posed by blood-borne viruses, the need for improved treatment service coverage and the changing drug markets. The overall aim is to contribute to drug demand reduction & drug supply reduction, as well as the reduction of health & social risks & harms caused by drugs	0.67
SI	Goal of Strategy is to reduce & contain the harm caused to individuals, families, & society from illicit drug use. 6 pillars: (i) information systems; (ii) drug demand reduction; (iii) supply reduction; (iv) international cooperation; (v) coordination;	1

	& (vi) evaluation, research, & training/education. demand reduction & prevention also focus	
ES	Focus = illicit drugs, NPS, other substances (alcohol, tobacco, & medicines) & behavioural addiction. Objectives include delaying the age of first contact with dependence-producing substances & behaviours, reducing their availability and prevalence, & reducing associated harms. 2 goals: a healthier and better-informed society (by diminishing drug demand & the addictions) – includes: prevention & risk reduction; integrated & multidisciplinary care; HR; & social integration. 2nd goal aims for safer society by diminishing drug supply & controlling activities that could lead to addiction, including supply reduction, review of legislation, & judicial & law enforcement cooperation at both national & international levels	0.67
SE	Goal is to have a society free from narcotics & doping, reduced medical & social harm from alcohol, & reduced tobacco use; NSPs also used with goal to prevent DR infectious diseases & promote access to treatment and care	0
TR	See treatment-based help. No HR intervention available	0
GB	Reduce harms and increase numbers in recovery from dependency	0.33

Table 29: Data – Conditionality of Treatment

CC	Conditionality of Treatment	Score
AT	Not mentioned as coercive; flexible & varied provision	0.67
BE	Not mentioned as coercive; flexible & varied provision - but drug dependence noted as key issue	0.67
BG	Mainly focused on opioid users, most common treatment is OST	0.33
HR	OST often complimented by a drug-free treatment approach (drug free approach used alongside other options too)	0.33
CY	Abstinence = main treatment goal of most treatment units (out or in-patient) followed by prevention of infect disease (development of self-esteem and confidence and life skills training)	0.33
CZ	Not mentioned as coercive; flexible & varied provision; mention of some abstinence-focused Treatment provided	0.67
DK	Main goal to achieve a reduction in drug use or to attain full abstinence through interventions and systematic follow-up of treatment for drug/non-drug-related issues. Preparation of a treatment plan is mandatory action. Access to drug treatment is guaranteed within 14 days of first contact or request from drug users 0ver 18 & sometimes under 18. People entitled to treatment may choose between public & private treatment programmes - free of charge. Drug treatment includes medical & social interventions and is delivered in close cooperation between the H&SC sectors	0.67

EE	OST & detoxification is where most funding goes, as main provisions. Only psychiatrists can provide drug treatment	0.33
FI	Approach aiming to facilitate treatment & recovery. Drug dependency treated differently. Specialised centres for this	0.33
FR	Addiction care model: The general addiction care system through hospitals is organised across three levels, with each new level building on services available at the previous level. First-level care manages withdrawal and organises consultations; the second level includes the provision of more complex residential care; and the third level expands the services to research, training & regional coordination	0.33
DE	Focus on treatment & counselling alongside prevention & early intervention; Family doctors play a special role, as often first point of contact for drug users & at-risk individuals. Doctors and family at the core of the dependency support system plus addiction counselling & treatment centres, psychiatric outpatient institutes, facilities for integration support & outpatient & inpatient therapy facilities. Psychiatric clinics also important in the drug treatment system. Most treatment is provided by charities. State & commercial organisations are involved mainly in the provision of inpatient treatment. Most drug treatment takes place in centres & institutions that deal with dependence – some treatment units for illicit drug users specifically	0.67
GR	Not mentioned as coercive; range of provisions; unclear how optional these are, but seems to suggest they are accessible to all who need them	0.67

HU	A recovery-oriented approach, places emphasis on enhancing the availability & quality of treatment services, with a particular focus on young people; Quasi-compulsory treatment as an alternative to criminal proceedings & long-term rehabilitation are provided mostly by NGOs - latter only partly medical or healthcare related, and dominated by social & welfare elements, such as work therapy & social reintegration. Supported housing service is funded by the state and an online self-help programme for problem cannabis users is offered by some outpatient centres in Budapest	0.33
IE	Reducing harm, supporting recovery: a health-led response to drug & alcohol use: main aim is to minimise harms caused by the use & misuse of substances, & to promote rehab & recovery by supporting the development of a range of treatment, rehab, and recovery services	0.67
IT	Treatment programmes don't usually distinguish between different types of substances used by their clients; however, some programmes focus on particular groups, such as cocaine users, children & adolescents who use psychoactive substances, those with dual diagnosis, or members of ethnic minorities	0.33
LV	Development of new treatment options & increasing the quality, & expanding provision, of existing treatment services - among the priorities of the current national drug strategy; seems healthcare profs very involved in conditionality of OST for e.g.,	0.33

LT	Emphasis on enhancing the quality & accessibility of drug dependence treatment services, while the Law on Narcological Care provides a regulatory framework for the provision of treatment to people who use licit & illicit substances	0.67
LU	Current national strategy further expanding national treatment system, adopting dependence treatment which covers both licit & illicit substances. Counselling & specialised care networks have been developed – has enabled DUs to start treatment at an earlier stage in their drug career	0.67
MT	National Drugs Policy puts an emphasis on synergies between service providers & other health & social professionals & institutions to ensure a multidisciplinary approach to treatment provision	0.67
NL	Emphasis on empowerment of clients & reintegration & self-regulation; options for treatment interventions are diverse	1
NO	Treatment-related objectives emphasise client-oriented approach, early interventions, diversification of services, reintegration, & alternative measures to incarceration	0.33
PL	Aim to increase the availability of outpatient drug services & OST. Wide range of other measures designed to improve the quality of drug treatment services are included in the strategy; drug free model prevails	0.33
PT	Treatment interventions are based on comprehensive diagnosis of a citizen's biopsychosocial needs, must be accessible & adaptable, be based on scientific	0.33

	evidence in terms of effectiveness, efficiency & quality, & be underpinned by guidelines	
RO	Treatment-related objectives place an emphasis on the diversification of treatment access points & treatment programmes. In general, drug treatment is funded from the public budget, &, as such, is free of charge for clients	0.33
SK	Emphasis on (i) the expansion of availability & affordability of treatment; & (ii) the provision of effective & diversified nationwide treatment, with a special focus on polydrug users & those suffering from mental &/or physical comorbidity. Implementation of drug treatment is the responsibility of Gov't. Distinctive feature with treatment services having close links to mental health services & integration with treatment services for alcohol, which permits mental health issues among drug users & consequences related to polydrug use to be addressed	0.33
SI	Current national drug strategy stipulates that drug treatment must be comprehensive, ensure continuity of care & be accessible to all drug users. Responsibility for implementing treatment lies predominantly at the national level, & drug treatment is provided by various health and social care systems & civil society organisations	0.67
ES	Overall policy from Gov't but 17 autonomous communities and 2 cities: each autonomous community entitled to organise & deliver health interventions according to its own plans, budgets, & personnel. Some have integrated treatment for drug use-related problems within primary care units or mental	0.67

	health services, & some have a separate treatment network that retains a connection with the general healthcare system. A specific drug dependence care network is widely distributed throughout the country. Therapeutic provision comprises outpatient & inpatient treatment networks	
SE	Treatment-related objectives place emphasis on enhancing access & quality of care based on a client-centred approach. Treatment is organised by social services in local communities (specialised outpatient clinics), hospitals (providing detoxification) and residential treatment facilities. Does provide compulsory treatment (for up to a maximum of 6 months), municipalities have responsibility for long term rehabilitation through social services	0
TR	The treatment-related objectives place emphasis on facilitating drug users' access to treatment & care services that meet the established standards and protocols. The primary approach of the treatment is to achieve a drug-free state. An essential part of treatment is detoxification, which is complemented by other interventions consisting of motivational interviewing techniques & therapies that aim to prevent relapse. Pharmacological treatment with opioid agonists or an antagonist is also available. Some centres offer short-term residential treatment; some NGOs offer treatment	0
GB	Strategies identify treatment as effective in tackling PDU & seek to improve its quality & effectiveness. Coordination & integration across a range of service providers is seen as key in helping problem drug users integrate into society	0.67

Table 30: Data – Extent / Accessibility of Treatment

CC	Extent of Treatment	Score
AT	Flexible range of options to respond to client's treatment & social needs. All nine provinces have drawn up drug strategies & nominated drug coordinators who are responsible for coordinating treatment at regional level. Drug coordinator appointed to accredit & monitor treatment at national level under the Federal Ministry of Health. Inter-regional coordination of treatment policies. Provincial governments, the social insurance funds & the federal government fund most treatment	0.67
BE	Range of services for drug use treatment &/or healthcare available in large part of country, except in the German-speaking Community, where there are no specialised treatment centres for drug users	0.67
BG	Flexible mix; more focused on PDU	0.67
HR	Wide range both in & outpatient; seems flexible for most part but with a hint of conditionality/drug-free focus	0.67
CY	Focused on treatment for specific groups: migrants, women, drug users with dual diagnosis; aims to increase accessibility of treatment	0.67
CZ	Inpatient treatment less extensive in reach across country. OST access of concern. 2014-20 reform strategy focus on introducing more flexible & extensive service provision based on regional needs and priorities	0.33

DK	Most prevalent approaches to treatment in Denmark are cognitive, socio-educational & solution focused; includes medical & social interventions & delivered in close cooperation with health and social sectors	1
EE	Less extensive due to limits on who can provide treatment	0
FI	Municipalities responsibility; organised based on location (needs); Drug treatment is mainly funded by the public budget of the communities; it is either free of charge or subject to a small customer fee. Inpatient treatment usually requires a payment guarantee from the social welfare office of the client's home municipality; extensive for opioid but for other drug use (amphetamines particularly) limited provision exists	0.33
FR	Regional responsibility of LAs. Financed by social sec system. Almost all sub regional admin areas have at least one STC: mainly non-profit NGOs managed through both in & outpatient care; Many DUs, particularly opioid users, treated in the general healthcare system at hospitals & by GPs rather than in CSAPAs, & therefore not covered by the French system for data collection on addictions & treatments	0.67
DE	Responsibility lies with lander & municipalities. Available treatments range from low-TH contacts & counselling services to intensive treatment & therapy in specialised inpatient facilities. Long-term treatment options exist including OST; long-term rehabilitative treatment & social reintegration options; some municipalities have cut outpatient service provision due to funding constraints	0.67

GR	People without social security & vulnerable social groups, PWID, have access to all public health services including hospitalisation & medication therapy; Drug treatment provided by public entities or corporate bodies under private law, almost all of which are fully or partially funded by the Gov't	0.67
HU	Treatment a task shared by healthcare system & social services; Treatment services provided by public bodies & by NGO drug service providers. Drug treatment is not substance based & covers licit & illicit substances, other dependencies, & psychiatric problems. Treatment is offered to DUs at various outpatient & inpatient facilities throughout the country. Some treatment units provide only health/social services - others mixed services	0.33
IE	Most access treatment through outpatient settings; rise in users of cannabis & hypnotics/sedatives (other drugs) & cocaine. Opioid users still largest but decrease in numbers seen	0.67
IT	Services located in the northern regions of Italy, which have highest numbers of DUs & the greatest urban densities. OST provision outside service is low	0.67
LV	Treatment mainly delivered by institutions that operate under the supervision of the Gov't & funded by state budget of NHS. Long-term social rehabilitation also provided through funds from Gov't. Drug treatment may also be delivered by private, profit-making organisations	0.67
LT	Drug treatment is provided free of charge to patients; Drug treatment provided mostly by public & private agencies	0.67

LU	Specialised drug treatment infrastructure relies on Gov't support & oversight & is provided through specialised outpatient treatment facilities, low-TH agencies, hospital-based drug treatment units & a therapeutic community. Treatment units are available in prisons. Treatment is decentralised and is most commonly provided by state-accredited NGOs. Most agencies sign agreement with Gov't that guarantees their annual funding. Outpatient treatment free, inpatient covered by health insurance	0.67
MT	5 main treatment providers: 3 funded by Gov't, 2 NGOs (partially funded by Gov't). Deliver different types of treatment, in 5 main categories: specialised outpatient services; low-TH services; inpatient treatment; detoxification treatment; & OST. NGO-based outpatient services offer long/short-term support through social work, counselling, group therapy & psychological interventions, while low-TH offer day-care	0.67
NL	Organisation, implementation, & coordination of addiction care is delegated to regional & LAs. Part of broader mental healthcare agenda. Treatment funded by health insurance primarily, with public budget available for social support to fund national programmes such as HAT & supported living. Treatment provided through specialised addiction care organisations. Mix of public private & some religious organisations	1
NO	Financed mainly by public funds. Gov't departments have funds for development of special high-priority work in epidemiology, research, prevention, & treatment	0.67

PL	Drug services integrated into mental health care. Implementation of drug treatment is the responsibility of the communities & provinces, where it is delivered by a range of providers who have signed contracts with the National Health Fund (NHF). Treatment activities that are not covered by the NHF can be funded through other resources on a competitive basis. Treatment at private clinics or from private practitioners is also available, although an additional fee must be paid by the client	0.67
PT	Healthcare for DUs provided by the Referral Network for Addictive Behaviours and Dependencies. The network encompasses public specialised services of treatment for illicit substance dependence, under the authority of the regional health administrations of Gov't, NGOs & other public or private treatment service providers interested & competent in the provision of care. Public services are free & accessible to all who seek treatment. 3 levels of care: (i) primary healthcare services; (ii) specialised care, mainly in outpatient settings; and (iii) differentiated care, mainly in inpatient settings (detoxification units, therapeutic communities, day centres &/or specialised mental or somatic healthcare)	0.67
RO		0.67
SK	Inpatient & outpatient treatment is funded by public health insurance, while residential care outside the healthcare sector is funded through local or regional budgets, co-financed to varying degrees by users. The Centres for the Treatment of Drug Dependencies are the main providers of all types of	0.67

	specialised drug treatment, while the mental health outpatient clinics — available nationwide — offer outpatient diagnostic services, detoxification, & long-term OST. In general, there is continuity between these two forms of treatment	
SI	The Health Insurance Institute funds drug treatment in the health sector, & treatment is free. Programmes delivered through the social care system are mainly funded by the Gov't & municipalities, or by other external resources, & may require a co-payment	1
ES	Overall policy for drug treatment is guided by the National Strategy on Addictions. At the same time, the implementation, management & evaluation of the resources & programmes for providing care for drug users come under the authority of the 17 autonomous communities & two autonomous cities. Each autonomous community is entitled to organise and deliver health interventions according to its own plans, budgets, & personnel. Some have integrated treatment for drug use-related problems within primary care units or mental health services, & some have a separate treatment network that retains a connection with the general healthcare system. The public sector is the primary provider of treatment, followed by NGOs & private organisations. Drug treatment is mostly funded by the public budget of the central government, autonomous communities, cities & by some municipalities, usually the big cities	0.67

SE	Approximately 80% of outpatient services are provided by municipalities, county councils or the state, while 60 % of all inpatient services are provided by private and NGOs. County councils are responsible for the provision of detoxification facilities and OST & for the treatment of psychiatric comorbidities, while municipalities have overall responsibility for long-term rehab through social services, for example in so-called 'homes for care & living' or 'family homes. Many of these 'homes' are privately operated. Contracts to deliver drug treatment services are often held by third-sector organisations (i.e., registered charities)	0.33
TR	Drug-related treatment responsibility of the Gov't; responsible for national coordination – though since the 2013, Provincial Healthcare Directorates have been authorised to license & supervise substance use treatment centres. Drug treatment is provided through the Alcohol-Substance Addiction Research, Therapy & Education Centres, psychiatric clinics in public hospitals under the Ministry of Health, university-based treatment units & some private hospitals. Majority of these institutions provide both inpatient & outpatient treatment. Funding for drug treatment services is mainly provided by the state through social or health insurance funds. Most treatment services treat addiction for both alcohol & illicit drug use	0.67
GB	Varies between countries in UK a bit, but overall drug treatment in the UK encompasses a range of available treatments & services, including community-based prescribing, community one-to-one & group-based psychosocial	0.67

	interventions to support recovery, inpatient treatment, day programmes, & quasi- & full-time residential drug treatment & rehabilitation support. In addition, drug users should be offered aftercare and relapse prevention programmes, HEP B virus vaccination, testing for HBV, HEP C & HIV, & access to HEP& & HIV treatment	

Table 31: Data – Availability of Treatment in Prisons

CC	Availability of Treatment in prisons	Score
AT	OST, detoxification, & assistance with abstinence-oriented goals, if desired, as well as prevention, diagnosis, & treatment of HIV, HEP C & other infectious diseases. OST can be either initiated or continued during imprisonment, but only a small proportion receive treatment - this varies by prison. A few prisons have special drug-free zones. Pre-release support programmes are also available to prisoners	0.67
BE	Provided by prison health teams & external caregivers. Info materials on drugs, harms & risk behaviour available. Availability of drug-related health services, (support from psychologist, CBT interventions, OST, therapeutic communities & drug-free programmes) varies among prisons. Treatment is often restricted to those with a medical prescription. OST can be either initiated or continued in prison; both methadone & buprenorphine available. Re. prevention of drug-related infections, voluntary testing for HEP B & C viruses & HIV available in some prisons. Treatment for infectious diseases available in all prisons. Condom distribution takes place at health services & through small vending machines. Referral to community services after release is available only in prisons in the Flemish Community	0.33
BG	At prison entry, inmates undergo a medical examination, including an assessment of DU & related problems. Those who exhibit symptoms of drug or alcohol dependency are monitored by psychiatrist & can be subject to	0.33

	mandatory treatment. Drug treatment options in prison include MMT & short- & medium-term programmes based on cognitive & behavioural approaches, which target mainly alcohol users. In 2016, 14 inmates received MMT. Voluntary & anonymous testing for HIV offered to all inmates. Various cultural, ed, & training activities conducted with NGOs	
HR	Drug treatment comprehensive & includes both medical & psychosocial treatment. OST using both methadone & buprenorphine is available in all facilities for detox & maintenance. Individual psychosocial treatment modified therapeutic communities & structured programmes for prevention of relapse also available. Prison hospital also provides inpatient treatment for prisoners with drug & alcohol problems & other mental health disorders. A social reintegration project has been implemented since 2007 & prisons cooperate with county services to ensure continuity of care following prisoners' release. HR in prison includes training & counselling activities with the aim of reducing drug-use-related harms & improving general medical condition of imprisoned DUs; voluntary testing for infectious diseases; treating viral HEP infections; preparatory procedures & referral to HIV/AIDS treatment; & motivating prisoners to become involved in treatment	0.67
CY	Prisoners' history of drug use & related problems assessed on admission; inmates are informed about all available prison services; Medical services provided by the Gov't, which appoints relevant healthcare staff. Where specific services cannot be provided inside, inmates are referred to services outside the	0.67

	prison. Drug treatment programme, offering individual counselling to prisoners. Pharmacologically assisted treatment is also available, including OST which is available to those receiving it before imprisonment & for those who continue use of opioids inside prison. Inmates are also offered free testing & treatment for infection and infectious diseases. Inmates referred to therapeutic community while still serving their sentence (provided served at least 2/3 of sentence); memorandum of cooperation between all parties signed to address the needs of released inmates	
CZ	Prevention & drug treatment interventions carried out in prisons through drug prevention counselling centres, drug-free zones & specialised prison wings; increasingly NGOs provide programmes in prisons. 10 prisons authorised to provide OST - provided to inmates who have received it prior to imprisonment, & initiation of OST while in prison is done only on an exceptional basis. Detoxification is available in a small # of prisons. Addiction treatment provided by specialised wings is provided on a voluntary basis & as part of court-ordered compulsory treatment. Since 2017, pilot schemes for distributing condoms through dispensing machines, upon request or in dedicated spaces (canteens & visiting rooms without visual or auditory supervision) have been in operation	0.33
DK	Treatment in prisons primarily based on the 'import model', where external providers offer drug treatment in close collaboration with the Prison & Probation Service's staff. Drug treatment provided on basis of the principles of equity & continuity of care. Prisons have introduced a treatment guarantee,	1

	which means that it should be provided to all inmates who request it within two weeks. Treatment available through health & social programmes, which include motivation, pre-treatment assistance, intensive inpatient treatment in special treatment units, OST, post-treatment programmes & treatment of withdrawal symptoms. Special programmes for those who use cannabis, cocaine & other stimulants are available. OST & other long-term drug treatment programmes are coordinated with public treatment services to ensure continuation in the post-release period. Drug-free prison wings also available. To prevent drug-related infectious diseases, chlorine is available for disinfection, & vaccination against HEP A and B viruses provided	
EE	Treatment in prisons includes detoxification, OST & social programmes. OST with methadone available in all prisons & can be either continued or initiated in prison. In 2016, 119 prisoners received OST. Three prisons have special departments for social reintegration of drug users. All prisoners are offered HIV testing and screening for tuberculosis, while tests & vaccination for HEP B & HCV infections are offered to PWID & people living with HIV/AIDS. Treatment for HIV & HCV infections is available in prisons. A naloxone programme to reduce drug-related overdoses has been available in prisons since 2015 & is supported by the Estonian-Swiss Cooperation Programme. In 2016, a total of 57 prisoners received training & 61 kits were distributed after release	0.67
FI	Treatment services in prisons guided by the substance use services guidelines for 2012-16; emphasise substance use services provided in prisons must	1

	correspond to the same services provided in the public social welfare & healthcare sectors. Substance use treatment provided by healthcare services consists of treatment of substance-related illnesses, substance-related psychiatric treatment & OST (may be initiated in prison). Substance use rehab in prison includes individual & group counselling, overdose prevention & preparation for release. Drug-free environments also available. Substance use rehab managed by specially trained personnel. Communicable disease prevention & control is undertaken in prisons through health education & harm reduction responses. Finnish prisons make available condoms as well as disinfectants for cleaning needles and syringes	
FR	Treatment of drug dependency in prison settings based on a 3-tier system: prison-based hospital healthcare units, responsible for monitoring physical health of inmates; regional medico-psychological hospital services in each French region, handle mental health aspects of DU in prisons if no specialised treatment centre (CSAPA) exists; & CSAPAs for prisons, established in 16 largest prisons in France, covering approximately 1/4 of incarcerated population & 3/4 of existing establishments. Ref CSAPA is appointed for each prison to offer support to inmates with drug dependency problems, particularly after their release. Gov't health policy for inmates implemented screening programmes & HR measures for inmates: included screening for infectious diseases on arrival; hygienic measures; provision of post-exposure treatments for both staff & inmates; & provision of bleach to disinfect equipment in contact with blood.	1

	Also improved detection of addictive behaviours & improved care in general & continuity of care after release. OST available & can be initiated in prison – main substance prescribed is buprenorphine, although methadone sometimes used too	
DE	Medical care of inmates is funded by the Gov'ts of the Länder, but differences between the Länder exist in the regulations & legislation that apply to prisons. Most Länder provide information material on the prevention of DRH. Treatment for infectious diseases also available. Condoms are available free of charge, but disinfectants are not generally. One syringe distribution project exists (a syringe machine) in a women's prison in Berlin. Naloxone provided by one pilot project to inmates who have completed relevant training on their release. Recommendation for continued services after release, on the need to establish links with community services & provision of vocational training & drug emergency training sessions	0.33
GR	7 treatment programmes in prisons, including OST. Offer: relapse prevention & testing & treatment for infectious diseases. +7 programmes of psychosocial support interventions in 21 prisons, meeting needs in several areas of the country. Offer services, including information & counselling, HR & death prevention. NGOs provide special programmes to HIV-positive prisoners. Imprisoned DUs who opt for treatment undergo a three-week detoxification before being admitted for treatment. Following successful completion of programme, may be granted conditional release to attend a treatment	0.33

	programme outside prison setting. Time spent in treatment programme counts as time served	
HU	Drug offenders may be ordered to undergo treatment as alternative to criminal proceedings. 3-levels: preventative consultations, drug treatment & treatment for other conditions related to DU. Treatment provided by prison system, health services & external treatment providers, mainly outpatient services. Several NGOs offer prevention programmes in prisons. Available treatment: psychosocial intervention, counselling, & pharmacologically assisted treatment. OST available, but provision rare. Risk assessment & risk management procedure includes assessment of psychoactive substance use & makes recommendation on if the prison should provide drug prevention training. Infectious disease testing & counselling are available in prison. +ve for HIV, HBV or HCV & meeting therapeutic criteria receive appropriate treatment. In 2015, reintegration programmes or individual support aimed at social reintegration on release, available in about 1/2 prisons & probation officers also assist with reintegration. Reintegration covers healthcare, labour market & vocational training, facilitation of access to social support services, info sessions on reintegration, follow-up care & legal aid, & prep for release. Few have post-release overdose prevention	0
IE	6 community-based organisations provide services in prisons. Drug-related interventions include structured assessments, individual counselling, therapeutic group work, HR interventions, multidisciplinary care, & release-	1

	planning interventions. Drug treatment include brief interventions, motivational interviewing, & motivational enhancement therapy, such as 12-step programme. Medical Unit in one Prison has 18 beds specifically allocated for 8-week drug-free programme. OST available in prison, both for maintenance & detoxification. MMT available in 11 of 14 prisons. Between 2009 & 2016 6000+ prisoners received drug treatment, mainly for opioid use. MMT most common treatment provided. Counselling services from agencies providing services to PWID. Vaccination against HEP B recommended for prisoners	
IT	Restructuring of existing prison services to meet the same essential levels of care adopted for the general pop; reiterate public drug dependency service units should provide services inside institutions in collaboration with the LAs & network of health & social services engaged in demand reduction. Cooperation between Gov't with Regions & ASL enhanced. For drug-dependent prisoners, guidelines recommend referring either to special sections with a less restrictive approach & a specific drug treatment programme or to special hospital units for withdrawal treatment	0
LV	Healthcare activities in prisons provided through mutual cooperation among several Gov't dept's. The medical department of the prison or the Latvian Prison Hospital provides health services. Drug treatment interventions in prisons include social rehab, self-help groups & OST. Prevention & treatment of infectious diseases also available. Treatment for HIV/AIDS available for	0.33

	prisoners who have started prior to imprisonment. No. of social reintegration programmes implemented in various prisons in 2014. Since 2012 MMT available to prisoners who had already started prior to imprisonment. In 2016, 40 inmates received MMT	
LT	Treatment activities in prisons focused on socio-psychological rehab of dependent prisoners. 4 prisons have residential rehab centres, & 1 prison has a day centre. In 11 prisons, Alcoholics Anonymous & Narcotics Anonymous operate & follow the 12-steps. OST is not available. MMT continued for clients in police custody but discontinued when transferred to prison. Free voluntary testing for infectious diseases available, accompanied by health ed measures to reduce behaviours associated with a risk of contracting HIV, HEP B & C. Treatment for HIV available to those in prison	0
LU	Responses in prison centred around 3 pillars: psychosocial care, coordination of interventions & prevention of STDs. At admission, new inmates seen by medical staff who propose a voluntary HIV test & simultaneous screening for other infectious diseases. Health responses include detox & psychosocial guidance. Detoxification is either responsibility of the prison medical unit or external units of general hospitals. Psychosocial & therapeutic care provided by both staff of the prison medical unit & specialised external agents from accredited drug agencies. OST mainly methadone & to a lesser extent buprenorphine provided to prisoners receiving prior to incarceration. It may also be initiated in prison. In 2016, 205 prisoners (13% inmates in one prison	1

	and 15% in other) received OST. A special programme targets female prisoners exclusively - becomes operational when a minimum number of females enrol. Drug-free zones are also available. Structured syringe distribution programme launched in 2005. In 2016, 31 kits distributed, & 1612 syringes exchanged in the prison setting. Other HR include provision of ascorbic acid, filters, sterile physiological water, & antiseptic wipes. Safe tattooing introduced in 2017. Continuity of care & social reintegration measures ensured by intervention of social workers from external field agencies. National after-prison reintegration strategy promotes further development with external drug care agencies aiming at a comprehensive concept of throughcare of psychosocial measures, substitution treatment & economical start-up help	
MT	On entering prison, inmates undergo medical screening, followed by a consultation with psychosocial team. On admission, all prisoners tested for HIV and HEP B. Most prisoners undergoing drug treatment in prison receive OST. OST initiated at hospital's forensic unit & the inmates are transferred back to the prison once they are stabilised. Protocols in place for transfer of inmates to selected drug rehab units, if needed. Drug treatment agencies offer counselling & support services to inmates inside the prison, including assistance with social reintegration. Since 2007, vaccination for HBV in place. Activities undertaken to prepare inmates for release, but not within remit of the prison to provide continuity of care on release	0.33

NL	If needed, prisoners can be referred to treatment services outside prison (as an alternative for imprisonment). Repeated offenders who exhibit DU problems on entry may be placed in Institution for Prolific Offenders - also offers several treatment interventions inside & outside the prison system. According to the guidelines on 'medical treatment of detained opiate addicts', those in methadone maintenance treatment prior to being incarcerated can continue treatment during imprisonment. Special treatment for those dependent on benzodiazepines/ gamma-hydroxybutyrate is available. To reverse overdose due to heroin & other opioids, naloxone available in every penitentiary. After release from prison, treatment & care services continue to be implemented by municipalities. Addiction probation often plays supervising & helping role in process. 'Safety houses' are networks of local organisations working together to reduce crime. To better combine & integrate penal & rehabilitative interventions for offenders, criminal justice organisations cooperate with municipalities, the social sector & care organisations	1
NO	Distinctive feature of the provision of interventions in correctional service is the 'import' model - external providers responsible for offering the same type of services to inmates in prison as other citizens outside. Often the municipality prison is located in that's responsible for 'imported' services & decides on how health & care services are organised. Public health regions responsible for the specialised health services, including interdisciplinary specialised drug & alcohol treatment. More than 1/2 of healthcare staff in prisons trained on drug	1

	& alcohol-related problems / treatment of mental disorders. A psychologist is available in more than 1/2 of prisons. Drug treatment available includes: counselling, motivational interviewing, OST, testing & counselling for infectious diseases, ed & training, & preparation for release. Re. infectious diseases, testing, risk assessment, treatment, counselling, & info provided. Correctional service has 13 units for addressing drug & alcohol problems. Several prisons organise drug & alcohol programmes or interviews to motivate inmates to seek treatment. OST is offered by the prison health & care services. Available data indicate that 271 prisoners received OST in 2016. Prisoners tested for blood-borne diseases & STDs. Vaccination available for inmates at high risk. NSPs do not exist in prisons; however, inmates given access to chlorine or chloramine as disinfectant material. Most prisons have reintegration coordinator, & reintegration guarantee was introduced in 2007-08, which ensures that binding collaborative structures are established between correctional service & public agencies when an inmate is released	
PL	Objective of increasing the number & variety of specialist drug treatment programmes in prisons, youth detention centres and hostels for minors, including OST & HR for drug-dependency. Treatment in therapeutic wards in prisons based on programmes approved by General Director of Prison Service. Main treatment consists of 6-month residential therapeutic programmes, with interventions from psychotherapy to rehab. Other programs, such as OST & short-term interventions, available. HR interventions include ed programmes,	0.33

	individual consultations, motivation for behavioural change, safe injection training, support groups & group sessions for inmates who had not been admitted to prison ward: implemented by NGOs. HIV +ve inmates given treatment	
PT	Healthcare managed by health services under the responsibility of the Gov't in partnership with National Health System. All prisons make detailed yearly plans for health promotion & disease prevention, including initiatives (awareness-raising & training actions) to tackle infectious diseases, drug dependency & addictive behaviours. Detection of addictive behaviours & dependences is part of evaluation protocol when prisoner enters prison. Referral to treatment encouraged in the prison setting & ensures the continuity for new prisoners of OST & other treatments initiated before imprisonment & allows them to access the different interventions available in prisons. OST can also be initiated in prison. Interventions divided into 2 types of responses: programmes oriented towards abstinence (Drug Free Wings and Exit Units) & medication-assisted treatment programmes (with opioid agonists and antagonists). 2016, around 1000 prisoners enrolled in programmes of pharmacological treatment with opioid agonists or antagonists in prisons. Interventions targeting infectious diseases are also available. Establishment of syringe exchange programme in prison ratified by the Ministry of Health in 2007, but no activity yet reported	1
RO	Possibility for detainees to engage in ed interventions that target DU & consequences & to prevent drug offences. Interventions for reducing drug via	0.33

	3 lines of action: prevention, treatment, & social reintegration. 3 prevention projects implemented in 2016. Services for drug users include psychosocial support, ed & counselling, therapeutic communities, & OST. 3 therapeutic communities available in prisons, & OST, mainly with methadone, can be initiated in prison. In 2016, 29 prisoners received OST. Prevention of drug-related infectious diseases falls under the responsibility of the existing medical units in prisons as providers of primary healthcare services to this pop. Measures include distribution of info materials, reporting of communicable diseases, & provision of vaccinations, testing & treatments. A programme for needle and syringe exchange in prisons available since 2009, but 2016 did not register any clients. The National Strategy for the Social Reintegration of Prisoners 2014-18 includes measures to ensure continuity of care after prisoners' release, & programmes for post-release relapse prevention are available for those receiving OST	
SK	Quality of drug-related treatment in prison determined by framework standards prepared by the Gov't & provision of healthcare supervised by the regional offices of the Public Health Authority, health insurance companies, Social Insurance Agency, & inspection bodies of the Ministry of Justice. Health screening conducted at prison entry & includes assessment of DU & related problems. Voluntary & mandatory drug treatment available in prisons. Group psychotherapy is one of the main components of mandatory & voluntary drug treatment. Drug treatment also includes ed work & training. Mandatory drug	0.33

	treatment preceded by medical examination, which includes tests for blood-borne infectious diseases	
SI	Medical services in prisons provided by healthcare services, such as the primary healthcare centres that operate in areas prisons are located, under the authority of the Gov't. Service delivery governed by agreements signed between prisons & centres. Drug treatment in prison follows same general guidance as drug treatment in the community, although internal guidelines are also applied. Drug treatment primarily delivered by psychiatrists in healthcare clinics or medical practitioners in Centres for the Prevention and Treatment of Illicit Drug Addiction. OST, individual & group counselling, & psychosocial support programmes led by qualified professionals working in prisons are available. Prisoners with dependencies may enrol in low-TH, medium-TH, & high-TH programmes. 2016, 2/3 prisoners diagnosed with drug dependency received OST. All inmates can access free, voluntary, & anonymous testing & treatment for HEP and HIV. Before release from prison, provided with info on overdose risk, & community treatment centres contacted to ensure continuity of care	1
ES	On entry, physical & mental health is assessed, & includes evaluation of drug use & drug-related problems, drug-related infectious diseases, & risk of suicide. Following assessment, treatment plan is established, & detainee may be assigned to a relevant programme. Drug dependency in prisons addressed through prevention, assistance, & social reintegration. Prevention & health ed	1

	programmes implemented in all penitentiary centres, including by health mediators recruited among inmates. Health programmes implemented include counselling, drug treatment & HR. Treatment is provided in partnership with various prison services (health, psychology, safety, etc.), & in close cooperation with services available outside prison, such as drug treatment facilities, social services, & NGOs. Detox programmes available & may be undertaken on an outpatient basis, in day-care centre or 'therapeutic' module. MMT an important part of drug treatment on offer. In 2016, almost 8000 received MMT, with about 1/4 receiving MMT combined with psychosocial support. HR measures available include prevention, vaccination, & treatment of infectious diseases (HIV and hepatitis), NSPS, & the distribution of condoms, disinfectant, & aluminium foil. 1st NSP introduced in 1997 & are now available in 47 prisons. In 2016, more than 4000 syringes distributed in 20 prisons. Since 2014, overdose prevention programmes have been implemented to address overdose risk inside prison & in post-release period. Social reintegration programmes offered in prisons provide PWUD with necessary skills to maintain treatment following release & support their reintegration into society	
SE	Provides healthcare in prison. Health & Social Care Inspectorate is responsible for the supervision of prison healthcare services, & the guidelines for this are issued by the National Board of Health & Welfare. Guiding principle for treatment of DU in prison & during probation is that prisoner has the same right to social or medical treatment as other people. Prisoners with DU	0.67

	problems are offered drug treatment programmes; mainly abstinence oriented & based on cognitive-behavioural interventions & 12-step programmes, adapted from Alcoholics Anonymous. Programmes accredited & evaluated. OST is available in prison & can be either continued or initiated in prison prior to release, following medical assessment. Decision to continue OST in prison is taken in agreement with prescribing doctor & treatment agency that provides treatment. Initiation of OST can be conducted in some prisons with specialised staff. Infectious disease testing & vaccination available & new treatment for HCV offered in prisons in two regions as part of trials. Several specific pre-release measures: parole, extended parole, halfway house, & stay-in care - latter aimed at clients in need of treatment for DU & takes place on location in treatment centres or as outpatient care	
TR	Treatment in prisons is managed by the Gov't, following treatment guidelines. Family doctors provide mobile/temporary healthcare. Psychosocial support services provided in penal institutions aimed at protecting & promoting physical & mental health of both prisoners & staff. A project for the rehabilitation of prisoners with mental health problems & drug dependency in Turkish prisons has been implemented, with the objectives of ensuring that prisoners with mental health problems receive proper assessment & diagnosis; developing & implementing effective intervention programmes; creating a supportive environment for mental health; protecting the mental health of staff; & increasing employee awareness of mental health. Drug treatment in	0

	Turkish prisons focuses on motivational interventions, info awareness & the management of withdrawal symptoms through relaxation techniques	
GB	Responsibility for healthcare provision in prisons lies with health services (across UK). Number of organisations responsible for substance misuse treatment, commissioning, delivery, & provision in prison, including health authorities & prison & probation services. Prisoners have access to range of treatment services for substance use problems, including clinical services such as detox & OST, structured psychosocial interventions, case management & structured counselling. Blood-borne viruses (BBV) remain concern; to improve the detection, surveillance & management of infections, new programme of opt-out BBV testing introduced in England, 2014. Take-home naloxone widely available in Scotland & Wales for prisoners who are at risk of opioid overdose on release. Focus on continuity of care in transition between community & prison/vice versa. Recovery wings/units have also been piloted in England, Wales & NI	0.67

Table 32: Data – Punishment for Drug Use

CC	Drug use offence?	Score
AT	No - not mentioned as an offence	1
BE	No- not mentioned as an offence	0.33
BG	Yes - offence for high-risk substance use & fine between 1023-2257 Euro imposable	0.67
HR	No	1
CY	Yes - up to life for all classes of drugs, but no life sentence has ever been imposed	0
CZ	No	1
DK	No - not mentioned as an offence	1
EE	Yes - either a fine (usually determined by police) or detention up to 30 years	0.33
FI	Yes - punishable by fine or up to 6 months prison; can be waived if considered insignificant - but rarely practiced	0
FR	Yes – maximum prison sentence up to 1 year or fine of 3750 Euro. Prosecution may be waived, or fine of 1875 Euro in minor cases. Max sentence = 5 years & fine 75000 Euro if endangered users of transport or was committed by a public servant on duty. May be doubled if repeat offence in 5-year period	0
DE	No - not mentioned as an offence	0.67
GR	Yes - sentence of up to no more than 5 months prison. No criminal conviction for offence on record if no other relevant offences committed in 5-year period.	0.33

	Quantities no specified - left to judges based on substance, quantity, purity, & needs of offender	
HU	Yes - up to 2 years prison	0
IE	Yes	0.67
IT	No - not mentioned as an offence	0.67
LV	Yes - administrative offence, punishable by warning or fine up to 280 Euro	0.33
LT	Yes - administrative offence punishable by fine or participation in rehab programme might be ordered	1
LU	Yes - risk imprisonment of 8 days-6 months &/or fine. Prosecution may be halted, or penalties reduced in cases where drug user has sought help	0.67
MT	No - not mentioned as an offence; but if use proven in court this can lead to a conviction for possession or trafficking	0.67
NL	No - but prohibited use in certain situations for purposes of protecting public health of young people, i.e., at schools or on public transport	1
NO	Yes - no separate law referring to illicit drugs. Use and possession of minor quantities = penalties of fines or imprisonment up to 6 months	0
PL	Yes - up to 3 years imprisonment. Minor cases - offender fined or ordered to serve sentence involving limitation or deprivation of liberty for up to 1 year. Treatment may also be offered/compelled	0.33
PT	Decriminalised - but person caught using or possessing for PU + no suspicion of trafficking is evaluated by local commission for dissuasion of drug addiction.	0.67

	Punitive sanctions can be applied but main objective is to explore need for treatment & promote healthy recovery	
RO	Yes - but no punishment specified. Drugs differentiated between 'risk' and 'high risk'	0.33
SK	Yes	0
SI	No	1
ES	Yes - serious order offence, punishable by administrative sanctions with fines of 601-30000 Euro. For minors, fine can be suspended if voluntarily attends treatment rehab counselling activities	0.67
SE	Yes - see possession	0
TR	Yes - 2-5 years prison; option of treatment/probation of up to 3 years	0
GB	No – not mentioned as an offence, but possession of drug constitutes the offence. See possession	0.33

Table 33: Data – Punishment for possession for personal use

CC	Punishment for possession for personal use	Score
AT	Yes - up to 6 months prison or fine (providing quantity of drugs is not over threshold); if other aggravating circumstances apply (involvement of minors or commercial intent) penalty can be up to 3 years imprisonment	0.67
BE	Yes – 3 months-5 years prison + 8000-800,000 Euro. Sentence increases to 10, 15, 20 years in various aggravating circumstances. Cannabis use: yes - up to 3 months prison or fine (8 000-800 000 Euro) (threshold exceeded, public area, aggravating circumstances); where no aggravating circumstances, punishable by fine (120-200 Euro); 2nd & 3rd offences = higher fine & possibly up to 1 year prison for 3rd	0
BG	Yes - differentiation made between high & moderate risk substances; minor cases result in fine up to 511 Euro	0.67
HR	No - but small amount possession classified as misdemeanour & punishable by fine 650-2600 Euro. Whether amount classes as small is judgement of prosecutor in case	1
CY	Yes - regarded as serious offence: up to 12 years prison for class A; 8 for B; 4 for C. 1st time offenders under 25 not given sentences of more than 1 year	0
CZ	Yes - noncriminal offence - other substances than cannabis = up to 2 years prison or 2-8 where quantity significant. Cannabis: yes – noncriminal offence; possession of quantity 'greater than small' attracts prison sentence up to 1year. Medical cannabis: provision & cult and use allowed for therapeutic purposes	0.67

DK	Yes - usually results in fine (dependent on drug type & quantity); penalty for possession of more dangerous drugs for PU can result in fine & short-term prison	0.67
EE	Small quantities punishable by fine or up to 30 days detention	0.67
FI	Yes - punishable by fine or up to 6 months prison; can be waived if considered insignificant - but rarely waived in practice	0.33
FR	Yes - no distinction between possession for PU/trafficking, nor variation by substance: judgement made by prosecutor	0.33
DE	Yes - up to 5 years prison; other possibilities than prosecution where small quantities for PU. Based on amount & type of drug, involvement of others, personal history of offender, & if public interest served by prosecution. Medical cannabis: cannabis containing medicinal products allowed to be manufactured and prescribed	0.33
GR	Differentiates between possession for PU/not for PU. Drug type/quantity not specified: left to prosecutor to judge	0.67
HU	Yes - up to two years prison if small quantities	0
IE	Differentiates between possession for PU/not for PU. Other drugs (not cannabis) punishable up to 1 year prison & fine or up to 7 years for serious crime. Cannabis use: yes - fine on first offence for possession (or second) and third or subsequent = up to 1 year prison, or up to 3	0.67

IT	Yes - administrative sanctions (suspension of driving licence or other privileges). Distinction between types of drugs - administrative sanctions for personal possession of drugs 1-3 months for less dangerous and 2-12 months for more dangerous drugs	0.33
LV	Yes - small amount is administrative offence punishable by warning or fine up to 280 Euro. Larger amounts (precisely defined thresholds) can lead to criminal penalty up to 3 years prison. Repeated unauthorised use/possession for PU in 1 year of previous offence is punishable by prison 15days-3 months, community service, or fine	0.33
LT	Yes - misdemeanour punishable by community service, restriction of liberty or arrest (non-prison incarceration)	1
LU	Yes - risk imprisonment of 8 days-6 months &/or fine. Prosecution may be halted/ penalties reduced in cases where drug user has sought specialised help. Cannabis use: use & possession for PU decriminalised. Illegal but attracts fine only. Prison sentence only if aggravating circumstances (used in school or in presence of minors)	0.67
MT	Yes - differentiated between PU & not for PU. PU = fine of 50-100 Euro for cannabis, or 75-125 Euro for other drugs. 2nd offence in 2 years = required to attend drug offenders' rehab board & assessed for drug dependence. Failure to comply = fine or 3 months prison. Cannabis use: see PU. One plant = no prison term mandatory	0.67

NL	Yes - legally punishable by imprisonment, but not subjected to targeted investigation by police. Generally, those found in possession of small amounts for PU won't be prosecuted. Police will confiscate drugs & refer them to a care agency. Cannabis use: yes - strict directives under which cannabis sales & consumption outlets (coffee shops) may be tolerated by local authorities. 567 of these in 2017	0.67
NO	Yes - no separate law referring to illicit drugs. Use & possession of minor quantities = penalties of fines or imprisonment up to 6 months	0.33
PL	Yes - up to 3 years imprisonment. Minor cases - offender can be fined or ordered to serve sentence involving limitation or deprivation of liberty for up to 1 year. Medical cannabis: legal basis for introducing access to (imported) upon prescription	0.33
PT	Decriminalised - but person caught using or possessing for PU + no suspicion of trafficking = evaluated by local commission for dissuasion of drug addiction, composed of legal expert, and 2 of either medical doctor, psychologists, sociologists, social workers. Punitive sanctions can be applied but main objective is to explore the need for treatment & promote healthy recovery	0.67
RO	Yes - PU for risky drugs = fine or prison sentence of 3months-2years. High risk = prison 6months-3years. Can avoid prison by attending integrated assistance programme	0.33

SK	Yes - up to 3 years prison for possession of amount over 3x usual single dose for PU. Up to 5 years for dose up to 10x amount	0
SI	Yes - but minor offence (of small quantities for PU) = fine 42-209 Euro or more lenient punishment if voluntarily enter treatment for illicit drug use	1
ES	Yes - serious order offence, punishable by administrative sanctions with fines of 601-30 000 Euro. For minors, fine can be suspended if offender voluntarily attends treatment rehab counselling activities	0.67
SE	Yes - penalty depends on severity of the offence classified as: minor, ordinary, serious, or particularly serious. Considered nature & quantity of drugs used/possessed & other circumstances. Penalties for minor = fines or up to 6 months prison; ordinary = up to 3 years prison; serious = 2-7 years; particularly serious = 6-10 years prison	0
TR	Yes - 2-5 years prison; option of treatment/probation of up to 3 years	0
GB	Yes - class A=up to 6 months &/or fine + on indictment penalties may reach 7 years prison. Class B=up to 3 months prison &/or fine; on indictment =up to 5 years prison &/or unlimited fine. Class C=up to 3 months prison &/or fine/up to 2 years prison &/or unlimited fine on indictment. Cannabis use: some discretion from the police offering cannabis warnings & cautions	0.33

List of Abbreviations

ASEAN	Association of Southeast Asian Nations
BF	Broader focus (i.e., inc. licit drugs)
DCRs	Drug consumption rooms
EBP	Evidence-based policy
ESS	European Social Survey
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EU	European Union
EVS	European Values Study
GMHC	General mental health care
GPH	General primary health care
HAT	Heroin-assisted treatment
HBRDT	Hospital based residential drug treatment
HR	Harm reduction
HRM	Harm reduction measure
IDF	Illicit drug focus
IDU	Illicit drug use
INCB	International Narcotics Control Board
IP	Incarceration possible
Low TH	Low threshold
LTA	Low threshold agencies
NP	No penalty

NSPs	Needle syringe programmes
NV	No variation
OAS	Organisation of American States
OECD	The Organisation for Economic Co-operation and Development
OST	Opioid substitution treatment
PDU	Problematic drug use
PP	Personal possession
PPS	Personal possession and supply
PWID	People who inject drugs
PWUD	People who use drugs
RDT	Residential drug treatment
SCO	Shanghai Cooperation Organisation
SDTC	Specialised drug treatment centres
SVMs	Syringe vending machines
TC	Therapeutic communities
THNPs	Take home naloxone programmes
UNODC	United Nations Office for Drugs and Crime
WHO	World Health Organisation
WI	Penalty without incarceration

Country Codes

AT	Austria
BE	Belgium
BG	Bulgaria
HR	Croatia
CY/CY-YCC	Cyprus
CZ	Czechia
DK	Denmark
EE	Estonia
FI	Finland
FR	France
DE	Germany
GR	Greece
HU	Hungary
IE	Ireland
IT	Italy
LV	Latvia
LT	Lithuania
LU	Luxembourg
MT	Malta
NL/NET	The Netherlands
NI	Northern Ireland

NO/NOR	Norway
PL	Poland
PT	Portugal
RO	Romania
ES	Spain
SK	Slovakia
SI	Slovenia
SE	Sweden
TR	Turkey
UK	United Kingdom

Reference List

Abrahamson, P., (1999). The Welfare Modelling Business, *Social Policy and Administration*, 33(4): 394-415

Adkisson R. V. (2014). Quantifying culture: problems and promises. *Journal of Economic Issues,* 48: 1: 89-108.

ALICE RAP (circa 2016) About ALICE RAP: The project and results. [Online] Available at: http://www.alicerap.eu/about-alice-rap.html [Accessed 10.7.2023]

Allyon, S., and Ferreira-Batista, N.N., (2018). Unemployment, drugs and attitudes among European youth, *Journal of Health Economics,* 57: 236-248

Anderberg, M.R., (1973). *Cluster Analysis for Applications*, New York, Academic Press

Armenta, A., Metaal, P., and Jelsma, M., (2012. A breakthrough in the making? Shifts in the Latin American drug policy debate, *Series on Legislative Reform of Drug Policies*, 21

Arts, W., and Gelissen, J. (2002). Three worlds of welfare capitalism or more? A state-of-the-art report, *Journal of European Social Policy*, 12(2): 137-158

Aspalter, C., (2011). The development of ideal-typical welfare regime theory, *International Social Work*, 54(6): 735-750

Babor, T., Caulkins, J.P., Edwards, G., Fischer, B., Foxcroft, D.R., Humphreys, K., Obot, I.S., Rehm, J., Reuter, P., Room, R., Rossow, I., and Strang, J. (2010). *Drug Policy and the Public Good,* Oxford, Oxford University Press

Babor, T., Caulkins, J.P., Fischer, B., Foxcroft, D.R., Humphreys, Medina-Mora, M.E., K., Obot, I.S., Rehm, J., Reuter, P., Room, R., Rossow, I., and Strang, J., (2018). *Drug Policy and the Public Good*. 2nd ed., Oxford, Oxford University Press

Bjerge, B., Duke, K., Frank, V.A., (2015). The shifting roles of medical stakeholders in opioid substitution treatment: a comparison between Denmark and the UK, *Drugs and Alcohol Today,* 15(4): 216-230

Barrett, D. (2010). Security, development, and human rights: Normative, legal and policy challenges for the international drug control system, *International Journal of Drug Policy,* 21: 140-144

Barton, A. (2011). *Illicit Drugs: Use and Control,* 2nd Ed. Routledge, London

Baskerville, R. F. (2003). Hofstede never studied culture, *Accounting, Organizations and Society*, 28(1): 1-14

Bennett, T, and Holloway, K. (2005). *Understanding Drugs, Alcohol and Crime,* Open University Press Berkshire

Bennett, T., and Holloway, K. (2010). Is UK drug policy evidence based? *International Journal of Drug Policy,* 21: 411-417

Beugelsdijk, S., Van Schaik, T., and Arts, W., (2005). Toward a unified Europe? Explaining regional differences in value patterns by economic development, cultural heritage, and historical shocks *Regional Studies*, 40(3): 317-327

Bewley-Taylor, D.R. (2002). *Habits of a Hegemon: The United States and the Future of the Global Drug Prohibition Regime*, Transnational Institute

Bewley-Taylor, D.R. (2003). Challenging the UN drug control conventions: Problems and possibilities, *International Journal of Drug Policy,* 14: 171-179

Bewley-Taylor, D.R. (2005). Emerging Policy Contradictions between the United Nations Drug Control System and the Core Values of the UN, *International Journal of Drug Policy*, 16, 423-431

Bewley-Taylor, D., (2012). *International Drug Control: Consensus Fractures,* Cambridge: Cambridge University Press

Bewley-Taylor, D.R. (2013). Towards revision of the UN drug control conventions: Harnessing like-mindedness, *International Journal of Drug Policy*, 24: 60-68

Bewley-Taylor, D. and Jelsma, M. (2011). Regime change: Re-visiting the 1961 Single Convention on Narcotic Drugs, *International Journal of Drug policy,* 23: 72-81

Boekhout van Solinge, T., (2004). *Dealing with Drugs in Europe, An Investigation of European Drug Control Experiences: France, the Netherlands and Sweden*, The Hague, BJu Publishing

Boister, N. (2016). Waltzing on the Vienna Consensus on Drug Control? Tensions in the International System for the Control of Drugs. *Leiden Journal of International Law*, 29(2): 389-409.

Bonoli, G., (1997). Classifying Welfare States: A Two-dimension Approach, *Journal of Social Policy*, 26(3): 351-372

Bowser, B.P., Word, C.O., and Seddon, T. (2014). *Understanding Drug Use and Abuse: A Global Perspective*, Basingstoke: Palgrave Macmillan

Breiger, R., (2009). Chapter 13: On the Duality of Cases and Variables: Correspondence Analysis (CA) and Qualitative Comparative Analysis (QCA) in Byrne, D., and Ragin, C.C., (2009) *The SAGE Handbook of Case-Based Methods*, Sage: London

Brewster, D (2017). Culture(s) of control: Political dynamics in cannabis policy in England & Wales and the Netherlands, *European Journal of Criminology,* 15 (5): 566-585

Brownstein, H.H (2016). The Shifting Landscape of Drug Policy and the Need for Innovative Research, *Criminology and Public Policy,* 15, 3: 837-841

Burns, R.P., and Burns, R., (2009). *Business Research Methods and Statistics Using SPSS*, London, Sage

Buxton, J. (2008). *The Historical Foundations of the Narcotic Drug Control Regime*, Policy Research Working Paper 4553, The World Bank Development Research Group

Callaghan, S., (2015). Does drug policy matter? A comparative analysis of drug policy typologies across 28 OECD countries, *Government, Policy and Management: A Reader,* 4: 4-23, SPSW Publishing, York UK

Caprar, D. V., Devinney, T. M., Kirkman, B. L., & Caligiuri, P., (2015). Conceptualizing and measuring culture in international business and management: From challenges to potential solutions, *Journal of International Business Studies*, 46(9): 1011-1027

Caputi, T.L., (2016). The case for uniform controls in drug policy studies, *International Journal of Drug Policy,* 33: 102-104

Castles, F. G., and Obinger, H., (2008). Worlds, Families, Regimes: Country Clusters in European and OECD Area Public Policy, *West European Politics*, 31(1–2): 321-44

Chandra, S., and Joba, J., (2015). Transnational cocaine and heroin flow networks in western Europe: A comparison, *International Journal of Drug Policy*, 26: 772-780

Chao, G. T., & Moon, H. (2005). The cultural mosaic: A metatheory for understanding the complexity of culture, *Journal of Applied Psychology*, 90(6): 1128-1140

Chatwin, C., (2006). Multi-level governance: The way forward for European illicit drug policy? *International Journal of Drug Policy,* 18: 494-502

Chatwin, C., (2016). Mixed messages from Europe on Drug Policy Reform: the cases of Sweden and the Netherlands, *Journal of Drug Policy Analysis*, De Gruyter

Cohen, P., (2010). Looking at the Un, Smelling a Rat: A Comment on 'Sweden's Successful Drugs Policy: A Review of the Evidence', Amsterdam Law Forum, 2(4):75–84

Collier, D., LaPorte, J., and Seawright, J., (2012). Putting Typologies to Work: Concept Formation, Measurement, and Analytic Rigor, *Political Research Quarterly*, 65(1): 217-232

Collins, J., (2014). *Ending the Drug Wars*, LSE Connect

Collins, J., (2012). *Governing the Global Drug Wars*, LSE Ideas

Collins, J., (2018) Beyond UNGASS 2016: drug control multilateralism and the end to the 'war on Drugs, in Reitano, T., Jesperson, S., and Bird Ruiz-Benitez de Lugo, L., (2018) (eds.) *Militarised Responses to Transnational Organised Crime: The War on Crime,* Basingstoke, UK: Palgrave Macmillan

Coomber, R., (1998). *The Control of Drugs and Drug Users: Reason or Reaction?* Amsterdam: Harwood Academic Publishers

Coomber, R., McElrath, K., Measham, F., and Moore, K (2013). *Key Concepts in Drugs and Society,* Sage, London

Csete, J, and Grob, P.J., (2012). Switzerland, HIV and the power of pragmatism: Lessons for drug policy development, *International Journal of Drug Policy*, 23: 82-86

Dogan, M., and Pelassy, D., (1990). *How to Compare Nations*, 2nd Ed. Chatham, Chatham House Publishers, Inc.

Duff, C., (2014). The place and time of drugs, *International Journal of Drug Policy*, 25: 633-639

Duke, K., (2006). Out of crime and into treatment?: The criminalization of contemporary drug policy since *Tackling Drugs Together. Drugs: Education, Prevention and Policy,* 13(5): 409-415

Duke., K., Gleeson, H., Dombrowski, K., Herold, M., and Rolando, S., (2021). The engagement of young people in drug interventions in coercive contexts: findings from a cross-national European study, *Drugs: Education, Prevention and Policy*, 28(1): 26-35

Ebbinghaus, B., (2012). *Comparing Welfare State Regimes: Are Typologies an Ideal or Realistic Strategy?,* Draft paper presented at European Social Policy Analysis Network, ESPAnet Conference, Edinburgh, UK

Edman, J., (2013). An all-embracing problem description. The Swedish drug issue as a political catalyst 1982–2000, *International Journal of Drug Policy*, 24: 558-565

Edwards, C. and Galla, M., (2014). Governance in EU illicit drugs policy, *International Journal of Drug Policy,* 25: 942-947

Eisenbach-Stangl, I., Moskalewicz, J., and Thom, B. (2009). *Two Worlds of Drug Consumption in Late Modern Societies,* Surrey: Ashgate Publishing Ltd.

Elman, C., (2009). Chapter 6: Explanatory Typologies in Qualitative Analysis in Byrne, D., and Ragin, C.C., (2009) *The SAGE Handbook of Case-Based Methods*, Sage: London

EMCDDA (2014). *Regional drug strategies across the world: A comparative analysis of intergovernmental policies and approaches*, EMCDDA Papers*,* Publications Office of the European Union, Luxembourg

EMCDDA (2015). *Drug policy and law*, [Online] available at: http://www.emcdda.europa.eu/policy-and-law [Accessed: 14.02.15]

EMCDDA (2016). *European Drug Report: Trends and Developments*, European Monitoring Centre for Drugs and Drug Addiction, Luxembourg Publications Office of the European Union

EMCDDA (2018). *Countries*, [Online] http://www.emcdda.europa.eu1/countries_en [Accessed: 29.04.19]

EMCDDA (2022). Statistical Bulletin [Online] https://www.emcdda.europa.eu/data/stats2022_en [Accessed 1.8.22)

Esping-Andersen, G., (1990). *The Three Worlds of Welfare Capitalism*, Cambridge, Polity Press

European Social Survey (ESS) (2013). *The typology approach*, [Online] available at: http://essedunet.nsd.uib.no/cms/topics/family/1/3.html [Accessed: 13.02.15]

Fazey, C.S.J., (2003). The Commission on Narcotic Drugs and the United Nations International Drug Control Programme: politics, policies and prospect for change, *International Journal of Drug Policy*, 14: 155-169

Feelbab-Brown, V. and Trinkunas, H., (2015). *UNGASS 2016 in Comparative Perspective: Improving the Prospects for Success*, Foreign Policy at Brookings, Improving Global Drug Policy: Comparative Perspectives for UNGASS 2016, Centre for 21st Century Security and Intelligence, Latin American Initiative

Fiss, Peer C., (2011). Building Better Causal Theories: A Fuzzy Set Approach to Typologies in Organization Research. *Academy of Management Journal,* 54: 393-420

Fraser, S, and Moore, D., (2011). Governing through problems: The formulation of policy on amphetamine-type stimulants (ATS) in Australia, *International Journal of Drug Policy*, 22: 498-506

Friedman, S.R., Tempalski, B., Brady, J.E., West, B.S., Pouget, E.R., Williams, L.D., Des Jarlais, D.C., and Cooper, L.F., (2016). Income inequality, drug-related arrests, and the health of people who inject drugs: Reflections on seventeen years of research, *International Journal of Drug Policy,* 32: 11-16

GDPI (2021) The Global Drug Policy Index Report [Online]. Available at: https://globaldrugpolicyindex.net/wp-content/themes/gdpi/uploads/GDPI%202021%20Report%20EN.pdf [Accessed: 10.7.2023]

GDPI (Global Drug Policy Index) (2023a) What is the GDPI?. [Online]. Available at: https://globaldrugpolicyindex.net/about [Accessed 10.7.2023]

GDPI (Global Drug Policy Index) (2023b) Ranking. [Online]. Available at: https://globaldrugpolicyindex.net/ranking [Accessed 10.7.2023]

Gelfand, M. J., Nishii, L. H., & Raver, J. L. (2006). On the nature and importance of cultural tightness–looseness, *Journal of Applied Psychology*, 91(6): 1225–1244

Gomis, B., (2014). *Illicit drugs and international security: Towards UNGASS 2016*, Chatham House, Briefing Paper

Granato, J., Inglehart, R., and Leblang, D (1996). The effect of cultural values on economic development: Throty, hypotheses, and some empirical tests, *American Journal of Political Science,* 40(3): 607-631

Gstrein, V., (2018). Ideation, social construction and drug policy: A scoping review, *Journal of International Drug Policy,* 51: 75-86

Hall, E. T., (1976). *Beyond culture*, Garden City, New York: Doubleday

Hamilton, L., Rubin, J, and Singleton, N., (2012). *Characteristics of good governance for drug policy: findings from an expert consultation*, UKDPC, London

Hantrais, L., (2009). *International Comparative Research: Theory, Methods and Practice*, Basingstoke, Palgrave Macmillan

Hantrais, L., and Mangen, S., (1996). *Cross-national Research Methods in the Social Sciences*, London, Pinter

Hayden, F.G., (1988). Values, Beliefs, and Attitudes in a Sociotechnical Setting, *Journal of Economic Issues,* XXII(2): 415-426

Helfgott, J.B., (2008). *Criminal behavior: theories, typologies and criminal justice*, London, Sage

Hofstede, G., (1980). *Culture's consequences: International differences in work related values*, Beverly Hills, CA: Sage

Hofstede, G., (1998). *A case for comparing apples with oranges: International differences in values*, *IJCS,* XXXIX(1): 16-31

Hofstede, G., (2001). *Cultures Consequences: Comparing values, behaviors, institutions, and organisations across nations*. 2nd, Sage, California

Home Office (2013) Drug Misuse Statistics [Online]. Available at: https://www.gov.uk/government/collections/drug-misuse-declared [Accessed 10.7.2023]

Home Office (2014). *Drugs: International Comparators*, Crown Copyright

Horsfall, D., (2013). A fuzzy set ideal-type approach to measuring the competition state, *Policy and Society,* 32(4): 345-356

House, R. J., Hanges, P. J., Javidan, M., et al. (eds.) (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*. Sage Publications, Thousand Oaks, CA

Hucklesby, A., and Wincup, E., (2010). *Drug Interventions in Criminal Justice*, Open University Press, Maidenhead

Hudson, J., Jo, N.K., and Keung, A., (2015). *Culture and the Politic of Welfare: Exploring Societal Values and Social Choices*, Palgrave Macmillan, Basingstoke

Hudson, J, and Kühner, S., (2009). Towards productive welfare? A comparative analysis of 23 OECD countries, *Journal of European Social Policy*, 19(1): 34-46

Hudson, J., and Kühner, S., (2013). Beyond indices: The potential of fuzzy set ideal type analysis for cross-national analysis of policy outcomes, *Policy and Society,* 32: 303-317

Hughes, R., Lart, R., ad Higate, P., (2006). *Drugs: Policy and Politics,* Open University Press, Berkshire

Inciardi, J.A. and Harrison, L.D., (2000). *Harm Reduction: National and International Perspectives*, Sage, California

Inglehart, R., (1997). *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*, Princeton University Press, Princeton, NJ

Javidan, M., House, R. J., Dorfman, P. W., Hanges, P. J., & de Luque, M. S. (2006). Conceptualizing and measuring cultures and their consequences: A comparative review of GLOBE's and Hofstede's approaches, *Journal of International Business Studies*, 37(6): 897–914

Jelsma, M., (2003). Drugs in the UN system: the unwritten history of the 1998 United Nations General Assembly Special Session on drugs, *International Journal of Drug Policy,* 14: 181-195

Jelsma, M., (2011). *The development of international drug control: lessons learned and strategic challenges for the future*, Global Commission on Drug Policies, Working Paper: Prepared for the First Meeting of the Commission, Geneva,

Jelsma, M., (2015). *UNGASS 2016: Prospects for Treaty Reform and UN System-Wide Coherence on Drug Policy,* Foreign Policy at Brookings, Centre for 21st Century Security and Intelligence, Latin America Initiative, Transnational Institute

Jo, N.K., (2010). *A Study of the Cultural Explanation of Welfare: The Effect of Values on Social Policy within the Welfare States*, University of York. PhD

Kaufman, L., and Rousseeuw, P.J., (1990). *Finding Groups in Data: An Introduction to Cluster Analysis,* New Jersey, Wiley and Sons, Inc.

Kennett, P., (2001*). Comparative social policy*, Open University Press, Buckingham

Kilmer, B., Reuter, P., & Giommoni, L., (2015). What can be learned from cross-national comparisons of data on illegal drugs? *Crime and Justice*, 44: 227-296

Kirkman, B. L., Lowe, K. B., & Gibson, C. B., (2006). A quarter century of *Culture's Consequences*: A review of empirical research incorporating Hofstede's cultural value framework, *Journal of International Business Studies*, 37(3): 285-320

Kirkman, B. L., Lowe, K. B., & Gibson, C. B., (2017). A retrospective on Cultures Consequences: The 35-year journey, *Journal of International Business Studies*, 48: 12–29

Koltko-Rivera, M.E., (2004). The Psychology of Worldviews, *Review of General Psychology,* 8(1): 3-58

Krajewski, K., (1999). How flexible are the United Nations drug conventions? *International Journal of Drug Policy,* 10: 329-338

Kvist, J., (2007). Fuzzy set ideal type analysis, *Journal of Business Research,* 60: 474-481

Lancaster, K., (2014). Social construction and the evidence-based drug policy endeavour, *International Journal of Drug Policy*, 25: 948-951

Lancaster, K., Duke, K., and Ritter, A., (2015). Producing the 'problem of drugs': A cross national comparison of 'recovery' discourse in two Australian and British reports, *International Journal of Drug Policy*, 26: 617-625

Landman, T., (2000). *Issues and Methods in Comparative Politics: An Introduction*, London, Routledge

Leung, K., & Morris, M. W., (2015). Values, schemas, and norms in the culture-behavior nexus: A situated dynamics framework, *Journal of International Business Studies*, 46(9): 1028-1050

Levine, H.G., (2003). Global drug prohibition: its uses and crises, *International Journal of Drug Policy*, 14: 145-153

Lloyd, C., (2012). The stigmatization of problem drug users: A narrative literature review, *Drugs: Education, Prevention and Policy,* 20(2): 85-95

Lor, P., (2011). Chapter 4 Draft: Methodology in Comparative Studies, *International and Comparative Librarianship*, available at: https://pjlor.files.wordpress.com/2010/06/chapter-4-draft-2011-04-20.pdf [Accessed: 10.12.14]

MacCoun, R.J. and Reuter, P., (2001). *Drug War Heresies: Learning from Other Vices, Times & Places*, New York: Cambridge University Press

MacDonald, Z., Tinsley, L., Collingwood, J., Jamieson, P., Pudney, S., (2005). *Measuring the harm from illegal drugs using the Drug Harm Index,* Home Office Report 24/05

MacGregor, S., (2013). Barriers to the influence of evidence on policy: Are politicians the problem? *Drugs: Education, Prevention and Policy,* 20(3): 225-233

MacGregor, S., Singleton, N., and Trautmann, F., (2014). Towards good governance in drug policy: Evidence, stakeholders and politics, *International Journal of Drug Policy,* 25: 931-934

Massard da Fonesca, E., (2005). Book Review: Controlling Illegal Drugs: A Comparative Study by Sandro Segre (2003), *International Journal of Drug Policy*, 16(2): 133-134

Mathers, R.L., and Williamson, C.R., (2011). Cultural Context: Explaining the Productivity of Capitalism, *KYKLOS*, 64(2): 231-252

Matheson, C., Jaffray, M., Ryan, M., Bond, C.M., Fraser, K., Kirk, M., and Liddell, D., (2014). Public opinion of drug treatment policy: Exploring the public's attitudes, knowledge, experience and willingness to pay for drug treatment strategies, *International Journal of Drug Policy*, 25: 407–415

Matthew-Simmons, F., Sunderland, M., and Ritter, A., (2013). Exploring the existence of drug policy 'ideologies' in Australia, *Drugs: Education, Prevention and Policy,* 20(3): 258-267

Maznevski, M. L., DiStefano, J.J., (1995). Measuring Culture in International Management: The Cultural Perspectives Questionnaire, The University of Western Ontario Working Paper Series: 95-39

McAllister, W.B., (2000). *Drug Diplomacy in the Twentieth Century,* Routledge, London

McGallagly, J. and McKeganey, N., (2013). Does robust drug enforcement lead to an increase in drug users coming forward for treatment? *Drugs: education, prevention and policy,* 20(1): 1-4

McKeganey, N., (2011). *Controversies in Drugs Policy and Practice*, Basingstoke: Palgrave Macmillan

McSweeney, B., (2002). Hofstede's model of national cultural differences and their consequences: A triumph of faith – a failure of analysis, *Human Relations*, 55(1): 89-118

Miller, F.P., Vandome, A.F., and McBrewster, J. (2009). *Cluster Analysis: Hierarchical Clustering, K-means Clustering, Conceptual Clustering, Formal Concept Analysis, Fuzzy Clustering*, USA, Alphascript Publishing

Misuse of Drugs Act 1971, c. 38. London: The Stationery Office.

Monaghan, M., (2009). The complexity of Evidence: Reflections on Research Utilisation in a Heavily Politicised Arena, *Journal of Social Policy and Society,* 9(1): 1-12

Monaghan, M., (2014). Drug Policy Governance in the UK: Lessons from changes to and debates concerning the classification of cannabis under the 1971 Misuse of Drugs Act, *International Journal of Drug Policy*, 25: 1025-1030

Moore, D., Fraser, S., Törrönen, J., and Tinghögb. M.E., (2014). Sameness and difference: Metaphor and politics in the constitution of addiction, social exclusion and gender in Australian and Swedish drug policy, *International Journal of Drug Policy*, 26: 420-428

Mosher, C J., and Akins, S., (2007). *Drugs and Drug Policy: The Control of Consciousness Alteration*, California, Sage

Mosher, C.J. and Akins, S.M., (2014). *Drugs and Drug Policy: The Control of Consciousness Alteration,* 2nd Edition, California: Sage Publications Inc.

Muggah, R., Aguirre, K., and Szabo de Carvalho, I., (2015). *Measurement matters: Designing new metrics for a drug policy that works*, Igarapé Publication, Strategic Paper 12

Nagelhout, G.E., Hummerl, K., de Goeij, M.C.M., de Vries, H., Kaner, E., and Lemmens, P., (2017). How economic recessions and unemployment affect illegal drug use: A systematic realist literature review, *International Journal of Drug Policy*, 44: 69-83

Neuman, W.L., (2006). *Social Research Methods: Qualitative and Quantitative Approaches*, 6th Ed. Pearson Education, Inc., Boston

Norris, P., (2009). 'Families of Nations, Victimisation and Attitudes Towards Criminal Justice', International Review of Victimology, 16: 229-255

Ødegård, E., (1998). Comparative research in the drug field, *European Journal on Criminal Policy and Research,* 6: 357–367

OECD (2015). *Tackling Harmful Alcohol Use*, [Online] http://www.oecd.org/els/health-systems/tackling-harmful-alcohol-use-9789264181069-en.htm [Accessed: 28.02.19]

Pardo, B., (2014). Cannabis policy reforms in the Americas: A comparative analysis of Colorado, Washington, and Uruguay, *International Journal of Drug Policy*, 25: 727-735

Pfau-Effinger, B., (2005). Culture and Welfare State Policies: Reflections on a Complex Interrelation, *International Journal of Social Policy,* 34(1): 3-20

Pickett, K., & Wilkinson, R., (2010). Inequality: An underacknowledged source of mental illness and distress. *British Journal of Psychiatry,* 197(6): 426-428

Pidgeon, N., (2012). Public understanding of, and attitudes to, climate change: UK and international perspectives and policy, *Climate Policy*, 12(01): 85-106

Plant, M., Robertson, R., Plant, M., Miller, P., (2011). *Drug Nation: Patterns, Problems, Panics and Policies*, Oxford University Press, Oxford

Pollack, H.A., and Reuter, P., (2014). Does tougher enforcement make drugs more expensive? *Society for the Study of Addiction*, 109(12): 1959-1966

Poret, S., (2009). An optimal anti-drug law enforcement policy, *International Review of Law and Economics,* 29: 221–228

Powell, M., and Barrientos, A., (2011). An Audit of the Welfare Modelling Business, *Social Policy and Administration*, 45(1): 69-84

Pycroft, A., (2015). *Key Concepts in Substance Misuse,* Los Angeles: Sage

Ragin, C.C., (2000). *Fuzzy-Set Social Science*, Chicago, University of Chicago Press

Ragin, C.C., (2008). *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. Chicago, University of Chicago Press

Ragin, C.C., and Fiss, P.C., (2017). *Intersectional Inequality: Race, class, test scores, and poverty,* The University of Chicago Press, Chicago

Ragin, C., (2017). *USER'S GUIDE TO Fuzzy-Set / Qualitative Comparative Analysis* [Online] available: https://www.socsci.uci.edu/~cragin/fsQCA/download/fsQCAManual.pdf [Accessed 11.03.19]

Reuter, P., Falco, M., and MacCoun, R., (1993). *Comparing Western European and North American Drug Policies: An International Conference Report*, RAND, Drug Policy Research Centre

Rihoux, B., and Lobe, B., (2009). Chapter 12: The Case for Qualitative Comparative Analysis (QCA): Adding Leverage for Thick Cross-Case Comparison in Byrne, D., and Ragin, C.C., (2009) *The SAGE Handbook of Case-Based Methods*, Sage: London

Rihoux, B., and Ragin, C.C., (2009). *Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques*, Sage, California

Ritter, A., (2009). Methods for comparing drug policies – The utility of composite Drug Harm Indexes, *International Journal of Drug Policy*, 20, 475-479

Ritter, A., (2021). *Drug Policy*, Routledge, London

Ritter, A., Livingston, M., Chalmers, J., Berends, L., Reuter, P., (2016). Comparative policy analysis for alcohol and drugs: Current state of the field, *International Journal of Drug Policy,* 31: 39-50

Richardson, D., and Bell, C., (2018). Public health interventions for reducing HIV, hepatitis B and hepatitis C infections in people who inject drugs, *Public Health Action*, 8(4): 153

Rhodes, T., Singer, M., Bourgois, P., Friedman, S.R., and Strathdee, S.A., (2005). The social structural production of HIV risk among injecting drug users, *Social Science & Medicine,* 61: 1026–1044

Roberts, M., (2014), Making drug policy together: Reflections on evidence, engagement and participation, *International Journal of Drug Policy*, 25: 952-956

Rolles, S., and Measham, F., (2011). Questioning the method and utility of ranking drug harms in drug policy, *International Journal of Drug Policy*, 22: 243-246

Room, R. and Reuter, P., (2012). How well do international drug conventions protect public health? *The Lancet,* 379: 84-91

Schultze-Kraft, M., (2014). Why a governance perspective could contribute to improving drug policy and engaging the international development community: Lessons from Colombia, *International Journal of Drug Policy,* 25: 1038-1039

Schwartz, S. H., (1994). Beyond individualism/collectivism: new cultural dimensions of values. In: Kim, U., Triandis, H.C., Kagitcibasi, C., Choi, S.C., Yoon, G. (Eds.), *Individualism and Collectivism: Theory, Methods and Applications*, Sage Publications, London: 85-119

Schwartz, S. H., (2014). Rethinking the concept and measurement of societal culture in light of empirical findings. *Journal of Cross-Cultural Psychology*, 45(1): 5-13

Seddon, T., (2010). Explaining Drug Policy: Towards an historical sociology of policy change, *International Journal of Drug Policy*, 22: 415-419

Singleton, N., and Rubin, J., (2014). What is good governance in the context of drug policy?, *International Journal of Drug Policy*, 25: 935-941

Smith, K. B., (2002). Typologies, Taxonomies, and the Benefits of Policy Classification, *Policy Studies Journal*, 30(3): 379-395

Smithson, M., and Verkuilen, J., (2006). *Fuzzy Set Theory: Applications in the Social Science*, Sage Publications, California

Spooner, C., & Hetherington, K., (2004). *Social determinants of drug use; Technical report number 228*, National Drug and Alcohol Research Centre, University of New South Wales, Sydney

Steel, P., & Taras, V., (2010). Culture as consequence: A multi-level multivariate meta-analysis of the effects of individual and country characteristics on work-related cultural values, *Journal of International Management*, 16(2): 211-233.

Stevens, A., (2010). *Drugs, Crime and Public Health: A Political Economy of Drug Policy*, Oxfordshire, Routledge

Stevens, A., (2011). Sociological approaches to the study of drug use and policy, *International Journal of Drug Policy*, 22(6): 399-403

Stevens, A., (2016). Inequality and adolescent cannabis use: A qualitative comparative analysis of the link at national level, *Drugs: Education, Prevention and Policy*, 23(5): 410-421

Stevens, A., Hughes, C.E., Hulme, S., & Cassidy, R., (2019). A realist review and programme theory of alternatives to criminalization for simple drug possession, *European Journal of Criminology*, 0: 1-26

Stevens, A., and Ritter, A., (2013). How can and do empirical studies influence drug policies? Narratives and complexity in the use of evidence in policy making, Editorial, *Drugs: Education, Prevention and Policy*, 20(3): 169-174

Strang, J., Babor, T., Caulkins, J., Fischer, B., Foxcroft, D., Humphreys, K., (2012). Drug policy and the public good: evidence for effective interventions, *Lancet*, 379: 71-83

Stevenson, R., (2001). Costs of the war on drugs, *Sensible solutions to the urban drug problem,* Fraser Institute Digital Publication, April. Vancouver, BC

Stevenson, B., (2011). *Drug policy, criminal justice, and mass imprisonment*, Global Commission on Drug Policies

Sznitman, S. R. and Lewis, N., (2018). Examining effects of medical cannabis narratives on beliefs, attitudes, and intentions related to recreational cannabis: A web-based randomized experiment, *Journal of Drug and Alcohol Dependence,* 185: 219-225

Taras, V., Rowney, J. & Steel, P., (2009). Half a century of measuring culture: Review of approaches, challenge, and limitations based on the analysis of 121 instruments for quantifying culture, *Journal of International Management*, 15: 357-373

Taras, V., Steel, P., & Kirkman, B. L., (2016). Does country equal culture? Beyond geography in the search for cultural boundaries, *Management International Review*, 56(4): 455-487

Tinasti K., Bem, P., Grover, A., Kazatchkine, M., and Dreifuss, R., (2015). SDGs will not be achieved without drug policy reform, *The Lancet*, 386: 1132

Trace, M., (2011). *Drug policy – Lessons learnt and options for the future*, Global Commission on Drug Policies

Trompenaars, F., (1993). *Riding the Waves of Culture: Understanding Diversity in Global Business*, Irwin Professional Publishing, Chicago, IL

Tsui, A. S., Nifadkar, S. S., & Ou, A. Y., (2007). Cross-national, cross-cultural organizational behavior research: Advances, gaps, and recommendations, *Journal of Management*, 33(3): 426-478

Uhl, A., Hunt, G. Brink, W., and Stimson, G., (2015). How credible are international databases for understanding substance use and related problems? *International Journal of Drug Policy*, 26: 119-121

UKDPC (2012). *How to make drug policy better: key findings from UKDPC research into drug policy governance*, London, The UK Drug Policy Commission (UKDPC)

UNODC (2016). *World Drug Report 2016,* UN Publication

UNODC (2017). *World Drug Report 2017*, UN Publication

UNODC (2018). *World Drug Report 2018*, UN Publication

UNODC (2020). *World Drug Report 2020*, UN Publication

UNODC (2021). *World Drug Report 2021*, UN Publication

UNRISD (1994). *Illicit Drugs: Social Impacts and Policy Responses*, UNRISD Briefing Paper No. 2, World Summit for Social Development

Van Oorschot, W., (2007). Culture and social policy: a developing field of study, *International Journal of Social Welfare*, 16: 129-139

Von Hoffman, J., (2016). The international dimension of drug policy reform in Uruguay, *International Journal of Drug Policy,* 34: 27-33

Vuolo, M., (2013). National-level drug policy and young people's illicit drug use: A multilevel analysis of the European Union, *Drug and Alcohol Dependence*, 131: 149-156

Warner, K.E., Citrin, T., Pickett, G., Rabe, B.G., Wagenaar, A., and Stryker. J., (1990). Licit and illicit drug policies: a typology; Conference Report, *British Journal of Addiction,* 85: 255-262

Watson, J., (2012). The good, the bad and the vague: Assessing emerging Conservative drug policy, *Critical Social Policy*, 33(2): 285-30

Werb, D., (2018). Post-war prevention: Emerging frameworks to prevent drug use after the War on Drugs, *International Journal of Drug Policy,* 51: 160-164

Williamson, C.R., and Mathers, R.L., (2011). Economic freedom, culture and growth, *Public Choice,* 148: 313-335

WHO (2021). *Drug-Related Harm Reduction*, [Online] Available: http://www.emro.who.int/asd/health-topics/drug-related-harm-reduction.html (Accessed: 2021)

Wilkinson, R., & Pickett, K., (2009). *The Spirit Level: Why Equality is Better for Everybody*, Penguin Books

Williamson, K., (1997). *Drugs and the Party Line,* Edinburgh, Rebel Inc.

Wincup, E., (2016). Gender, recovery and contemporary UK drug policy, *Drugs and Alcohol Today*, 16(1): 39-48

Wincup, E., and Monaghan, M., (2016). Scrounger narratives and dependent drug users: welfare, workfare and warfare, *Journal of Poverty and Social Justice*, 24(3): 261-275

Windle, J., (2016). Security trumps drug control: How securitization explains drug policy paradoxes in Thailand and Vietnam, *Drugs: Education, Prevention and Policy*, 23(4): 344-354

Wodak, A., (2006). Book Review: Dealing with Drugs in Europe. An Investigation of European Drug Control Experiences: France, The Netherlands and Sweden: Boekhout van Solinge, T (Ed.), BJu Legal Publishers, The Hague, 2004, *International Journal of Drug Policy*, 17: 51-53

Wodak, A., (2011). *Demand Reduction and Harm Reduction*, Global Commission on Drug Policies

Yamasaki, S., and Rihoux, B., (2009). Chapter 6: A Commented Review of Applications, in Rihoux, B., and Ragin, C.C. (2009) *Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques*, Sage, California

Ysa, T., Colom, J., Albareda, A., Ramon, A., Carrión, M., and Segura, L., (2014) Governance of Addictions: European Public Policies. Oxford University Press

Zellmer-Bruhn, M., & Gibson, C. B., (2014). How does culture matter? A process view of cultural interaction in groups. In M. Yuki and M. Brewer (Eds.), *Frontiers of culture and psychology series: Culture and group processes* (pp. 166-194), Oxford, UK: Oxford University Press

Zhang, S.X., and Chin, K., (2015). *A People's War: China's Struggle to Contain its Illicit Drug Problem*, Foreign Policy at Brookings

Zhou, J. Shin, S. J., Brass, D. J. Choi, J. Zhang, Z., (2009). Social networks, personal values, and creativity: Evidence for curvilinear and interaction effects, *Journal of Applied Psychology*, 94(6): 1544-1552