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Alternatives to the Criminalization of Simple Possession of Illicit Drugs

Review and Analysis of the Literature[1-2]

Jon Heidt[3]

Abstract

This report reviews the key research literature on the impact of decriminalization, depenalization, diversion, and harm reduction programs from countries in Europe, North America, South America Oceania, and several U.S. states including California, Maine, Oregon, and Washington state. From this review, key indicators emerged in two domains: crime and criminal justice and mental and public health. Crime and criminal justice indicators include crime rates, levels of organized crime, rates of imprisonment, levels of public disorder (e.g., open air drug use and dealing), drug use trends and patterns, drug availability and price, rates of treatment uptake, addiction and overdose, police clearance rates, costs of enforcement, and functioning. Mental and public health indicators include drug use rates and patterns, rates of drug treatment participation, and rates of drug related mortality. These indicators were used to evaluate the impact that different approaches to drug policy have on society.

Keywords: cannabis, drug possession, decriminalization, depenalization, drug policy, drug prohibition.

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Executive Summary

This report reviews the key research literature on the impact of decriminalization, depenalization, diversion, and harm reduction programs from countries in Europe, North America, South America Oceania, and several U.S. states including California, Maine, Oregon, and Washington state. From this review, key indicators emerged in two domains: crime and criminal justice and mental and public health. Crime and criminal justice indicators include crime rates, levels of organized crime, rates of imprisonment, levels of public disorder (e.g., open air drug use and dealing), drug use trends and patterns, drug availability and price, rates of treatment uptake, addiction and overdose, police clearance rates, costs of enforcement, and functioning. Mental and public health indicators include drug use rates and patterns, rates of drug treatment participation, and rates of drug related mortality. These indicators were used to evaluate the impact that different approaches to drug policy have on society.

Key Findings

- Neither decriminalization nor depenalization were found to lead to significantly higher rates of crime or drug use.
- Many jurisdictions that have liberalized drug policy saved money in criminal justice system costs because of less enforcement, reduced court costs, and lower levels of imprisonment.
- Some studies indicate that police activities were redirected to more serious forms of crime under decriminalization and depenalization approaches.
- Net-widening was found to be a serious concern in some jurisdictions especially with regards to the impact it can have on marginalized people and minorities.
- Despite the claims of many supporters of prohibition, there seems to be little deterrent effect associated with this policy.
- Drug price and potency does not seem to be significantly affected by the liberalization of drug policy; instead, prices seem to be impacted more by factors like globalization and advances in technology.
- Some studies indicate that prohibition give rise to increasingly stronger drugs, and that supply side strategies are not equipped or able to deal with modern drug markets.
- Findings in several studies suggest that liberalization of drug policy results in improvements in mental and public health outcomes including higher treatment uptake and lower rates of drug related mortality.
- Drug courts were found to result in less recidivism and better outcomes for the participants while also lowering criminal justice system costs.

- Numerous studies in several countries suggested that supervised injection sites and drug consumption rooms did not raise crime rates in the areas, reduced levels of public disorder and open-air drug use, and raised the likelihood that participants would engage in detoxification and treatment programs.

- Racial disparities are widespread in the enforcement of drug policy in a variety of countries and persist even in the face of depenalization.

Policy and Research Implications

- Based on an assessment of its current political context and an analysis of how drug policy liberalization has occurred in the past, Canada seems well-poised to explore the option of implementing decriminalization of simple drug possession.

- Major stakeholders in Canada seem to support decriminalization; however, there are concerns especially amongst drug user advocacy groups about net-widening and how this will impact marginalized people, minorities, and young people.

- If Canada adheres to the status quo of prohibition with depenalization, it will be difficult to address the pressing problems around drug use stemming from the emergence of increasingly potent synthetic drugs, racial disparities in enforcement of drug policy, and the high rates of drug related mortality brought on by the opioid overdose crisis.

- There are indications that funding decriminalization can become quite expensive; Federal policymakers need to consider other policy maneuvers that could increase revenue to support the shift (e.g., deregulation of recreational cannabis to better compete with the illicit market).

- There is an urgent need for research that incorporates the lived experience of people with experience using drugs that can be used to inform decriminalization policy.

- There is also a need for more studies that help clarify the relationship between threshold limits, enforcement, and net-widening.

- It is also important to consider how new sanctions under decriminalization could cause harm through increased enforcement.

- Insight could also be gained from a thorough and systematic review of the social programs used by Portugal to support decriminalization.

Introduction

In 2001, after much debate and discussion, Portugal instituted decriminalization for simple possession of drugs becoming the first country to do this on national level (Greenwald, 2009; Hughes & Stevens, 2010). This event has received considerable media coverage and attention from researchers; however, there are still questions about the success level and international applicability of this approach. Some characterize Portuguese decriminalization as a "resounding success" with no issues or problems while others have characterized it as a "disastrous failure" for moral and ideological reasons and based on a differing interpretation of statistics (Hughes & Stevens, 2012). Others suggest that those unfamiliar with the legal history of criminal justice in Portugal overestimate how quickly changes took place and underestimate the importance of small philosophical shifts and practical adjustments that took place prior to decriminalization (Laqueur, 2014).

In the Netherlands, drugs are still technically illegal, but their possession for personal use is typically tolerated by the criminal justice system and is rarely prosecuted. However, in recent years, the Dutch have tightened restrictions around cannabis and other drug use suggesting that they are pulling back from liberal drug policy after roughly 50 years. Should this be interpreted as change brought about by pressure from neighboring countries, a societal realization of policy failure or simply an urge to try something different?

Because these two countries have had these policies in place for decades, research is accumulating about the impact of these approaches on various aspects of society including crime, the criminal justice system, and public order. Further, several other countries in Europe, North America, and South America have recently adjusted their drug policies for pragmatic reasons and to better fit with what is known about addiction and drug related crime. A more thorough examination of countries that have implemented alternatives to the criminalization of simple possession of drugs can help shed light on benefits, drawbacks, and unintended consequences associated with reducing penalties around simple possession. This analysis provides some insight on the results achieved in other countries and consider options available in a Canadian context.

This study seeks to assess the impact of non-punitive approaches for simple possession of illicit drugs. More specifically, how do strategies like decriminalization and depenalization of simple drug possession, and drug diversion affect drug use, crime, the functioning of the criminal justice system, and other related aspects of society? This can be accomplished by conducting a comparative analysis of research, statistics, and data from various countries that have implemented policies like these (Howard, Newman, & Pridemore, 2000). Other phenomena might also be relevant to understanding the impact of these policies and therefore studies on these issues may be included. More specifically, research on harm reduction, drug regulation, organized crime, and mental health may be relevant here.[4]

[4] Studies of legalization and regulation of drug production or supply which do not address decriminalization, depenalization, or diversion models and studies on post-sentence diversion and conviction measure that reduce criminal severity are not included in this study. Changes to cannabis policy, such as legalization are not reviewed in this report as this appears to be a separate entity from decriminalization of other drug use with quite different motivating factors. More specifically, cannabis legalization is often motivated by economic factors (e.g., saving money, creating economic opportunity) and less by humanitarian and public health concerns (e.g., helping people

The following section describes the methods and sample selection used in this analysis. The third section offers a brief discussion of the history of drug policy reforms instituted in countries in North America, South America, Europe, and Oceania (i.e., Australia and New Zealand). The fourth section includes a discussion of how key criminal justice and public health indicators have been impacted by diversion program, depenalization, and decriminalization. The fifth section discusses the lessons learned about the relative effectiveness of each approach and their outcomes while also offering a discussion of the strengths and weaknesses of the methodologies used in the various studies. Finally, the conclusion identifies the potential policy and research implications for Canada if they should choose to decriminalize simple possession of drug use.

Methods and Data Sources

This research involves a comparative analysis of the crime, criminal justice, mental and public health impacts of various policy approaches in the selected countries. Impact on key indicators from crime, criminal justice, mental and public health will be determined by examining official statistics, empirical studies, government and non-government organization (NGO) reports. This analysis incorporates a variety of peer-reviewed journal articles from the last 20 years including policy analyses, theoretical discussions, quantitative, and qualitative research on drug use and drug policy from reputable journals in a variety of disciplines including criminology, sociology, political science, economics, legal, public, and mental health studies.

Several databases were consulted to locate these articles including: Criminal Justice Abstracts, Sage Premier, EBSCO Open Access Journals, SOC Index, Academic Search Complete, and Taylor & Francis Social Sciences and Humanities Database. A variety of searches were conducted on these databases. For example, searches were conducted based on countries that have legalized and decriminalized drug possession or reduced penalties for drug possession significantly. The list below summarizes some of the search terms that were used:

- Argentina OR Australia OR Canada OR Czech Republic OR Denmark OR Germany OR New Zealand OR the Netherlands OR Portugal OR U.K. OR Uruguay OR U.S. States including Alaska OR California OR Colorado OR Connecticut OR Maine OR Michigan OR Nevada OR Oklahoma OR Oregon OR Utah OR Washington
- and drugs, OR drug use OR substance use OR hallucinogens OR opiates OR stimulants OR heroin OR cocaine OR methamphetamine OR mushrooms OR psilocybin OR ecstasy
- and decriminalization OR depenalization OR defelonization OR de facto decriminalization OR diversion OR expiation OR harm reduction OR law OR liberalization OR policy

who are addicted to the drug, reducing disease and mortality levels). Studies of cannabis decriminalization will be included if they are connected to a country's strategy for controlling other forms of illicit drug use (e.g., the Dutch coffee shop method of separating cannabis and hard drug markets). In addition, research, studies, and reports will be excluded if they are commentary and opinion pieces written by non-experts or if they use problematic methods and/or data.

- and addiction rate OR crime rate OR crime reduction OR drug use trend OR drug use pattern OR evaluation OR impact OR law enforcement cost OR overdose rate OR outcome OR public disorder OR police clearance rates OR judicial backlog OR judicial processing OR imprisonment rate OR and incarceration rate OR rate of use of drug treatment

Drug policy research in government reports and reports from various think tanks and non-governmental organizations (NGOs) were also be considered. Some of these include: the Australian Institute of Criminology (https://www.aic.gov.au/) the Canadian Drug Policy Coalition (https://www.drugpolicy.ca/), the Centre for Drug Policy Evaluation (https://cdpe.org/about/), the Drug Policy Alliance (https://drugpolicy.org/), the European Monitoring Centre for Drugs and Drug Addiction (https://www.emcdda.europa.eu/emcdda-home-page_en), the International Society of Drug Policy (https://www.issdp.org/), the National Institute of Drug Abuse (https://www.drugabuse.gov/) the Ontario Drug Policy Research Network (https://odprn.ca/), the RAND Corporation (https://www.rand.org/well-being/justice-policy/centers/dprc.html), the United Nations Office on Drugs and Crime (https://www.unodc.org/) the Urban Institute (https://www.urban.org/) and the U.S. Department of Justice (https://www.justice.gov/). Finally, data from public health organizations may also be relevant given the relationship of drug use to mental illness (Howard et al., 2000).

Research and sources written in English are the main source of data; however, the principal investigator has incorporated sources written in other languages when it is possible to find translations of these articles or reports.

Context

There are two major alternatives to the criminalization of simple possession of illicit drugs that countries have implemented thus far: decriminalization or some form of depenalization coupled with the use of diversion and harm reduction programs.[5] Decriminalization[6] refers to formally eliminating criminal penalties for simple possession of drugs. Depenalization occurs when there is a reduction in the penalties associated with simple drug possession. Diversion programs involve activities that divert drug users away from the criminal justice system and into therapeutic or social services. These programs are often used in countries that have either reduced penalties for simple possession of illicit drugs (e.g., depenalization) and countries that still have prohibition in place (Stevens, Hughes, Hulme, & Cassidy, 2019).[7]

To make matters more complex, countries often take a mixed approach to drug policy or the drug policy within a country may vary significantly based on the state. For example, cannabis has been legalized in several U.S. states but is treated very harshly in other ones (e.g., Utah and many states in the south). Oregon recently legalized both cannabis and psychedelic substances and has decriminalized other drugs. Likewise, Australian drug policy varies by state and region with some having decriminalization of cannabis and others being more punitive. German drug policy also varies significantly by region (Stevens et al., 2019). To clearly understand the dynamics around drug policies in differing countries and regions, it is important to be familiar with contextual factors that influence these different areas.

First, it is important to understand the *conditions of the social systems* in which these alternative policies operate. These conditions may be structural or cultural. The structure of the political economy of drug policy must be considered meaning that we must understand the dynamics around those who create, influence and are subject to the law (Stevens et al., 2019; see also Brewster, 2017). For example, drug laws may be enforced against different groups at unequal rates because of higher levels of institutionalized racism in some areas (Caudy & Mitchell, 2014; Lammy, 2017; Owusu-Bempah & Luscombe, 2020).

In addition, the cultural direction of the country in question must be considered. Canada has historically embraced more liberal social policies on the national level (e.g., socialized medicine, access to abortion, and legalization of gay marriage) and many provinces make use of harm reduction and restorative justice approaches to deal with drug use. As Stevens and his colleagues (2019) note, “Cultural values shape the nature of policy reform.” (pg. 7). Not surprisingly, some researchers have noted the importance of public support and political survivability for the success

[5] Legalization of simple possession of drugs is a fourth option; however, no country has tried this approach beyond legalizing cannabis.
[6] The term decriminalization is used in very inconsistent ways as it sometimes used interchangeably with what are essentially diversion programs or approaches that involve simply reducing the penalty for possession from a felony to a misdemeanor (i.e., depenalization or defelonization) (see Logan, 2014).
[7] It should be noted that in some countries and states with drug prohibition, police often use their discretion and simply do not arrest people consistently for simple drug possession and in other areas prosecutors may decline these cases. This is sometimes referred to as ‘de facto’ decriminalization as opposed to ‘de jure’ decriminalization in which simple drug possession has been formally decriminalized through changes to official policy. De facto decriminalization can be seen as a form of discretion- based depenalization for the purposes of comparative analysis.

of cannabis law uptake. In a more global sense, countries must also consider if they are willing to violate U.N. treaties around drug use (Hyshka, 2009).

Second, the *nature and scale of the illicit drugs market* in the various countries is important to understand when considering the development and use of policies. For example, the widespread involvement of certain groups in a prohibited activity may trigger calls for reform. Lempert (1974) points out that as more and more middle-class young people became involved with cannabis use during the 1960s and started getting criminal records because of this activity, there were increased calls to reduce the penalties for this drug (as cited in Stevens et al., 2019). Somewhat surprisingly, Hyshka (2009) notes that users have not always supported cannabis policy reform in Canada, and this negatively impacted the chances of success. For example, historically Canadian cannabis users have seen changes in the law as weak half-measures and not worth their ardent support. Some research has also found that if regulations are too stringent and prices are too high under legalization, users will be reluctant to switch to the legal market (Heidt, 2021).

Third, the *culture and priorities of the police and prosecutors* may affect how implementation takes place. For example, if police or the courts have already shifted to a laissez-faire approach to certain drug crimes (i.e., de facto or de jure decriminalization) they may be inclined to support some form of decriminalization or reduction in penalties to encourage respect for the law and consistency in enforcement. Hyshka (2009) also notes that the success of cannabis law implementation is heavily influenced by the level of police support in society.

Fourth, Stevens and his colleagues (2019) mention that a final aspect of context that might be important is *research and evaluation capacity.* The quality of the supporting research evidence and level of evaluation and review are also cited by Hyshka (2009) as being factors that are important in understanding the success of cannabis laws.

The following section presents a summary of the social context and political dynamics of the countries and states being reviewed. These are summarized in Table 1 as well (see page 12).

Country Policy Profiles

Decriminalization[8]

The Netherlands

Since the 1960s, the Dutch government has acknowledged that drug use is inevitable regardless of the law and have focused on avoiding stigmatizing and alienating users. Possession of small amounts of hard drugs for obvious personal use (.5 grams or one pill) are not subject to prosecution, and in most cases, the drugs are simply confiscated by the police (EMCDDA, 2019). This policy is sometimes referred to as 'tolerance policy', and essentially amounts to an extreme form of depenalization (Brewster, 2017).

To separate the cannabis market from other illicit drug markets, the government has allowed coffee shops as venue for selling small amounts of cannabis since the 1980s. Rules around coffee shops selling cannabis are flexible and minor adjustments can be made based on the preferences and characteristics of the municipalities Since 2000, regulation has increased and the amount of cannabis allowed for possession and in coffee shops has been reduced (Chatwin, 2016; Brewster, 2017). Furthermore, in response to a multi-drug epidemic during the 1960s and early 70s, the Netherlands emerged as a pioneer in the implementation of needle and drug maintenance programs in Europe since the mid-1970s, and these programs have continued to this day (Grund & Breeksema, 2013; Chatwin, 2016).

[8] The Netherlands was placed in this group of countries even though their system is technically an example of depenalization as no formal laws have been changed regarding drug use. The Dutch approach is much different when compared to depenalization in other countries which is less consistent (as in the case of Germany, Canada, and some areas of the U.S.) or is in many cases focused on cannabis possession and/or may only a temporary change, based on enforcement orders given to the police (as in the case of the U.K. or some U.S. states like California). One could argue that in practice, the Netherlands has the most liberal approach of all the countries as they never prosecute simple possession of drugs and have essentially legalized cannabis through coffee shop sales.

Table 1: Political Context and Summary of Policy by Country

Country	Cannabis Policy	Hard Drug Policy	Drug Div.	Drug Crts.	Drug Consump. Rooms	Notes on Approach to Drug Policy
Netherlands	De facto legalization	Complete Depenalization	No	No	Yes	'Tolerance policy'- coffee shop sales and public use of cannabis tolerated; simple drug possession is rarely prosecuted; use of harm reduction programs.
Portugal	Decriminalization	Decriminalization	No	No	No	All simple drug possession is formally (de jure) decriminalized (up to 10-day supply)
Czech Republic	Decriminalization	Decriminalization	No	No	No	Possession of small quantities of drugs decriminalized formally (de jure); limited penalties for cultivation of cannabis
Oregon	Legalization	Decriminalization	No	Yes	No	Decriminalization and recreational cannabis legalization recently passed in November 2020; new penalty would be a possible $100 fine and referral to treatment and support services.
Uruguay	Legalization	Depenalization	Yes	No	No	Simple possession was decriminalized in 1974 and prosecutors were allowed to use discretion on a case-by-case basis for simple possession cases

Country	Cannabis Policy	Hard Drug Policy	Drug Div.	Drug Crts.	Drug Consump. Rooms	Notes on Approach to Drug Policy
Germany	Decriminalization	Depenalization	Yes	No	Yes	States have decriminalized varying amounts of cannabis (6 to 30 grams); prosecutors exercise discretion in proceeding with low level drug cases
Australia	Decriminalization	Depenalization	Yes	Yes	Yes	Most states treat cannabis as civil offense; possession is still considered a criminal offense, but minor cases often diverted
Canada	Legalization	Depenalization	Yes	Yes	Yes	Simple possession cases are often not enforced (especially in larger cities) or are diverted several larger cities are considering municipal decriminalization
Argentina	Decriminalization	Decriminalization	Yes	Yes	No	2009 Arriola ruling decriminalized simple possession; harm reduction approach is social rather than medically based.
Maine	Legalization	Prohibition	Yes	Yes	No	Legalized recreational cannabis in 2016; pending bill LD 967 would reduce simple possession of drugs from a felony to an administrative offense with a fine of $100.

Country	Cannabis Policy	Hard Drug Policy	Drug Div.	Drug Crts.	Drug Consump. Rooms	Notes on Approach to Drug Policy
California	Legalization	Prohibition	Yes	Yes	No	Legalized recreational cannabis in 2016; pending bill
Washington State	Legalization	Prohibition	Yes	Yes	No	Legalized recreational cannabis in 2012; pending bill would defelonize simple drug possession reducing it to misdemeanor.
Denmark	Prohibition	Prohibition	No	No	Yes	Re-criminalized all drug use in 2004 after trying lenient policies; drug consumption rooms and substitution therapy are still allowed.
New Zealand	Prohibition	Prohibition	Yes	Yes	No	Limited use of harm reduction programs in the form of needle exchanges and drug substitution programs.
United Kingdom	Prohibition	Prohibition	Yes	Yes	No	Some cities tried limited cannabis depenalization; limited use of drug diversion programs.

Portugal

Prior to 1970, drug use was not considered to be a major social problem and laws primarily restricted drug transactions and trafficking. After the democratic revolution that followed the Salazar dictatorship in 1974, drug use became a pressing issue. As with many totalitarian regimes, problems with drugs and addiction were minimized and hidden from public view. In addition, there were many soldiers returning from colonies who had developed drug addictions. Portugal did not have the knowledge to deal with these problems or the money to wage a war on drugs like other countries – this situation led to their modern policy (Cabral, 2017).

While it is based on recommendations from the Commission on National Drug Strategy convened in 1998, the roots of the Portuguese National Strategy for the Fight Against Drugs (NSFAD) adopted in 1999 date back to the late 1970s when drug use started to be redefined as a medical rather than criminal issue (Gonçalves, Lourenço, & Silva, 2015). Under this system, possession of drugs would be treated as an administrative offense rather than a criminal one and individuals could now possess a supply of drugs that would last an average user up to 10 days. Police refer cases of simple possession to panels known as Commissions for the Dissuasion of Drug Addiction (CDTs) composed of up to three people with knowledge of drug use and addiction including lawyers, social workers, and medical professionals. Offenders are offered several non-punitive sanctions including fines, community service, professional license suspensions and geographic restrictions (e.g., cannot go near elementary schools). This panel also discusses the motivation and circumstances around the offender's drug use with the primary aim of desistance or reduction in drug consumption and getting those with serious addictions into treatment programs and recreational activities (Gonçalves et al., 2015).

Czech Republic

After the "Velvet Revolution" and fall of the Communist regime in 1989, the new government sought to remove repressive policies around drug use. In the old Communist regime, drug users were considered enemies of the state and were persecuted – the problem was suppressed rather than directly addressed (Radimecký, 2007). From 1990 to 1998, illicit drug possession of any kind was legal (Červený, Chomynova, Mravčík & van Ours, 2017). The collapse of the government and flood of illicit drugs into the country led to problems with drug addiction and mental illness that needed to be addressed. Modern drug policy in the Czech Republic originated in 1993 when the government founded a National Drug Commission in response to requests by non-governmental organizations to draft drug policy (Radimecký, 2007).

In 1998, criminal code provisions were rewritten to specify exact threshold limits that would trigger criminal prosecution for drug possession (Csete, 2012). After a great deal of study, debate, and deliberation, simple possession of drugs was formally decriminalized in 2010 (Rosmarin & Eastwood, 2012). Amounts "greater than small" were specified for various drugs and substances were recodified into two classes based on health risks and social costs – cannabis penalties were also significantly reduced (Červený et al., 2017).

Oregon

Oregon's shift to drug decriminalization and recreational cannabis and psilocybin mushroom legalization was the result of a ballot initiative approved by voters in the November 2020 election by 17-point margin. Under this law, simple possession of drugs is no longer considered a crime. Instead, people apprehended with drugs may be fined $100 and may be put in touch with various support services (e.g., evidence based and culturally informed treatment, peer support and recovery services, harm reduction program, housing aid, and employment opportunities). These new services are funded revenue gained through the legalization of cannabis ($45 million) and criminal justice system savings from reduced enforcement, imprisonment, and prosecution – these funds are expected to increase to $100 million in the first year and $129 million by 2027 (Sutton, 2021).

The motivation for making this change appears to be motivated by a few different factors. First, there is the impression that prohibition is not working and does not help those who struggle with addiction – this has likely been exacerbated by the opioid crisis. Second, there are clear racial disparities in the enforcement of drug policy that are obvious even to laypeople who do not study crime or work in the criminal justice system (Akins & Mosher, 2020). According to a report from the Oregon Criminal Justice Commission (2020) this change will drastically reduce the overrepresentation of minorities in the criminal justice system; in fact, if previous statistical trends hold true, Indigenous people from Oregon will go from being overrepresented to underrepresented in the criminal justice system because of these changes.

Depenalization and Diversion

Uruguay

In 1974, Uruguay decriminalized simple possession for a "minimum quantity" of drugs; judges would now decide whether to prosecute on a case-by-case basis. In 1999, Uruguay's drug policy was amended and mandatory minimum sentences for production and sale were reduced to 20 months, and treatment alternatives were provided to low-risk offenders. Starting in the mid-2000s, the government started to implement harm reduction approaches to drug policy including measures to provide easier access to clean needles. Finally, in 2013 under the leadership of President José "Pepe" Mujica, Uruguay became the first country in the world to legalize and regulate cannabis (Walsh & Ramsey, 2016).

Germany

Modern drug policy in Germany can be traced to the passage of the German Narcotics Law of 1972. This law emphasized control and was largely in line with the U.S. prohibition rhetoric around the War on Drugs. As the drug war intensified during the 1980s, Germany's drug policy also became increasingly severe. Over time, a more therapeutic dynamic evolved to deal with cases of addiction; however, this has resulted in forced treatment in some cases (Bollinger, 2004). The spread of diseases through HIV and other poor conditions in the urban drug scene eventually led to the admission by law enforcement that punitive tactics were not working and are, in fact, making situations worse (Fischer, 1995).

In 1992, the German government instituted some harm reduction practices including needle exchanges, methadone maintenance, and drug consumption rooms (Holzer, 2017). Less than 10 years later, the new medicalization paradigm rivaled the repressive approach in influence in the German system – tolerated drug consumption rooms have added medical experts and therapists to help keep addicts healthy and desist from drug use (AK Konsumraum, 2011). This "four column strategy"[9] consists of harm reduction, treatment, prevention, and enforcement and has been exported to many countries throughout the world, like Canada. In 1994, the German Supreme Constitutional Court ruled that possession of small amounts of drugs should not be prosecuted. However, southern federal states maintained much lower thresholds for cannabis possession (6 grams vs. 10 to 30 grams for other states) (Bollinger, 2004). Finally, in more recent years, with court approval, prosecutors have discretion as to whether they pursue cases of simple possession, suggesting a shift to a sort of discretionary depenalization or de facto decriminalization (Anderson, 2012).

Australia

The trend toward alternative sanctions in Australia began in 1987 when the state of South Australia decriminalized cannabis use, possession (up to 28 grams), and cultivation (up to ten plants) with a new policy known as the Cannabis Expiation Notice (CEN) System.[10] In the years following, most other states reduced or decriminalized possession of small amounts of cannabis. This trend arose in most areas out of concerns around the social costs of criminalizing cannabis use (e.g., increased employment, housing, relationship, and legal problems) (Lenton, Humeniuk, Heale, & Christie; Hyshka, 2009).

Most Australian states make use of both police assisted programs for both cannabis and other illicit drugs. The most prominent police-based diversion program is the Illicit Drug Diversion Initiative (IDDI). IDDI diverts minor drug offenders away from the criminal justice system and into drug treatment or drug education programs (Hughes, Seear, Ritter, & Mazerolle, 2019). Drug treatment courts have been prominent in Australia since 1999 and are meant to divert first-time and minor drug offenders away from the criminal justice system and into drug treatment and rehabilitation services.[11] Failure to comply with treatment measures results in sanctions associated with the original crime (Kornhauser, 2018). Australia has made use of harm reduction initiatives since the early 1980s with the introduction of needle exchange programs. In addition, there are currently supervised injection sites in the cities of Melbourne and Sydney.

Canada

The national anti-drug strategy in Canada is one of prohibition. However, in many areas (e.g., Vancouver[12] and several other cities in British Columbia) laws around simple possession are not

[9] It should be noted that this approach did not originate solely in Germany and was influenced by developments in other European countries, most notably Switzerland.
[10] These are also sometimes referred to as cannabis infringement notices (CINs) (see Sutton & Hawk, 2005). While they vary in some minor respects, cannabis cautioning schemes in different areas are similar.
[11] Like cannabis cautioning schemes, drug treatment courts may vary based on where they are implemented; however, the principles and logic are consistent.
[12] In March of 2021, Vancouver applied for a federal exemption from enforcement of drug laws for simple possession to combat the opioid overdose crisis. This would not technically change the law but rather would allow

enforced consistently or uniformly, and very few people are imprisoned for drug use alone - this amounts to something comparable to informal depenalization. Canada also makes use of diversion programs and drug courts to guide low-level users away from the criminal justice system. There is also a long history of harm reduction programs and activities in Canada including, needle exchanges, supervised injection sites, crack safer use kits, opioid substitution therapies, and heroin-assisted treatment (Carter and MacPherson, 2013).

Argentina

Drug use has been decriminalized in Argentina since 2009 following the Arriola ruling. This ruling ensured that simple possession would be treated as a health issue rather than a criminal one (Corda & Rossi, 2016). To deal with the issues that stem from drug use, Argentina also has a unique approach to harm reduction. Compared to other Anglo-Saxon countries, the harm reduction methods practiced here tend to be more holistic and social and tend to rely less on clinical and medical techniques (Harris, 2016).

Maine

Maine has had depenalization of cannabis in place since 1976 and has allowed its citizens access to medical cannabis since 1999 (Huber III, Newman & LaFave, 2016). In 2016, recreational cannabis was legalized in the state of Maine. In April of 2021, state representative and nurse practitioner, Ann Perry, introduced bill LD 967 which would reduce simple possession of drugs from a felony to an administrative offense with a fine of $100 (Carrigan, 2021). Maine currently has drug treatment courts and other drug diversion programs in place.

California

In 2014 voters in California passed proposition 64 which made simple possession drug and some property offences misdemeanors rather than felonies (i.e., defelonization), an example of depenalization (Bird, Nguyen, Grattet, 2020). After a long period of de facto legalization, California legalized recreational cannabis with Proposition 64 in November of 2016. More recently in April of 2021, the California State Senate tabled another bill that would further decriminalize illicit substances. Based on reforms in Oregon and other U.S. cities, Bill 519 would decriminalize several Schedule I controlled substances including psilocybin, LSD, ketamine, DMT, MDMA, ibogaine, and mescaline. This bill would also expunge old criminal records, penalties for giving these drugs to minors, and would establish a working group to examine the safety and efficacy of psychedelic drug use in the state (Cahill, 2021).

Washington State

In 2012, Washington along with Colorado formally legalized recreational cannabis. In a February 2021 ruling, the Washington State Supreme Court struck down the current law prohibiting simple

police to determine if the amount of drugs in the user's possession were for personal use and if this is the case they would refer them to the Coastal Health Authority to get help if required (Canadian Press, 2021). It appears that both Toronto and Montreal may take similar steps for similar reasons (Crockett, 2021).

drug possession invalidating numerous felony drug convictions over the last 50 years. After this ruling the Seattle Police Department announced that it had directed officers to no longer arrest or detain people for drug possession and would no longer confiscate illicit drugs. After this announcement, a bill was proposed that would formally decriminalize simple drug possession. However, in April 2021 the state senate passed a bill that depenalized drug possession reducing charges from a felony to a gross misdemeanor. This bill also directed prosecutors to divert cases first and second time drug possession away from criminal courts and into drug diversion programs (O'Sullivan, 2021). Washington state has a history of using police assisted drug diversion programs like law enforcement assisted diversion (LEAD) (see Clifasefi, Lonczak, & Collins, 2017; Collins, Lonczak, & Clifasefi, 2019). In recent years, this program has been redesigned to rely less on referrals from the police and more on directly communicating with communities about their needs (Kroman, 2020).

Prohibition and Repenalization[13]

Denmark

The history of Denmark's drug modern policy is tied to that of the other Nordic countries Norway and Sweden. In 1968, Norway and Sweden and strengthened their criminal code penalties for drug trafficking and dealing of a professional nature. In 1969, Denmark followed suit to discourage trafficking through their own country. There were concerns around how these new harsher drug laws could impact the lives of young people, so a bill was passed that instructed police and prosecutors to avoid charging young drug users for cases of personal possession especially with regards to cannabis. Small amounts of other drugs were dealt with administratively. During the 1980s and 90s, Danish drug policy moved away from the original social drug policy approach and moved closer to embracing control through medicalization of drug use (Houborg, 2017).

In 2003, a new more punitive strategy emerged from an influential white paper called *The Fight Against Drugs.* While this paper did confirm the commitment to a four-pillar approach addressing control, prevention, treatment, and harm, it also argued that current drug policy was unbalanced and lacking in control (Asmussen 2008). This new punitive approach was embraced by the government and any amount of drug possession – even personal use – would now be punished similar to other countries with a traditional, prohibition-based approach. However, harm reduction approaches drug consumption rooms and substitution therapy are still allowed. This radical shift occurred against a backdrop of indications and reports of increasing use and normalization of drug use amongst youth. There was also an emerging societal view of young people as societally disconnected, selfish, and rational actors who engage in cost-benefit analyses and respond readily to punishments (Houborg, 2017).

New Zealand

Like most other Western countries, New Zealand criminalized cannabis and most other drugs in the 1920s under *Dangerous Drugs Act of 1927*. Toward the end of the 1980s, enforcement of

[13] Repanlization refers to the process of shifting drug policy from full or partial decriminalization to a system with more punishment or prohibition (Houborg, Søgaard, & Mogensen, 2020).

simple possession of cannabis laws were loosened as police focused on reducing cannabis supply through prosecution of large-scale growers and suppliers. During the early 1990s, the government started to use more diversion programs and many users took advantage of these to avoid prosecution (Abel, 1997). New Zealand's approach was hampered during the 90s from a lack of coordination between government agencies, educational and treatment services. In addition, the alcohol industry had considerable influence in creation of National drug policy of New Zealand during this time as it demanded separate national policies for dealing with licit and illicit drugs (with little regard to empirical evidence on health outcomes for various drugs) (Abel, 1997).

Currently New Zealand prohibits simple possession of drugs. However, as in Australia, police-assisted diversion programs and drug treatment courts are also in place for young offenders and adults who are charged with simple possession of small amounts of drugs (Buchanan, 2016). New Zealand also makes use of harm reduction approaches including needle exchanges and drug substitution programs.

United Kingdom

Contemporary drug policy in the U.K. has its origins in the *1971 Misuse of Drug Act*. This act created a tripartite classification system that purportedly classified drugs by their degree of harm and dangerousness. A primary goal of this legislation was to identify punishments that would be appropriate for the different drug violations with class A drugs being the most severely punishment and class C the least severely punished (Brewster, 2017).

In recent years in the U.K., there has been "lively discussion" around decriminalizing drugs and acknowledgement that criminally charging drug addicted offenders makes it more difficult for them to recover because of the social costs entailed by criminal convictions (e.g., problems with education, employment, housing, and in one's relationships). Further, there are emerging concerns around human rights and the fact that minority groups are often overrepresented in drug arrest statistics (Ward 2013). There are various drug diversion programs in place in areas of the U.K. with more emerging in recent years (Transform Drug Policy Foundation, 2021).

Key Indicators

Various indicators can be used to assess outcomes associated with the different policy and approaches. These key indicators can be classified into two broad categories: crime/criminal justice and mental/public health indicators.

> **Crime and criminal justice indicators** include crime rates, levels of organized and gang crime, levels of public disorder (e.g., open air drug use and dealing), police clearance rates, costs of enforcement, judicial efficiency, and rates of imprisonment, drug availability and price.
>
> **Mental and public health indicators** considered here include drug use rates and patterns, rates of drug treatment participation, and rates of drug related mortality.

Decriminalization[14]

Crime and Criminal Justice Indicators

Quantitative data about Portugal's approach to decriminalization do not provide clear conclusions about its impacts on crime and criminal justice.[15] However, most evaluations suggest that this approach did not lead to increases in crime or public disorder (Smiley, 2016; see also Lacquer, 2014). Hughes and Stevens (2010) analyzed reports from the Portuguese Institute of Drugs and Drug Addiction (IDT) from 1998 to 2008 to gain insight into how decriminalization has impacted crime and public health. They found that after implementation drug seizures increased by nearly 500% from 2000 to 2004 when compared to 1995 to 1999 figures suggesting that decriminalization frees up time for law enforcement to focus on higher level trafficking and other forms of more serious crime. Their findings also revealed that there was a nine percent increase in the crime associated with drugs which include theft, robbery, public assaults, and fraud in the years 2001 to 2005 as compared with the years 1997 to 2001. However, the government reports reviewed did not suggest that these increases were related to decriminalization policies.

[14] Summary tables for research on the impact of decriminalization policies can be found on Table 2 on the following pages.

[15] Pinto Coelho, a Portuguese medical doctor and President of the Association for a Drug-Free Portugal, has written several articles (2010 & 2015) very critical of the Portuguese approach to drug decriminalization. However, these articles contain no original empirical research and are simply manipulations of statistics and emotional pleas to return to the days of "drug free societies". These articles have been severely criticized and contain little useful information Further, he is rarely ever cited and does not address counter arguments, trends, patterns, and statistics that do not fit his narrative. Conversely, Glenn Greenwald (2009), an associate of the CATO Institute and political commentator wrote a report praising the effectiveness of Portugal's model while minimizing any of its faults. Because these articles seem to be heavily coated in ideology, they will be excluded from this report in favor of more objective empirical studies and reports (see Hughes and Stevens, 2012; Lacquer, 2014).

TABLE 2: Decriminalization				
Impact on Crime and Criminal Justice				
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**
Hughes & Stevens (2010)	Portugal, Spain, and Italy	• Analysis of reports from the Portuguese Institute of Drugs and Drug Addiction (IDT) and central police agencies from 1998 to 2008 supplemented by qualitative interviews with 13 key stakeholders	• Crime • Criminal justice efficiency • Drug prices • Drug seizures	• No substantial changes in crime attributable to decriminalization. • Has enabled the police to focus their attention on more serious crime. • No increases in administrative notices for possession - no evidence of net widening. • Drug seizure patterns varied considerably and imply increased activity on the part of law enforcement. • Law enforcement activities use more systematic investigative techniques and participate in more international law enforcement collaborations. • Prices across most drug types have also fell suggesting less demand.
Lacquer (2014)	Portugal, Spain, and Italy	• Analysis of statistics and other existing data	• Crime • Criminal justice efficiency • Drug prices • Drug seizures	• Decriminalization had minimal impact on psychopharmacological or economic-compulsive crime. • No evidence of net widening. • Data indicate that overall crime did not increase significantly. • Total crime rose 7% from between 2003 and 2009 (as it did in Spain and Italy) while violent crime did not change. • Drug seizures pattern were found to vary considerably. • Drug prices have risen moderately in line other countries in E.U.

Study	Country	Study Type	Indicators of Impact	Key Findings
Gonçalves, Lourenço, & da Silva (2015)	Portugal	• Examination of data from EMCDDA and Portuguese Institute for Drug Addiction reports	• Criminal justice efficiency	• Social costs of drug use decreased by 12% in the five years following the implementation of decriminalization and then by 18% after eleven years. • Considerable savings in criminal justice related costs.
Belackova, Ritter, Shanahan, and Hughes (2017)	Various countries	• Compared laws on the books and laws in practice for cannabis and other illicit drugs in the Czech Republic, New South Wales, and Florida to examine how arrests and sentencing are impacted by different drug policies.	• Criminal justice efficiency	• Cases presented in court and numbers receiving sentences of imprisonment corresponded to laws on the books but average sentence length and percentage of cases going to prison did not. • Some jurisdictions may appear to be more lenient in practice because of lower rates of enforcement of severe drug laws.
Zeman, Štefunková, & Trávníčková (2017)	Czech Republic	• Qualitative analysis of statistics on drug offences, epidemiological data, assessment of legislation, and expert strategic documents	• Crime • Criminal justice efficiency	• Drug offense charges rose by 80% and convictions doubled following decriminalization due to net-widening (user numbers did not increase). • Police focused more resources on disrupting drug markets leading to the detection of more users. • Summary court proceedings for drug cases became common speeding up processing of users.
Félix & Portugal (2017)	Portugal	• Difference-in-differences statistical approach • Comparisons made to Spain and Italy	• Drug prices	• Prices of opiates and cocaine did not decrease following decriminalization. • Comparisons reveal that price increases are not due to decriminalization but reflect other trends (e.g., globalization, tech improvements)

Study	Country	Study Type	Indicators of Impact	Key Findings
MacCoun (2011)	Netherlands	• Analysis of Dutch data on the prevalence and patterns of use, treatment, sanctioning, prices, and purity of cannabis back to the 1970s	• Drug markets • Drug prices	• Found coffee shop approach was successful at separating the hard and soft drug markets. • Cannabis prices did not seem heavily impacted if compared to countries with prohibition.
Jacques, Rosenfeld, Wright, & Gemert (2016)	Netherlands	• Mixed methods study using statistical data and qualitative interviews	• Crime • Drug Markets	• Unregulated street drug dealers experienced the highest levels of violent retaliation and victimization and lowest rates of legal mobilization. • Coffee shops experienced the lowest rates of victimization and similar rates of violent retaliation and legal mobilization as alcohol cafés. • Researchers attributed this difference to higher levels of preventive control exercised at coffee shops.
Gutheil, Liger, Heetman, Eager, & Bourgeon (2016)	Czech Republic	• Review and analysis of policy	• Crime • Drug Markets	• Czech Republic drug policy has led to low levels of organized crime. • Drug production within the country is mainly limited to personal use.
Impact on Mental and Public Health				
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**
Reinarman (2004)	Comparison of Netherlands & U.S.)	• Survey research on cannabis use patterns in Amsterdam and San Francisco	• Drug use	• Found no evidence that decriminalization increases cannabis use. • Found no evidence that criminalization decreases cannabis use. • Findings suggest that drug laws likely have a limited effect on user behavior.
Reinarman (2009)	Comparison of Netherlands & U.S.	• Survey research on cannabis use patterns in	• Drug use • Drug markets • Drug preference	• Dutch system was able to separate hard and soft drug markets without

		Amsterdam and San Francisco		significantly impacting consumption rates. • Decriminalization was also associated with user preference for milder cannabis strains and products.
MacCoun (2011)	Netherlands	• Analysis of Dutch data on the prevalence and patterns of use, treatment, sanctioning, prices, and purity of cannabis back to the 1970s	• Drug use • Treatment uptake	• Found a modest association between the number of coffeeshops and prevalence of cannabis use. • Coffeeshops do not appear to encourage heavier use or longer drug-using careers. • There is evidence that the 'separation of markets' has weakened the link between cannabis use and the use of harder drugs. In the years following the introduction of coffee shops, there was a rise in cannabis use amongst young people. • On a per capita basis, the U.S. has almost four times as many cannabis users in treatment when compared to the Netherlands.
Monshouwer, Van Laar, & Vollebergh (2011)	Netherlands	• Analysis of epidemiological data from 2000 to 2007	• Drug use • Drug markets	• Cannabis prevalence rate for adults is below the European average. • Cannabis prevalence rate for adolescents is somewhat high and age of first use is low. • Rate of use for hard drugs for both adolescents and adults is below the European average. • Data suggests that the Dutch coffee shop is effective at separating markets.
Červený, Chomynová, Mravčík, & van Ours (2017)	Czech Republic	• Analysis of national drug survey data from 2008 and 2012	• Drug use	• Decriminalization did not affect the age of uptake for cannabis use.

Study	Country	Study Type	Indicators of Impact	Key Findings
Hughes and Stevens (2010)	Portugal, Spain, and Italy	• Analysis of reports from the Portuguese Institute of Drugs and Drug Addiction (IDT) and central police agencies from 1998 to 2008 supplemented by qualitative interviews with 13 key stakeholders	• Drug use • Overdose mortality • Treatment uptake	• There was a reduction in illicit drug use by adolescents but small to moderate increases in drug use reported by adults. • The estimated number of problematic drug users between the ages of 15 and 64 years old in Portugal fell from 7.6 to 6.8 per 1,000 population declined from 2000 to 2005. • While all three countries reported less drug related deaths, Portugal's decline was more pronounced than the others - the proportion of opioid related deaths declined from 95% in 1995 to 59%. • Levels of cocaine use have also remained low in Portugal while in Spain they have overtaken heroin as a major cause of death and hospitalizations. • The amount of people in treatment increased from 23,654 to 38,532 and the number between 1998 and 2008.
Vuolo (2013)	E.U. Countries	• Analysis of cross-sectional data	• Drug use	• Strongest and most consistent finding is that decriminalization of simple possession is not associated with increases in drug use of any kind.
Scheim, Maghsoudi, and Marshall (2020)	U.S., Australia, Belgium, China, the Czech Republic, Mexico and Portugal to	• Meta-analysis of 114 studies.	• Drug use	• Changes to policy did not trigger changes in any of the substance abuse metrics that were considered

Study	Country	Study Type	Indicators of Impact	Key Findings
Pombo and da Costa (2016)	Portugal	• Comparative study examining data on heroin seeking clients (N = 627) and treatment admissions (N = 2,323 cases) from 1992 to 1999 and 2002 to 2013	• Drug use • Treatment uptake	• Treatment demand declined by 37% while treatment engagement increased by 94%. • Increasing number of females accessing treatment (increased from 13% to 20.9%). • Drug injection also decreased, and HIV infection decreased (dropping from 28% to 19.6%). • Portugal drug scene changed post decriminalization with most heroin indicators stable or trending downwards.
Adam and Raschzok (2017)	Belgium, Finland, France, and Portugal	• Quasi-experiment to compare cannabis policy in between 1999 and 2004 in terms of cannabis-induced treatment uptake	• Treatment uptake	• No significant differences found between these countries. • Conclude that reforms do not have adverse on public health in terms of treatment uptake.
Gutheil, Liger, Heetman, Eager, and Bourgeon (2016)	Czech Republic	• Review and analysis of policy	• Drug use • Disease • Overdose mortality	• Numerous public health benefits of their system including low overdose rates, HIV prevalence under 1%, and a large drop in prevalence of hepatitis C (from 60% to 18%). • Some increases in high-risk users and drug prevalence – this is attributed to a failure in government management of harm reduction programs and a lack of focus on drug use as a pressing social problem.
Lejčková and Mravčík (2007)	Czech Republic	• Analysis of mortality rates of different subgroups of drug users	• Overdose mortality	• Mortality rates peaked in 1998 and then declined in the early 2000s. • In comparison to other countries, Czech Republic has a relatively low rate of overdose mortality and few overdoses were found in the cohort

Study	Country	Study Type	Indicators of Impact	Key Findings
Gonçalves, Lourenço, & da Silva (2015)	Portugal	• Examination of data from EMCDDA and Portuguese Institute for Drug Addiction reports	• Health savings	• Social costs of drug use decreased by 12% in the five years following the implementation of decriminalization and then by 18% after eleven years. • Found substantial reduction in health-related costs.

Lacquer (2014) conducted an analysis on the impact of drug decriminalization on various aspects of society. She found that because the policy did not allow production or distribution of drugs, frequency of drug use and drugs, there was little impact on psychopharmacological or economic-compulsive crime. Further, she also noted a 2009 UN Report on Drug and Crime Homicide Statistics suggested that the 40 percent increase in the homicide rate between 2001 and 2006 (from 104 to 155 per 100,000) may have been an outcome of increased trafficking related to the change in policy. However, she adds that this rate continued to rise until 2007, peaking 185, but then returned to close to their original levels in 2011 (114).[16] After an analysis of statistics, she concludes that some types of drug-related crime did increase from 2001 to 2003 (from 160, 492 to 175, 502). Since 2003 comparable data indicate that overall crime did not increase significantly. More specifically, like Spain and Italy, total crime rose 7 percent from between 2003 and 2009 in Portugal while violent crime did not change.

Belackova, Ritter, Shanahan, and Hughes (2017) compared laws on the books and laws in practice for cannabis and other illicit drugs in the Czech Republic, New South Wales, and Florida to examine how arrests and sentencing are impacted by different drug policies. They found that cases presented in court and numbers receiving sentences of imprisonment corresponded to laws on the books but average sentence length and percentage of cases going to prison were not. Florida and New South Wales had the most punitive laws on the books; however, because of differential enforcement rates it did not always appear to be the case in practice. This illustrates how net-widening can occur in areas that have liberalized drug laws.

Zeman, Štefunková, and Trávníčková (2017) found that from 2008 to 2014, drug offense charges filed by Czech police rose by 80% and convictions doubled following decriminalization. Their analysis suggests that these increases are not due to the increasing numbers of users but rather changes in the justice system. First, the police have focused more resources and effort on disrupting drug markets and that this inevitably leads to the detection of more users. Second, in 2012 use of summary court proceedings for drug cases became increasingly common speeding up processing of users. This is striking considering that other types of crime were on the decline.

The data on how Portugal's approach to decriminalization has affected drug prices is unclear, although some reports suggest that prices have fell since decriminalization suggesting less demand for heroin (supply indicators seem to suggest there would be less heroin) (Smiley, 2016). Félix and

[16] Hughes and Stevens (2012) speculate that this is a statistical artefact related to an increase demand in Europe for cocaine and the geographical location of Portugal that makes it a hub for drug smuggling activity in Europe.

Portugal (2017) used a difference-in-differences statistical approach to assess the impact of Portuguese drug decriminalization on the prices of illicit drugs. They concluded that the prices of opiates and cocaine did not decrease following implementation. However, when compared to Spain and Italy, there are clearly broader trends that have a greater impact on price than drug policy reform (e.g., globalization, improvements in technology and communications) (Lacquer, 2014).

The Dutch approach to cannabis does result in cheaper prices for the drug compared to other countries with stricter enforcement regimes (e.g., Norway). However, some estimates suggest that cannabis prices in the Netherlands were still higher than in most U.S. states prior to legalization possibly because of retail markup (MacCoun, 2011). Despite findings indicating that the coffee shop approach was successful at separating the soft and hard drug markets, the same might not be true for suppliers. Grund and Breeksma (2013) have noted that there have been issues with "back door" or illegal market involvement in supplying coffee shops.

In their mixed methods study using statistical data and qualitative interviews, Jacques, Rosenfeld, Wright, and Gemert (2016) examined victimization, retaliation, and legal mobilization rates of legally regulated alcohol cafés, cannabis coffeeshops that operate under a de facto legalization and light regulation, and illicit drug dealers to gain insight the amount of conflict associated with each type of market (i.e., legalized, decriminalized, and prohibited). Not surprisingly, unregulated street drug dealers experienced the highest levels of violent retaliation and victimization and lowest rates of legal mobilization. Somewhat surprisingly, the more lightly regulated coffee shops experienced the lowest levels of victimization and had similar rates of violent retaliation and legal mobilization as alcohol café. They attribute this difference to higher levels of preventive control exercised by owners of coffee shops because of potential to lose their business if problems arise. The authors conclude that policymakers should consider this knowledge when regulating bars and cafes that sell alcohol as well (i.e., there should be severe penalties if nuisance becomes an issue).

In their review of EU drug policy, Gutheil, Liger, Heetman, Eager, and Bourgeon (2016) found that the effects of the Czech Republic shift to formal decriminalization 2010 were primarily positive. They found that because of these laws there was very little organized crime and drug production within the country is mainly limited to personal use.

Mental and Public Health Indicators

Decriminalization has not had disastrous consequences for mental and public health in countries that have implemented them. There have not been an epidemic of drug use and there have been increases in treatment uptake. While the Czech Republic has higher rates of drug use amongst young people compared to other European countries, this was also the case prior to decriminalization, so it is perhaps more attributable to a culture that has developed in that area than the impact of drug policy. The Netherlands also has a "notably higher" rate of cannabis use amongst young people compared to the E.U. average; however, for other illicit drugs rates are about the same. Portugal drug use rates are much lower than other European countries (EMCDDA, 2019).

Within ten years of allowing cannabis to be sold from coffee shops, the Netherlands saw a significant drop in heroin use suggesting that separating markets was an effective strategy for

removing cannabis users from the criminal subcultures associated with hard drug use (Grund & Breeksema, 2013). Interestingly, some studies indicate that policy has little impact on patterns of cannabis use. Reinarman (2004) conducted an analysis of survey data from Amsterdam and San Francisco[17] to better understand how the smoking patterns of users from both areas were affected by drug policy. He found no evidence that decriminalization increases use or that criminalization decreases use and concluded that drug laws likely have a limited effect on user behavior. Five years later, Reinarman (2009) conducted a follow-up study which analyzed how cannabis consumption patterns and perceived risk of arrest were affected by differing policies by comparing San Francisco and Amsterdam. He found that the Dutch system more effectively separated the drug markets and that there was little difference in rates of consumption. Decriminalization was also associated with a user preference for milder cannabis.

Monshouwer, Van Laar, and Vollebergh (2011) presented epidemiological data that also provides insight into how the Dutch coffee shop policy affects cannabis and other drug use. They found that cannabis prevalence rates for adults are below the European average. However, the rate is somewhat high amongst adolescents and age of first use is low and their rates of use are above the European average.

MacCoun (2011) examined available Dutch data on the prevalence and patterns of use, treatment, sanctioning, prices, and purity of cannabis back to the 1970s and found a modest association between the number of coffeeshops and prevalence of cannabis use. He also noted that the coffeeshops do not appear to encourage heavier use or longer drug-using careers. He concludes that there is evidence that the separation of markets approach has weakened the link between cannabis use and the use of harder drugs. However, he also notes that in the first few years after introducing coffee shops, there was a rise in cannabis use amongst young people when regulations allowed more advertising and age restrictions were 16 or older.

Interestingly, the number of adolescent cannabis and hard drug users in the Netherlands has declined since the mid-90s More specifically, the increasing trend toward ecstasy use seems to have halted in the past five years; however, rates of prevalence amongst young people remain high and cocaine and methamphetamine are increasing in popularity amongst this demographic. In the general population there have been small increases in cocaine use in recent years (EMCDDA, 2019).

Data obtained from the Survey on Addictive Behaviors from 2017 indicates that there have been slight increases in cocaine use in Portugal over the past few years. Wastewater analysis of major cities in Portugal does not indicate unusually high rates of cocaine, or MDMA use, and methamphetamine levels remain very low as they have been in the past. Lifetime drug use amongst young people was lower compared to other countries in Europe; however, in recent years lifetime cannabis use has increased slightly in Portugal (EMCDDA, 2019).

In recent years, drug use trends in the Czech Republic have also remained relatively stable. Most recent data from 2017 indicate that one in five young people had used cannabis in the past year which is down from previous reports in 2013-2014. Amongst Czech students, drug use prevalence was close to the European average with regards to lifetime use of illicit drugs other than cannabis

[17] Cannabis was prohibited in San Francisco until November 2016.

and use of inhalants which were both far higher. Further, rates of lifetime of tranquilizers or sedatives without a prescription were much higher than European averages (EMCDDA, 2019). In an analysis of national drug survey data from 2008 and 2012, Červený, Chomynová, Mravčík, and van Ours (2017) found that a shift to decriminalization did not affect the age of uptake for cannabis use. Notably, Czech rates of use for tranquilizers and sedative without prescriptions were over double the European average (16% vs. 6%).

In their research on Portuguese decriminalization, Hughes, and Stevens (2010) examined the criminal justice and health impacts against trends from neighboring Spain and Italy. They found that decriminalization did not lead to major increases in drug use and found a reduction in illicit drug use by problematic users and adolescents but small to moderate increases in drug use reported by adults. While all three countries reported less drug related deaths, Portugal's decline was more pronounced than the others. Interestingly, the proportion of opioid related deaths declined from 95% in 1995 to 59%. Levels of cocaine use have also remained low in Portugal while in Spain they have overtaken heroin as a major cause of death and hospitalizations. The amount of people in treatment also increased from 23,654 to 38,532 and the number between 1998 and 2008.

There are a few broader studies that consider the decriminalization of hard drugs. Vuolo (2013) analyzed cross-sectional survey data from E.U. young people (i.e., 15-24 years old) from 2002 and 2004 to examine how decriminalization of simple possession affected rates of drug use. His strongest and most consistent finding was that decriminalization and simple possession are not associated with increases in drug use of any kind.

Scheim, Maghsoudi, and Marshall (2020) performed a meta-analysis of 114 studies done in the U.S., Australia, Belgium, China, the Czech Republic, Mexico and Portugal to determine the effects of decriminalization on health and social harm. They found that policies usually do not trigger changes in any of the substance abuse metrics that were considered.

Pombo and da Costa (2016) conducted a comparative study examining data on heroin seeking clients (N = 627) and treatment admissions (N = 2,323 cases) from 1992 to 1999 and 2002 to 2013 to evaluate patterns of addiction and treatment involvement before and after Portuguese drug policy reform. They found that treatment demand declined by 37% while treatment engagement increased by 94% with an increasing number of females accessing treatment (increased from 13% to 20.9%). Further, drug injection also decreased, and HIV infection decreased (dropping from 28% to 19.6%). They conclude that the drug scene changed post decriminalization with most heroin indicators stable or trending downwards.

More recent Portuguese treatment center data support the findings of Pombo and da Costa's (2016) study as well. EMCDDA (2019) data indicate that first entry into heroin treatment has declined since 2009. First time entry into cannabis treatment increased until 2016 but has stabilized since then whereas there have been increases in cocaine treatment demands after a period of stability. Adam and Raschzok (2017) conducted a quasi-experiment to compare cannabis policy in Belgium, Finland, France, and Portugal between 1999 and 2004 in terms of cannabis-induced treatment uptake. They found no significant differences between these countries and conclude that reforms do not have adverse on public health in terms of treatment uptake.

In the last five years, treatment entry levels in the Netherlands have remained stable overall with slight increases in those seeking help for cannabis and a larger increase in those seeking help for methamphetamines. Like many other countries, the rate of drug related deaths has increased in the Netherlands since 2017. Key reasons cited for this increase include aging user demographics and increases in use of powerful medicinal opioids (EMCDDA, 2019).

In their review of Czech decriminalization, Gutheil et al. (2016) found that there were numerous public health benefits including low overdose rates, HIV prevalence under 1%, and a large drop in prevalence of hepatitis C (from 60% to 18%). There were some increases in high-risk users and drug prevalence – this is attributed to a failure in government management of harm reduction programs and a lack of focus on drug use as a pressing social problem.

Lejčková and Mravčík (2007) analyzed mortality rates of different subgroups of drug users in the Czech Republic by looking at a cohort of 12,207 patients from the ages of 15 to 49. Mortality rates peaked in 1998 and then declined in the early 2000s. The researchers concluded that in comparison to other countries, Czech Republic has a relatively low rate of overdose mortality and few overdoses were found in the cohort.

The drug induced mortality rate for the Netherlands matches the European average of 2.2 deaths per 100,000 people (EMCDDA, 2019). After a large increase in drug induced deaths in Portugal in 2015, there was a decline in 2016. The drug induced mortality rate of .4 deaths per 100,000 is much lower than the European average. Like other countries the Czech Republic has been impacted by the opioid overdose crisis, with the number of overdoses doubling from 2016 to 2017. However, the drug induced mortality rate is very far below the European national average (.5 deaths per 100,000 in the Czech Republic) (EMCDDA, 2019).

Gonçalves, Lourenço, and da Silva (2015) examined data from EMCDDA and the Portuguese Institute for Drug Addiction reports to assess the social costs of drug use under decriminalization. They found that social costs of drug use decreased by 12% in the five years following the implementation of decriminalization and then by 18% after eleven years. They suggest that a large portion of this decrease is the result of a reduction in criminal justice system costs; however, they suggest that a decrease in health-related costs also played a significant role.

Depenalization and Diversion[18]

Crime/Criminal Justice Indicators

Several countries including Uruguay, Germany, Australia, and Canada still retain drug prohibition but have reduced their use of criminal penalties for simple drug possession (i.e., depenalization). Instead, these countries divert offenders into treatment or social programming through police assisted diversion programs and drug courts or based on discretion of prosecutors. To manage drug use outside of the criminal justice system, these countries also employ a variety of harm reduction

[18]Summary tables for research on the impact of depenalization, diversion, drug court, drug consumption rooms, and supervised injection sites can be found on Table 3 on the following pages.

tactics like needle exchanges, drug substitution programs, drug consumption rooms, and supervised injection sites. Some states in the U.S. and areas of the U.K. have also experimented with implementing depenalization protocols for limited periods of time and there were a few studies that provides some insight into the impact it had on crime and disorder.

Using a combination of administrative records and survey data from the Lambeth neighborhood in London, Adda, McConnel, and Rasul (2014) to examine the impact of depenalization of small amounts of cannabis on the area. They found that the policy allowed police to reallocate their efforts to non-drug crime. There was also evidence that five of seven different types of crime declined after implantation of the policy.

Huber III, Newman, and LaFave (2016) examined the relationship between legalization of medical cannabis, depenalization of simple possession, and incidence of non-drug crime by analyzing United States panel data from 1970 to 2012. The results showed evidence of 4% to 12% reductions in robberies, larcenies, and burglaries when medical cannabis was legalized. Depenalization of cannabis possession was found to have little impact on crime, and, in fact, may result in more crime. They speculate that this is because depenalization has little effect on the legal supply of cannabis.

TABLE 3: Depenalization. Diversion, and Harm Reduction

Impact on Crime and Criminal Justice

Study	Country	Study Type	Indicators of Impact	Key Findings
Adda, McConnel, & Rasul (2014)	U.K.	• Analysis of administrative records and survey data from the Lambeth neighborhood in London to examine the impact of depenalization of small amounts of cannabis.	• Crime • Criminal justice system efficiency	• There was evidence that five of seven different types of crime declined after implementation of the policy. • Policy allowed police to reallocate their efforts to non-drug crime. .
Braakmann & Jones (2014)	U.K.	• Analyzed the link between cannabis depenalization and crime by using panel data for England and Wales from 2003 to 2006	• Crime	• No increases in crime or other forms of risky behavior after the shift
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Huber III, Newman, & LaFave (2016)	U.S.	• Analysis of United States panel data from 1970 to 2012 to better understand impacts of medical cannabis legalization and cannabis depenalization	• Crime	• Results showed evidence of 4% to 12% reductions in robberies, larcenies, and burglaries when medical cannabis was legalized. • Depenalization of cannabis possession was found to have little impact on crime, and, in fact, may result in more crime. • Authors speculate that this is because depenalization has little effect on the legal supply of cannabis.
Maier, Mannes, & Koppenhofer (2017)	U.S.	• Analysis of the 2014 Uniform Crime Report for all 50 U.S. states to explore the impact of various approaches to cannabis policy on crime and drug abuse arrest rates.	• Crime	• No significant differences in crime or drug arrests could be attributed to change in policy
Bird, Nguyen, & Grattet (2020)	U.S.	• Conducted natural policy experiment on California's Prop. 47 to better understand how defelonization of simple drug possession impacts recidivism rates.	• Recidivism	• Those convicted after Prop. 47 had lower rearrest and reconviction rates than those sentence prior to it.
Mooney, Giannella, Glymour, Neilands, Morris, Tulsky, & Sudhinaraset (2018)	U.S.	• Examined California drug arrests data from 2011 to 2016 to evaluate the impact of defelonization of drug offenses.	• Racial Disparity	• There was an immediate drop in numbers of arrests for minorities and less Black-White disparity, relative disparity increased by 27%, partly because of Black people still had larger proportions of felony drug offenses (e.g., sale of drugs).
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Shiner (2015)	U.K.	• Analysis of official data to assess the impact of reclassification of cannabis to a less dangerous drug in 2004	• Criminal justice system efficiency	• There was a considerable net-widening effect that more than doubled the number of people receiving formal sanctions for drug possession offences. • This net-widening effect persisted after cannabis was rescheduled as a more dangerous drug in 2009.
Diversion Programs				
Payne, Kwiatkowski, & Wundersitz (2008)	Australia	• Analysis of drug diversion programs across Australia	• Recidivism	• Most participants did not reoffend for up to 18 months. • The majority were apprehended for either no or fewer post-program offences than before. • In six jurisdictions, 31% to 48% of prior offenders did not reoffend after diversion. In the other two. jurisdictions, the figure was between 53% and 54%. • Similar pattern in offenders with no prior record before participation in diversion. • In six jurisdictions the percentage who remained non-offenders varied from 69% to 77%, while it was higher than 80% in the other two.
Clifasefi, Lonczak, & Collins (2017)	U.S. (Seattle, WA)	• Analysis of housing, employment, and income/benefits outcomes on 176 of low-level drug and prostitution offenders to assess the impact of Seattle's LEAD program	• Recidivism • Improved social outcomes	• Participants showed significant improvements across all outcomes measured. • Positive housing outcomes were associated with 17% fewer arrests while those achieving positive employment outcomes were associated with 33% fewer arrests.
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Collins, Lonczak, & Clifasefi (2019)	U.S. (Seattle, WA)	• Quasi-experiment comparing Seattle's LEAD program participants with those undergoing standard booking and prosecution procedures to assess outcomes and cost-effectiveness	• Recidivism • Criminal justice efficiency	• LEAD participants had 1.4 fewer average yearly jail bookings, spent over 40 fewer days in jails per year, and were 88% less likely of being incarcerated relative to the control group. • LEAD program resulted in significant savings for the criminal justice system because of reduced legal and court costs.
Hughes, Shanahan, Ritter, McDonald & Gray-Weale (2014)	Australia	• Evaluation of diversion programs across Au	• Recidivism • Criminal justice efficiency • Improved social outcomes	• Widespread support for drug diversion programs and acknowledged that they are more effective and pragmatic than prosecuting cases criminally. • Diversion programs reduced workloads on police and the court system. • Positive outcomes include reduced utilisation of criminal justice system resources, reduced incidence of re-offending, improved cost-effectiveness, and several other social, community and economic benefits.
Shanahan, Hughes, & McSweeney (2017)	Australia	• Examination of police diversion programs for cannabis to better understand impact on reoffending and criminal justice costs	• Recidivism • Social outcomes • Criminal justice efficiency • Improved social outcomes	• Offenders diverted in programs had similar rates of recidivism compared to those charged criminally. • Diversion programs were found to cost 15 times less than charging users criminally. • Found that offenders diverted into programs had more positive social, employment, and family outcomes.
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Wilkins & Sweetsur (2012)	New Zealand	• Analyzed rates of apprehension, prosecution, conviction, and other criminal justice outcomes for cannabis possession in New Zealand from 1991 to 2008.	• Criminal justice efficiency	• Police apprehensions for cannabis declined from 468 in 1994 to 247 in 2008 with similar declines in prosecutions and convictions. • Those prosecuted from 2000 to 2008 were less likely to be processed through the criminal justice system, but rather were funneled into diversion programs.
Labriola, Reich, Davis, Hunt, Rempel, & Cherney (2018)	U.S.	• Focus group interviews with staff, stakeholders, and participants to compare15 prosecutor-led diversion programs from 11 jurisdictions in the U.S.	• Criminal justice efficiency	• Staff and stakeholders reported cost-savings for the justice system and benefits to program participants. • Inconsistent funding and resources reported as barriers to the programs.
Drug Courts				
Mitchell, Wilson, Eggers, & MacKenzie (2012)	U.S.	• Review of 154 quasi-experimental and experimental evaluations of the effectiveness of drug courts (including 92 adult drug courts) in reducing offending.	• Recidivism	• Participants have lower rates of recidivism versus non-participants. • Adult drug courts were found to drop recidivism by 12% and the effects lasted up to three years. • Youth drug courts were found to have much less of an impact.
Gutierrez, Bourgon, & Guy (2012)	Canada	• Meta-analysis of 96 studies on drug treatment courts in Canada	• Recidivism	• Found that drug courts reduce recidivism by approximately 8%.
Kornhauser (2018)	Australia	• Review of studies on Australian drug courts using quasi- or random experimental designs to assess their effectiveness	• Recidivism	• Drug courts reduce recidivism more than conventional sanctions. • Support is tempered by mixed results and limitations in some of the studies.
Drug Consumption Rooms and Supervised Injection Sites				

Study	Country	Study Type	Indicators of Impact	Key Findings
Zurhold, Degwitz, Verthein, & Haasen (2003)	Germany	• Mixed methods – combination of surveys and interviews with 616 drug users in Hamburg, Germany analyzed to understand impact of drug consumption rooms	• Crime • Public disorder	• DCRs played an important role in the reduction of crime and public disorder in the area around the site.
Potier, Laprévote, Dubois-Arber, Cottencin, & Rolland, (2014)	Various countries (including Canada and Australia)	• Review of 75 studies on supervised injection facilities	• Crime • Public disorder	• Sites were not associated with increases in injection, trafficking, or crime in the surrounding areas.
Wood, Kerr, Small, Li, Marsh, Montaner, & Tyndall (2004)	Canada	• Measured injection-related public order problems during the 6 weeks before and the 12 weeks after the opening of the safer injecting facility in Vancouver.	• Public disorder	• The safer injecting facility was independently associated with improvements in several measures of public order, including reduced public injection drug use and public syringe disposal.
Wood, Tyndall, Montaner, & Keer (2006)	Canada	• 3-year pilot study evaluating Vancouver's supervised injection sites	• Crime • Public disorder	• Found all measures of public disorder were found to have decreased after the facility had been open for one year. • Crime rates found to have remained stable, and facility was not associated with increases in drug dealing or drug-related crime.
Wood, Tyndall, Lai, Montaner, & Kerr (2007)	Canada	• Analysis of crime rates one year before and after the opening of Vancouver's supervised injection sites	• Crime • Public disorder	• No significant changes in drug trafficking (124 vs. 116) or assaults/robbery (174 vs. 180) or any other crimes typically associated with drug trafficking and drug use. • Substantial decline in break-ins and vehicle theft (302 vs. 227).
Impact on Mental and Public Health				

Study	Country	Study Type	Indicators of Impact	Key Findings
Braakmann & Jones (2014)	U.K.	• Analyzed the link between cannabis depenalization and crime by using panel data for England and Wales from 2003 to 2006	• Drug use	• No increases in cannabis consumption or consumption of other drugs following the shift.
Hamilton, Lloyd, Hewitt, & Godfrey (2014)	U.K.	• Studied impact of the reclassification of cannabis by examining psychiatric admission data from 1999 to 2010	• Drug use	• Increasing admissions for cannabis psychosis from 1999 to 2004. • After reclassification admissions declined until 2009 reclassification to a more serious drug. • Demonstrates a statistical association between the reclassification of cannabis and admissions for cannabis psychosis in the opposite direction to that predicted by the presumed relationship between the two. • Researchers propose that changes in mental health services and policing caused these patterns.
Philbin, Mauro, Santaella-Tenorio, Mauro, Kinnard, Cerdá, & Martins (2019)	U.S.	• Analysis of National Surveys on Drug Use and Health from 2004 to 2006 & 2010 to 2012 to examine the impact of liberalizing cannabis laws on cannabis use disorder	• Drug use	• Found that liberal states had higher past-year cannabis use, but lower cannabis use disorder prevalence rates amongst users compared to states with repressive cannabis policies.
Stevens (2019)	Various countries	• Survey data from 38 countries from 2001-2002, 2005-2006, & 2009-2010 to see if policy liberalization increases cannabis use in adolescents.	• Drug use	• Found no significant association between less stringent cannabis policies and higher odds of adolescent cannabis use.
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Mennis & Stahler (2020)	U.S.	• Used Substance Abuse and Mental Health Services Administration on treatment admissions for cannabis use from 2008 to 2017 to examine how legalization affected cannabis use disorder.	• Drug use	• Found no increase in treatment admissions during this time in either state.
Melchior, Nakamura, Bolze, Hausfater, El Khoury, Mary-Krause, & Azevedo Da Silva (2019)	Various countries	• Meta-analysis of 41 studies from the U.S., U.K., Australia, and the Czech Republic to provide insight into how the liberalization of cannabis laws affects adolescents and young people (i.e., people under 25)	• Drug use	• Findings indicated that most forms of cannabis liberalization do not seem to have a significant impact on cannabis use for this age group. • However, they noted that states with recreational legalization saw a 2% to 5% increase in use amongst adolescents and lower ages of first use of cannabis.
Drug Consumption Rooms and Supervised Injection Sites				
Zurhold, Degwitz, Verthein, & Haasen (2003)	Germany	• Analysis of surveys and interviews with 616 drug users in Hamburg analyzed to understand impact of drug consumption rooms	• Disease reduction • Healthcare savings	• Found that participants showed improvement in health-related behaviors like injection technique and hygiene
Hedrich, Kerr, & Dubois-Arber (2010)	Various countries	• Reviewed evaluations of drug consumption rooms in Europe (i.e., Switzerland and Germany), Canada, and Australia to better understand their impact.	• Drug use • Treatment Uptake	• Consistent evidence that these sites are associated with lower levels of self-reported injecting risk and public drug use. • Participants who use of these facilities are more likely to enroll in detoxification programs and have higher rates of treatment uptake.
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Ivsins, Chow, Macdonald, Stockwell, Vallance, Marsh, Michelow, & Duff (2012)	Canada	• Analyzed quantitative and qualitative data collected in surveys with 579 injection drug users in Victoria and Vancouver between 2007 and 2010.	• Disease rate • Healthcare savings	• Needle sharing in Victoria increased from under 10% in 2008 to 20% in 2010 while rates remained in Vancouver where there are several sites
Potier, Laprévote, Dubois-Arber, Cottencin, & Rolland, (2014)	Various countries	• Systematic review of 75 studies conducted on supervised injection facilities to better understand the benefits and harms created by them	• Disease reduction • Overdose mortality	• Sites were able to attract marginalized drug users, promote safer injection techniques, and reduce overdose frequency. • Findings indicated that these facilities were associated with reduced levels of public injection and discarded needles.
Wood, Tyndall, Montaner, & Keer (2006)	Canada	• 3-year pilot study evaluating Vancouver's supervised injection sites	• Treatment uptake • Disease Reduction	• Found a variety of positive public health impacts associated with Vancouver's supervised injection sites including reduction of disease from safer injecting techniques, increase in referral to treatment and other care, and no overdose related deaths in the facility.
Wood, Tyndall, Zhang, Montaner, & Kerr (2007)	Canada	• Examined detoxification facility data one year before and after the opening of Vancouver's supervised injection site to determine how it impacted uptake	• Treatment uptake	• Found that there was a 30% increase in enrollment in detoxification programs a year following implementation, and that this was associated with enrolling in methadone maintenance or other forms of addiction treatment
DeBeck, Kerr, Bird, Zhang, Marsh, Tyndall, Montaner, & Wood (2011)	Canada	• Analysis of data from supervised injection site in Vancouver to assess impact on treatment enrollment	• Treatment uptake	• Findings indicated that addiction treatment uptake rates were higher for people using the site
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Marshall, Milloy, Wood, Montaner, & Kerr (2011)	Canada	• Examined population-based overdose mortality rates to assess the impact of Vancouver's supervised injection sites on overdose mortality rates they one year before and one year after their opening.	• Overdose mortality	• Found that the fatal overdose rate decreased by 35% in this area while they fell by only 9.3% in other areas.

Maier, Mannes, and Koppenhofer (2017) analyzed the 2014 Uniform Crime Report for all 50 U.S. states to explore the impact of depenalizing cannabis policy on crime and drug abuse arrest rates. They found no significant differences in crime or drug arrests could be attributed to changes in policy.

Bird, Nguyen, and Grattet (2020) conducted a natural policy experiment on California's Proposition 47 to better understand how defelonization of simple drug possession impacts recidivism rates. Using data obtained from the BSCC–PPIC Multi-County Study (MCS) they found that those convicted after Prop. 47 had lower rearrest and reconviction rates than those sentence prior to it.

Mooney, Giannella, Glymour, Neilands, Morris, Tulsky, and Sudhinaraset (2018) examined California drug arrests data from 2011 to 2016 to evaluate the impact of defelonization of drug offenses. They found that while there was an immediate drop in numbers of arrests for minorities across the board and Black-White disparity, relative disparity increased by 27%, partly because of Black people still had larger proportions of felony drug offenses (e.g., sale of drugs).

In analysis of the New South Wales cannabis cautioning scheme, Baker and Goh (2004) found that it was generally successful in diverting offenders away from the criminal justice system as there were decreases in numbers of charges laid by police (6,679), charges dealt with by the court (5,241) and persons convicted by the court (2,658). However, there were also numerous unintended outcomes, including net-widening, a shift toward pro-active high visibility policing, the use of drug detection dogs, and reductions in the use of informal warnings due to fear of allegations of corruption, have also increased the number of people required to be dealt with under the Scheme. They also found that the cannabis cautioning scheme used in New South Wales is much less effective for Indigenous people when compared to non-Indigenous persons as Indigenous persons (11%) were much less likely than non-Indigenous persons (31%) to be cautioned because they often failed to meet the eligibility criteria. Consequently, Indigenous persons were diverted from the court system at a lower rate thereby increasing the degree to which Indigenous persons are over-represented in the court system.

Shiner (2015) analyzed official statistics to assess the impact of the reclassification of cannabis to a less dangerous drug in 2004. He found that after the change, there was a considerable net-

widening effect that more than doubled the number of people receiving formal sanctions for drug possession offences. Interestingly, this net-widening effect persisted after cannabis was rescheduled as a more dangerous drug in 2009.

As explained earlier, countries with radically different policies may both use diversion and harm reduction programs. For example, many states in the U.S. have some type of drug diversion programs for low-level offenders and some larger cities have embraced harm reduction even though their drug policies are rooted in prohibition and tend to be quite harsh. Conversely, Australia has decriminalized cannabis and implemented drug consumption rooms in some areas.
In a study of police drug diversion programs across Australia, Payne, Kwiatkowski, and Wundersitz (2008) found that across all jurisdictions, most people who were referred did not reoffend in the 12 to 18-month period following their participation in diversion and the majority were apprehended for either no or fewer post-program offences than before. More specifically, in six jurisdictions, 31% to 48% of prior offenders did not reoffend after diversion. In the other two jurisdictions, the figure was between 53% and 54%. They found a similar pattern in offenders with no prior record before participation in diversion. In six jurisdictions the percentage who remained non-offenders varied from 69% to 77%, while it was higher than 80% in the other two.

Clifasefi, Lonczak, and Collins (2017) conducted a single-arm, within-subjects analysis of housing, employment, and income/benefits outcomes on 176 of low-level drug and prostitution offenders to assess the impact of Seattle's LEAD program. Their findings indicated that LEAD participants showed significant improvements across all outcomes measured (i.e., housing, employment, and income/benefits). They also note that positive housing outcomes were associated with 17% fewer arrests while those achieving positive employment outcomes were associated with 33% fewer arrests. They also observed clear improvements in the housing and employment outcomes of participants in the program.

Collins, Lonczak, and Clifasefi (2019) conducted a quasi-experiment comparing Seattle's LEAD program participants with those undergoing standard booking and prosecution procedures to assess outcomes and cost-effectiveness. They found that LEAD participants had 1.4 fewer average yearly jail bookings, spent over 40 fewer days in jails per year, and were 88% less likely of being incarcerated relative to the control group. Their findings also indicated that the LEAD program resulted in significant savings for the criminal justice system because of reduced legal and court costs.

In their qualitative study Hughes, Shanahan, Ritter, McDonald and Gray-Weale (2014b) found that Australian experts interviewed held strong and widespread support for drug diversion programs and acknowledged that they are more effective and pragmatic than prosecuting cases criminally. In addition, they indicated that these programs reduced workloads on police and the court system. They also identified several positive outcomes that result from diversion programs including reduced utilisation of criminal justice system resources, reduced incidence of re-offending, improved cost-effectiveness, and several other social, community and economic benefits including implications associated with avoiding a criminal finding or conviction (Hughes, Seear, Ritter, & Mazerolle, 2019: 12).
Shanahan, Hughes, and McSweeney (2017) examined Australian police diversion for cannabis to better understand how they affected reoffending and criminal justice costs. Their study revealed

that offenders diverted in programs had similar rates of recidivism compared to those charged criminally. Further the diversion programs were found to cost 15 times less than charging users criminally.

Wilkins and Sweetsur (2012) analyzed rates of apprehension, prosecution, conviction, and other criminal justice outcomes for cannabis use in New Zealand from 1991 to 2008 and found that police apprehensions for cannabis had declined from 468 in 1994 to 247 in 2008 with similar declines in prosecutions and convictions. They also found that those prosecuted from 2000 to 2008 were less likely to be processed through the criminal justice system, but rather were funneled into diversion programs.

Labriola, Reich, Davis, Hunt, Rempel, and Cherney (2018) compared 15 prosecutor-led diversion programs from 11 different jurisdictions in the US. Data was collected via focus group interviews with staff, stakeholders, and participants in diversion programs. Of the 15 diversion programs which mostly deal with misdemeanor crimes, several emphasized diversion with drug possession. Staff and stakeholders reported cost-savings for the justice system and benefits to program participants, as well as inconsistent funding and resources being a barrier to diversion programs, while participants viewed the diversion programs as being fairer and more individualized than the traditional court system.

In a review of 154 quasi-experimental and experimental evaluations of the effectiveness of U.S. drug courts (including 92 adult drug courts) in reducing offending Mitchell, Wilson, Eggers, and MacKenzie (2012) found that drug court participants generally have lower rates of recidivism versus non-participants. Adult drug courts were found to drop recidivism by 12% and the effects lasted up to three years; however, youth drug courts while still effective, were found to have much less of an impact.

In their meta-analysis of 96 studies on drug treatment courts in Canada, Gutierrez, Bourgon, and Guy (2012) found that drug courts reduce recidivism by approximately 8%. Further, they found that effectiveness can be increased through adherence to the Risk-Need-Responsivity principles identified by Andrews and Bonta (2006).

Kornhauser (2018) conducted a review of studies on Australian drug courts using quasi- or random experimental designs to assess their effectiveness. He determined that drug courts reduce recidivism more than conventional sanctions; however, this tentative support is tempered by mixed results and methodological limitations in some of the studies.

The effectiveness of drug consumption rooms has been widely documented in various studies done in Europe and Canada. Zurhold, Degwitz, Verthein, and Haasen (2003) conducted a mixed methods study using a combination of surveys and interviews with 616 drug users in Hamburg, Germany to assess the impact of consumption rooms on the health of users and public nuisance drug use. Findings of the study indicated that the rooms played an important role in the reduction of crime and public disorder in the area around the site. In their review of 75 studies on supervised injection facilities[19] worldwide, Potier, Laprévote, Dubois-Arber, Cottencin, and Rolland, (2014)

[19] Supervised injection facilities or sites are a type of drug consumption room that allow heroin injection but no smokable drugs.

discovered that the sites were not associated with increases in injection, trafficking, or crime in the surrounding areas.

Wood, Kerr, Small, Li, Marsh, Montaner, and Tyndall (2004) measured injection-related public order problems during the 6 weeks before and the 12 weeks after the opening of the safer injecting facility in Vancouver. Their findings revealed that the opening of the safer injecting facility was independently associated with improvements in several measures of public order, including reduced public injection drug use and public syringe disposal.

In a 3-year pilot study evaluating Vancouver's supervised injection sites Wood, Tyndall, Montaner, and Keer (2006) found that all measures of public disorder were found to have decreased after the facility had been open for one year. Further, crime rates were found to have remained stable, and the facility was not associated with increases in drug dealing or drug-related crime, including assaults, robbery, and vehicle break-ins.

Wood, Tyndall, Lai, Montaner, and Kerr (2007) analyzed crime rates one year before and one year after the opening of Vancouver's supervised injection sites to better understand how they were impacting levels of crime. They found no significant changes in drug trafficking (124 vs. 116) or assaults/robbery (174 vs. 180) or any other crimes typically associated with drug trafficking and drug use. Finally, the noted that there was a substantial decline in break-ins and vehicle theft (302 vs. 227).

Mental/Public Health Indicators

Braakmann and Jones (2014) analyzed the link between cannabis depenalization and crime by using panel data for England and Wales from 2003 to 2006. They found no increases in cannabis consumption, consumption of other drugs, crime, or other forms of risky behavior after the shift.

Hamilton, Lloyd, Hewitt, and Godfrey (2014) studied the impact of the U.K. reclassification of cannabis from a more serious to a less serious drug (i.e., class B to class C) by examining psychiatric admission data from 1999 to 2010. They found increasing admissions for cannabis psychosis from 1999 to 2004. After reclassification admissions declined until 2009 when cannabis was reclassified again as a more serious drug. This study demonstrates a statistical association between the reclassification of cannabis and hospital admissions for cannabis psychosis in the opposite direction to that predicted by the presumed relationship between the two. The researchers propose that changes in mental health services and policing caused these patterns.

Philbin, Mauro, Santaella-Tenorio, Mauro, Kinnard, Cerdá, and Martins (2019) analyzed data from National Surveys on Drug Use and Health from 2004 to 2006 and 2010 to 2012 to examine the impact of liberalizing cannabis laws on cannabis use disorder. They found that liberal states had higher past-year cannabis use, but lower CUD prevalence amongst users compared to states with repressive cannabis policies.

Stevens (2019) analyzed survey data from 38 countries from 2001-2002, 2005-2006, and 2009-2010 to examine if policy liberalization increases the likelihood of cannabis use in adolescents. He found no significant association between less stringent cannabis policies and higher odds of

adolescent cannabis use. Further, Mennis and Stahler (2020) used SAMHSA on treatment admissions for cannabis use from 2008 to 2017 to examine how legalization affected cannabis use disorder. They found no increase in treatment admissions during this time in either state.

In a meta-analysis, Melchior, Nakamura, Bolze, Hausfater, El Khoury, Mary-Krause, and Azevedo Da Silva (2019) examined 41 studies from the U.S., U.K., Australia, and the Czech Republic to provide insight into how the liberalization of cannabis laws affects adolescents and young people (i.e., people under 25). These findings indicated that most forms of cannabis liberalization do not seem to have a significant impact on cannabis use for this age group; however, they noted that states with recreational legalization saw a 2% to 5% increase in use amongst adolescents and lower ages of first use of cannabis.

Diversion and harm reduction programs also appear to have some impact on mental and public health indicators. In their analysis of police diversion programs in Australia, Shanahan, Hughes, and McSweeney (2017) found that offenders diverted into programs had more positive social, employment, and family outcomes.

In their mixed methods study of consumption rooms in Hamburg, Germany, Zurhold, Degwitz, Verthein, and Haasen (2003) found that participants showed improvement in health-related behaviors like injection technique and hygiene. Hedrich, Kerr, and Dubois-Arber (2010) reviewed evaluations of drug consumption rooms in Europe (i.e., Switzerland and Germany), Canada, and Australia to better understand their impact. They found that there is consistent evidence that use of these sites is associated with lower levels of self-reported injecting risk and public drug use. Further, their findings revealed that participants who use of these facilities are more likely to enroll in detoxification programs and have higher rates of treatment uptake.

To assess how Victoria's only fixed-site needle and syringe exchange affected drug use patterns, Ivsins, Chow, Macdonald, Stockwell, Vallance, Marsh, Michelow, and Duff (2012) analyzed quantitative and qualitative data collected in surveys with 579 injection drug users in Victoria and Vancouver between 2007 and 2010. Their analysis revealed that needle sharing in Victoria increased from under 10% in 2008 to 20% in 2010 while rates remained in Vancouver where there are several sites.

Potier, Laprévote, Dubois-Arber, Cottencin, and Rolland, (2014) performed a systematic review of 75 studies conducted on supervised injection facilities to better understand the benefits and harms created by them. They found that all studies suggested that the sites were able to attract marginalized drug users, promote safer injection techniques, and reduce overdose frequency. Their findings also indicated that these facilities were associated with reduced levels of public injection and discarded needles.

In their 3-year evaluation study Wood and his colleagues (2006) found a variety of positive public health impacts associated with Vancouver's supervised injection sites including reduction of disease from safer injecting techniques, increase in referral to treatment and other care, and no overdose related deaths in the facility.
Wood, Tyndall, Zhang, Montaner, and Kerr (2007) examined residential detoxification facility data one year before and one year after the opening of Vancouver's supervised injection site to determine how it impacted uptake. They found that there was a 30% increase in enrollment in

detoxification programs a year following implementation, and that this was associated with enrolling in methadone maintenance or other forms of addiction treatment.

DeBeck, Kerr, Bird, Zhang, Marsh, Tyndall, Montaner, and Wood (2011) performed a Cox regression analysis on data obtained from supervised injection site participants in Vancouver, B.C. to better understand how the site impacted treatment enrollment. Their findings indicated that addiction treatment uptake rates were higher for people using the site.

To assess the impact of Vancouver's supervised injection sites on overdose mortality rates, Marshall, Milloy, Wood, Montaner, and Kerr (2011) examined population-based overdose mortality rates one year before and one year after their opening. They found that the fatal overdose rate decreased by 35% in this area while they fell by only 9.3% in other areas.

Prohibition and Repenalization[20]

Crime/Criminal Justice Indicators

As noted earlier there are several countries under review here that either rely primarily upon drug prohibition with some diversion programs and limited use of depenalization (i.e., New Zealand, The U.K., and the U.S.), or as in the case of Denmark have recently veered back toward drug prohibition by repenalizing simple possession of drugs (See Houborg et al., 2020). Another example of this trend is the tightening of the Dutch coffee shop regulations. There are also some troubling racial disparities in arrests for drug use in countries that rely on prohibition and depenalization that are illuminated by some studies that deserve attention. Further, they tend to target low-level users instead of focusing on drug traffickers as most proponents claim. Interestingly, these studies are not limited to one country or continent, but instead this is a common theme that can be found in several evaluations.

Møller (2010) examined criminal statistics from Denmark on the birth country of people who were convicted of cannabis misdemeanors and police drug seizures by district. The study found a significant association between high numbers of cannabis seizures and a low amount of cannabis seized. These findings suggest that crackdowns on cannabis use tend to target high number of users and low-level offenders. This study also found that the police crackdown affected minorities disproportionately.

van Ooyen-Houben, Bieleman, and Koff (2016) examined 14 Dutch municipalities in the Netherlands using a multi-method approach (i.e., surveys, interviews, and ethnography) to better understand how tightening of the coffee shop policy by the Dutch government in 2012 impacted cannabis use. They found that the crackdown on coffee shops gave rise to an expansion of the illicit market and residents experienced a rise in nuisance activities related to street dealing (i.e., public disorder).

[20] Summary tables for research on the impact of prohibition and repenalization policy can be found on Table 4 on the following pages.

Males and Buchen (2014) compared five states that had implemented major cannabis reforms from 2009 to 2014 (California, Connecticut, Massachusetts, Colorado, and Washington) to evaluate their effectiveness in reducing cannabis arrests and impact on public health and safety. They found that even after decriminalization was implemented considerable racial disparities in arrests remain, especially for African Americans. They conclude that these disparities can only be addressed if states move toward full legalization.

TABLE 4 – Prohibition and Repenalization

Impact on Crime and Criminal Justice

Study	Country	Study Type	Indicators of Impact	Key Findings
Møller (2010)	Denmark	• Examined criminal statistics from Denmark on the birth country of people who were convicted of cannabis misdemeanors and police drug seizures by district.	• Criminal Justice Efficiency • Racial Disparities	• Found a significant association between high numbers of cannabis seizures and a low amount of cannabis seized. • Found that the police crackdown affected minorities disproportionately.
van Ooyen-Houben, Bieleman, & Koff (2016)	Netherlands	• Multi-method approach (i.e., surveys, interviews, and ethnography)	• Public disorder • Crime	• Tightening coffee shop regulations led to expansion of the illicit market and increased street drug dealing. • More public disorder and nuisance activities reported.
Males & Buchen (2014)	U.S.	• Compared five states (California, Connecticut, Massachusetts, Colorado, and Washington) that implemented cannabis depenalization from 2009- 2014 to evaluate their effectiveness in reducing cannabis arrests and impact on public health and safety	• Criminal justice efficiency • Youth crime • Racial Disparity	• Found that after depenalization and decriminalization schemes were implemented considerable racial disparities in arrests remain, especially for African Americans
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Owusu-Bempah & Luscombe (2020)	Canada	• Analysis of cannabis arrest data from 2015 in five major cities across Canada (Vancouver, Calgary, Halifax, Ottawa & Regina) to gain further insight into how race influences enforcement of drug law in Canada.	• Racial Disparities	• Findings reveal that both Black and Indigenous people are over-represented in these statistics in every city examined. • Disparities were particularly pronounced for Indigenous people in Vancouver where they were 6.3 times as likely to be arrested for cannabis possession than would be expected based on their proportion of the population while Black people in Halifax were 4.1 times more likely to be arrested.
Lammy (2017)	U.K.	• Analysis of official statistics from Crown Prosecution Service (CPS), the courts system, prisons and young offender institutions, the Parole Board, the Probation Service and Youth Offending Teams (YOTS).	• Racial Disparities	• Found that despite government claims that the youth justice system was prosecuting fewer young offenders, the number of minority offender rose in several categories from 2006 to 2016. • Proportion of minority young people offending and re-offending rose from 11% to 19%. • Found evidence that young minority offenders were more likely to be given prison sentences versus their White counterparts and notes that the majority of these differences resulted from drug related types of crimes.
Koch, Lee, & Lee (2016)	U.S.	• Analysis of data from the 1997 National Longitudinal Survey of Youth (NLSY) to gain a greater understanding of racial disparities in drug arrests.	• Racial Disparities	• Research revealed that compared to Whites, Blacks were more likely to be arrested for drug use even after controlling socio-demographic factors
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Mitchell & Caudy (2015)	U.S.	• Analysis of data from the 1997 National Longitudinal Survey of Youth (NLSY) to gain a greater understanding of racial disparities in drug arrests.	• Racial Disparities	• Found that racial disparities in drug arrests could not be explained by difference in drug or non-drug offenses or geographic location (i.e., residing in areas that likely have heavy police drug patrols).
Reinarman (2009)	Comparison of Netherlands & U.S.	• Survey research on cannabis use patterns in Amsterdam and San Francisco	• Drug purity and potency • Drug prices	• Found that cannabis using residents in San Francisco preferred more potent cannabis products when compared to Amsterdam. • Findings also suggest that cannabis prices had little impact on the patterns of use in both cities.
Costa Storti & De Grauwe (2009)	Various countries worldwide	• Applied a theoretical model to better understand the reasons behind the global price decline in illicit drugs.	• Drug prices	• Found that changes in market structure brought about by globalization have increased the efficiency of drug distribution, reduced risks involved with dealing drugs, and increased the degree of competition in drug markets. • Researchers note that these findings illustrate problems with the effectiveness of policies that are intended to reduce the supply of drugs (i.e., interdiction strategies) and that countries might be well-advised to rely more upon demand reduction strategies (i.e., treatment and harm reduction).
Werb, Kerr, Nosyk, Strathdee, Montaner, & Wood (2013)	Various countries including U.S., U.K., and Australia	• Examined longitudinal measures of illegal drug supply indicators from 1990 to 2012 to assess the long-term impact of enforcement-based supply reduction interventions.	• Drug prices	• Findings suggest that with few exceptions and despite increasing investment in law enforcement-based supply side efforts, illicit drug prices have generally decreased while purity has increased. • Conclude that expanding efforts to control the illegal drug market through law enforcement are failing.

Martin, Cunliffe, Décary-Hétu, & Aldridge (2017)	U.S.	• Performed an interrupted time-series analysis of data from 2013 to 2016 to examine how the US Drug Enforcement Administration's 2014 crackdown affected online illicit drug markets.	• Drug prices	• Found that illegal online sales of prescription opioids increased after the schedule change with no significant changes in sales of prescription sedatives, steroids, stimulants, or illicit opioids. • The most potent opioids exhibited the largest increases in sales.
Impact on Mental and Public Health				
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**
Reinarman (2004)	Comparison of Netherlands & U.S.)	• Survey research on cannabis use patterns in Amsterdam and San Francisco	• Drug use	• Heavy users of cannabis were far more prevalent in San Francisco. • Found that cannabis users in San Francisco were significantly more likely to have used crack and opiate drugs in the three months prior to the interview.
Parker, Williams & Aldridge (2002)	U.K.	• Analysis of data from the North West England Longitudinal Study for 465 young adults from the 2000 who had been previously interviewed during their adolescence (1991 to 1995).	• Drug use	• Found that 76% of participants had tried drugs by age 22 and generally used both alcohol and illicit drugs for long periods of time in the youth. • Nearly two-thirds of abstainers held tolerant or approving attitudes towards drug use and half had friends who used cannabis regularly. • Conclude that "sensible" forms of drug use are becoming increasingly tolerated amongst young people even those who are generally law-abiding.
Cristiano (2014)	Canada	• Analysis of the Canadian Addiction Survey	• Drug use	• Found that ecstasy use is becoming increasingly normalized in Canadian society.
Study	**Country**	**Study Type**	**Indicators of Impact**	**Key Findings**

Wilkins, Prasad, Parker, Rychert, & Barnes (2017)	New Zealand	• Analysis of data from the New Zealand Arrestee Drug Use Monitoring study, examining approximately 800 police detainees every year from 2010 to 2015	• Drug use	• Found that among this sample methamphetamine use increased from 28% in 2012 to 36% in 2015. • Most other forms of drug use stayed steady or declined over this period.
Robinson & Scherlen (2014)	U.S.	• Re-analysis of surveys from 2000 to 2005 conducted by the Office of National Drug Control Policy in the U.S. to determine the impact of supply reduction efforts on drug use patterns.	• Drug use • Overdose mortality • Treatment uptake • Drug markets	• Strategies used by the ONDCP have consistently failed to reduce drug use, drug fatalities or illnesses associated with drug use. • Prohibition strategies used by the ONDCP have consistently failed to reduce drug use, drug fatalities or illnesses associated with drug use; failed to provide treatment for addicted users; and have not clearly reduced the availability of most drugs.
Beletsky & Davis (2017)	U.S.	• Historical analysis comparing alcohol and drug prohibition to gain a better understanding of the opioid crisis in the U.S.	• Drug markets • Drug prices	• Findings suggest that efforts to suppress the illicit drug supply undertaken by prohibition and other supply side strategies give rise to economic and logistical pressures that favor increasing potent and compact substances (i.e., the Iron Law of Prohibition). • Conclude that the progression towards ever more powerful illicit drugs can only be curtailed through evidence-based harm reduction and demand reduction policies that acknowledge the importance of mental and public health.

Owusu-Bempah and Luscombe (2020) conducted an analysis of cannabis arrest data from 2015[21] in five major cities across Canada (Vancouver, Calgary, Halifax, Ottawa & Regina) to gain further

[21] Cannabis was still prohibited in Canada at this time.

insight into how race influences enforcement of drug law in Canada. Their findings reveal that both Black and Indigenous people are over-represented in these statistics in every city examined. Disparities were particularly pronounced for Indigenous people in Vancouver where they were 6.3 times as likely to be arrested for cannabis possession than would be expected based on their proportion of the population while Black people in Halifax were 4.1 times more likely to be arrested.

In a review of the treatment of ethnic minority in the U.K. criminal justice system, Lammy (2017) analyzed official statistics from Crown Prosecution Service (CPS), the courts system, prisons and young offender institutions, the Parole Board, the Probation Service and Youth Offending Teams (YOTS). He found that despite government claims that the youth justice system was prosecuting fewer young offenders, the number of minority offender rose in several categories from 2006 to 2016. First, the proportion of minority young people offending and re-offending rose from 11% to 19%. Second, the proportion of youth prisoners rose from 25% to 41% in that decade. Finally, Lammy (2017) also found evidence that young minority offenders were more likely to be given prison sentences versus their White counterparts. He notes that the majority of these differences resulted from drug related types of crimes.

Koch, Lee, and Lee (2016) analyzed data from the 1997 National Longitudinal Survey of Youth (NLSY) to gain a greater understanding of racial disparities in drug arrests. Their research revealed that compared to Whites, Blacks were more likely to be arrested for drug use even after controlling socio-demographic factors. In an earlier analysis of NLSY 97 data, Mitchell and Caudy (2015) also found that racial disparities in drug arrests could not be explained by difference in drug or non-drug offenses or geographic location (i.e., residing in areas that likely have heavy police drug patrols).

There is also increasing evidence that prohibition and other supply side strategies may serve to increase the potency of drugs while failing to significantly reduce use of them or their availability. This fits with economic theories such as the Alcian and Allen (1967) theorem and Cowan's (1985) extension of it – the Iron Law of Prohibition. For example, Reinarmann's study (2009) provide some support for this as he found that cannabis using residents in San Francisco (the area with more repressive drug policy) preferred more potent cannabis products when compared to Amsterdam.[22] His findings also suggest that cannabis prices had little impact on the patterns of use in both cities.

Costa Storti and De Grauwe (2009) applied a theoretical model to better understand the reasons behind the global price decline in illicit drugs. They found that changes in market structure brought about by globalization have increased the efficiency of drug distribution, reduced risks involved with dealing drugs, and increased the degree of competition in drug markets. They note that these findings illustrate problems with the effectiveness of policies that are intended to reduce the supply of drugs (i.e., interdiction strategies) and that countries might be well-advised to rely more upon demand reduction strategies (i.e., treatment and harm reduction).

[22] Fischer (1995) also found that a more repressive approach also gave rise to drugs that are stronger and more readily available.

Werb, Kerr, Nosyk, Strathdee, Montaner, and Wood (2013) examined longitudinal measures of illegal drug supply indicators from 1990 to 2012 to assess the long-term impact of enforcement-based supply reduction interventions. Their findings suggest that with few exceptions and despite increasing investment in law enforcement-based supply side efforts, illicit drug prices have generally decreased while purity has increased. The conclude that expanding efforts to control the illegal drug market through law enforcement are failing.

In their historical analysis, Beletsky and Davis (2017) compared alcohol and drug prohibition to gain a better understanding of the opioid crisis in the U.S. Their findings suggest that efforts to suppress the illicit drug supply undertaken by prohibition and other supply side strategies give rise to economic and logistical pressures that favor increasing potent and compact substances (i.e., the Iron Law of Prohibition). They conclude that the progression towards ever more powerful illicit drugs can only be curtailed through evidence-based harm reduction and demand reduction policies that acknowledge the importance of mental and public health.

Martin, Cunliffe, Décary-Hétu, and Aldridge (2017) performed an interrupted time-series analysis of data from 2013 to 2016 to examine how the US Drug Enforcement Administration's 2014 crackdown affected online illicit drug markets. They found that illegal online sales of prescription opioids increased after the schedule change with no significant changes in sales of prescription sedatives, steroids, stimulants, or illicit opioids. It is worth noting that their results were consistent with the Iron Law of Prohibition given that the most potent opioids exhibited the largest increases in sales.

Mental/Public Health Indicators

The studies reviewed here suggest that under prohibition drug use has increased over time and drug use has become increasingly normalized amongst young people. Further, some of the studies indicate that the criminal record from a drug conviction can cause problems in the lives of users (e.g., loss of employment, housing, and other social connections) and may further exacerbate already existing problems. Finally, several of the studies examined indicate that positive outcomes are obtained through simply not enforcing drug laws and/or diversion programs that funnel users away from the criminal justice system.

In Denmark, drug use has remained stable in recent years. Surveys indicate that one in two young adults (16 to 34) had tried cannabis and one in ten had tried cocaine. Just under 20% of young adults had used cannabis in the last year. There are some indications that cannabis use has been increasing amongst young adults since 2010; however, the data also indicate a drop in older cohorts of the population. Cocaine use has remained relatively stable while use of amphetamines and MDMA are decreasing amongst young people while older groups show a slight increase Despite the general stability of drug using patterns, there is an increasing number of people seeking treatment for cannabis and cocaine use. However, there are less people seeking treatment for heroin use and injecting is becoming less common amongst heroin users (EMCDDA, 2019).

In his comparison of cannabis use patterns, Reinarman (2004) found that heavy users of cannabis were far more prevalent in San Francisco which is under drug prohibition when compared to the city of Amsterdam which operates under a tolerance policy that resembles full drug

decriminalization. Further, he found that cannabis users in San Francisco were significantly more likely to have used crack and opiate drugs in the three months prior to the interview.

Parker, Williams and Aldridge (2002) analyzed data from the North West England Longitudinal Study for 465 young adults from the 2000 who had been previously interviewed during their adolescence (1991 to 1995). They found that 76% of participants had tried drugs by age 22 and generally used both alcohol and illicit drugs for long periods of time in the youth. Further, their research revealed that nearly two-thirds of those who abstained from drug use held tolerant or approving attitudes towards drug use and half had friend who used cannabis regularly. They conclude that "sensible" forms of drug use are becoming increasingly tolerated amongst young people even those who are generally law-abiding. This would appear to run counter to goals expressed by proponents of prohibition. Further, in his analysis of the Canadian Addiction Survey from 2004 Cristiano (2014) found similar patterns of normalization with ecstasy in Canada.

In their analysis of data from the New Zealand Arrestee Drug Use Monitoring study, Wilkins, Prasad, Parker, Rychert, and Barnes (2017) examined approximately 800 police detainees every year from 2010 to 2015. They found that among this sample methamphetamine use increased from 28% in 2012 to 36% in 2015. Most other forms of drug use stayed steady or declined over this period. They speculate that the decline in cannabis may have been related to the emergence of legal synthetic cannabinoids. The use of methamphetamine is thought to have increased more amongst New Zealanders in recent years, and opioid use is higher than average as of 2018.

Supply side efforts embraced by the prohibition model also seem to have been ineffective in consistently reducing drug use and availability and providing treatment to addicted users. Robinson and Scherlen (2014) re-analyzed surveys from 2000 to 2005 conducted by the Office of National Drug Control Policy in the U.S. to determine the impact of supply reduction efforts on drug use patterns. Their results indicate that the ONDCP routinely manipulates statistics to justify continuing the War on Drugs, and in some cases, their efforts have had the opposite of the intended outcome. More specifically, strategies used by the ONDCP have consistently failed to reduce drug use, drug fatalities or illnesses associated with drug use; failed to provide treatment for addicted users; and have not clearly reduced the availability of most drugs.

Analysis of Outcomes

Crime and the Liberalization of Drug Policy

Because of the common association many make between serious drug use and criminal behavior, a major concern around liberalizing drug policy is that it will lead to increases in other types of crime and public disorder. The studies reviewed here indicate that this is not necessarily the case (Hughes and Stevens, 2010; Lacquer, 2014; Smiley, 2016). There was an increase in drug related offenses (for possession of large amounts or for production of drugs) in the Czech Republic from 2009 to 2014 following the implementation of decriminalization. However, some suggest that this was not attributable to an increase in this type of crime but rather a change in enforcement practices (Zeman et al., 2017).

In most cases, depenalization and defelonization of cannabis and other illicit drugs have resulted in decreases in criminal activity when implemented in the U.K. (Adda et al., 2014; Braakmann & Jones, 2014). However, this does not always hold true in the U.S. as studies have found that cannabis depenalization had no significant impact on crime or drug arrests and may have increased crime in some cases because demand rose without any changes to the legal supply of cannabis (Huber III et al., 2016; Maier et al., 2017). Finally, there are indications that California's Proposition 47 that defelonized simple possession of illicit drugs led to lower rearrest and reconviction rates for drug offenders after it was implemented (Bird et al., 2020).

As mentioned earlier, countries that have implemented depenalization typically make use of both diversion and harm reduction programs to manage illicit drug use outside of the criminal courts. Most of the studies reviewed here indicate that programs like these are helpful for managing crime and public disorder when drug policy is not being enforced or strictly adhered to. Diversion programs were found to have consistently high success rates when compared with criminal charges.[23] More specifically, about 40% to 80% of participants did not re-offend; this variation is highly dependent on the nature of the program and criminal history of the offender in the program (i.e., participants with longer criminal histories tend to have poorer outcomes) (Clifasefi et al., 2017; Payne et al., 2008). Further, the type of outcomes being achieved in the program are important; more specifically, housing and employment were found to be associated with substantially lower rates of rearrest (Collins et al., 2019).

Drug courts have had somewhat more mixed results when compared to diversion programs. While some studies did find lower recidivism, in most cases these were quite modest ranging from 8% to 12% (Gutierrez, et al., 2012; Mitchell et al., 2012). Further, there were also indications that the quality of some of the studies of drug courts were not as strong and reliable (Kornhauser, 2018).

There is considerable evidence from various countries to support the use of supervised injection sites and drug consumption rooms. Findings from several studies indicate that these facilities are helpful for managing public disorder and open-air drug use and that they do not increase criminal activity in the areas they are implemented (Wood et al., 2004; Wood et al., 2006). Further, there were no increases in drug trafficking or drug related crime in these areas (Wood et al. 2006; Potier et al., 2014; Zurhold et al., 2003).

Criminal Justice Processes and Efficiency

There are some indications that decriminalization (or extreme depenalization as practiced in the Netherlands) has led to some positive criminal justice outcomes and may help increase the efficiency of criminal justice processes in a few ways. There is some evidence that police are refocusing on more serious crime. For example, increases in drug seizures in Portugal suggest that law enforcement is focusing attention on drug traffickers rather than low-level dealers and users (Lacquer, 2014; Smiley, 2016).

[23] One exception here is an examination of a police-assisted diversion program for cannabis where no significant differences was found between those charged criminally and those in the program (Shanahan, Hughes, & McSweeney, 2017)

Some findings suggest other improvement based on indicators like reduced costs for enforcement, fewer court cases, and lower prison costs with less overcrowding **(**Hughes and Stevens, 2007, 2010; Gonçalves et al., 2015). The low level of arrests for simple possession in these countries also suggests that the criminal justice processes mechanism has been affected with less people receiving criminal records, leading to less difficulties in finding legitimate opportunities in society (Stevens et al., 2019; EMCDDA, 2019).

In some cases, countries that liberalize drug policy experience issues with net-widening, which can create problems with criminal justice system efficiency. The studies reviewed here provide mixed findings on this topic. Portugal has seen no influx of cases that previously would have been ignored (Hughes & Stevens, 2010; Lacquer, 2014). The increase in drug arrests in the Czech Republic following decriminalization led Zeman and his colleagues (2017) to conclude that this increase was related to a more intense focus on users possessing large amounts of drugs and greater expenditure of police resources for enforcement for political reasons that led to a type of net-widening that occurred after implementing decriminalization in 2010. It is also worth noting that this enforcement approach has led to lower levels of organized crime in the Czech Republic, likely because of the focus on drug production and higher-level trafficking cases (Gutheil et al., 2016). However, as Belaklova et al. (2017) warn, it is important to consider how enforcement tactics might shift in response to liberalization of drug law and the possible problems that could result from this (e.g., more processing of marginalized and young offenders who otherwise would have been released).

Studies that examine criminal justice efficiency in the context of depenalization have yielded mixed results. On the one hand, some have found positive impacts such as decline in other crime, increased ability of the police to refocus on more serious crime, and a drop in racial disparities of arrests (Adda et al., 2014; Mooney, et al., 2018). However, there was also evidence of net-widening and several other intended outcomes including a shift toward pro-active high visibility policing, the use of drug detection dogs, and reductions in the use of informal warnings. (Baker and Goh, 2004; Shiner, 2015). The findings of the studies taken together suggest that more positive outcomes result from depenalization when criminal arrests are avoided (Adda et al., 2014).

According to the studies reviewed here, diversion programs result in reduced workloads for police and the courts (Hughes et al., 2014; Wilkins & Sweetsur, 2012). Further, they are also cost effective, and in some cases, diversion programs cost up to 15 times less than charging users in criminal court (Shanahan et al., 2017; Labriola et al., 2018; Collins, et al., 2019).

During the 1970s and 80s, German drug policy became more strict and severe with increases in punishments. The statistics from this era suggest that the repressive approach did not achieve most of its goals (i.e., deterrence and prevention) and primarily focused law enforcement efforts on low-level consumers rather than large drug suppliers (Fischer, 1995). Bollinger (2004) elaborates on the situation below:

> In Germany, the effort to curb international drug trafficking has had little effect compared to other countries. The fact that foreigners were increasingly involved in trafficking on German territory was persistently ignored…It was futile to believe – or cynical to try to convince the voters – that sharpened drug laws could have any positive influence. Drug supply soared in spite of increased forfeitures of illegal imports and transports. Due to the

> adoption of refined techniques by the rackets and ethnic isolation of gangs, it was impossible to increase the number of kingpins getting caught, in spite of multiplication of police forces and legal instruments, such as undercover enforcement, crown witness privileges, use of *agents provocateurs*, eavesdropping, etc. Law enforcement agencies therefore responded by resorting to the apprehension of rather small-scale drug peddlers. About 80% of the traffickers sentenced to relatively high prison terms were actually lower-level cannabis dealers. (pgs. 301-302, italics in original)

As the passage implies, deterrence and prevention seem to not have been achieved by Germany's mix of prohibition and depenalization policy. Instead, increased enforcement spurred by repressive policy resulted in a sort of net-widening from increased police attention similar to the experience in Denmark (see Møller, 2010).

Drug Use, Deterrence, and Normalization

Opponents of liberalizing drug policy often contend that such efforts inevitably lead to more drug use, possibly amongst young people, because the deterrent effect of the law will fail to function thus freeing up members of society to engage in higher levels of reckless drug use. However, the evidence reviewed here suggests that this is not the case in countries that implemented decriminalization of cannabis or illicit drugs.

Cannabis decriminalization had very little impact on rates of use according to several studies (Reinarman, 2004; MacCoun, 2011). Rates of illicit drug use for countries that have decriminalized simple possession of drugs tend to be close to those of their neighbors with stricter drug policies (Vuolo, 2013; Scheim, Maghsoudi, and Marshall, 2020). At worst, decriminalization results in small to moderate increases in drug use reported by adults. Finally, there does not seem to be a drastic impact on adolescent drug use; however, ages of first use in some countries are lower other countries (Červenýet al., 2017; Hughes and Stevens, 2010; Monshouwer et al., 2011). Cannabis depenalization and other modes of liberalization also seem to have little impact on cannabis or the consumption of other drugs for adults or young people (Braakmann & Jones, 2014; Melchior et al., 2019; Stevens, 2019).[24]

The evidence reviewed here also reveals that prohibition and other repressive drug control policies often have surprising and unintended outcomes. For example, a very influential branch of drug use studies suggest that forms of minor drug use are becoming increasingly common amongst young people to the point of being normalized (Cristiano, 2015; Parker et al., 2002; Parker, 2005). This seems to be the opposite of the deterrence effect that is currently propagated by opponents of drug policy liberalization. Finally, the strategies used by prohibitionists have been found to be ineffective in reducing drug use on a national level in the U.S. (Robinson & Scherlen, 2014).

Drug Markets, Potency, and Prices

[24] No studies on how depenalization of other illicit drugs affects drug use were found. This is likely since in many jurisdictions in which depenalization is informal or based on discretion of police and prosecutors and would be difficult to study.

A major concern associated with any liberalization of drug policy, be it cannabis or stronger drugs, is that drug use rates will increase because drugs will become cheaper and more readily available because risks associated with trafficking and possession will decrease. However, most of the empirical research reviewed here on the impacts of decriminalization and prohibition runs counter to this logic.

The studies reviewed here suggest that decriminalization has little impact on drug prices – this finding is uniform across both cannabis and hard drugs including opioids (Hughes and Stevens, 2010; MacCoun, 2011; Lacquer, 2014; Félix & Portugal, 2017). Further, drug prices seem to be affected by a host of factors (e.g., changes in market structure, globalization, increasingly efficient communication and distribution networks, and more competition) that supply side strategies used by most countries have great difficulties in addressing (Costa Storti & De Grauwe, 2009; Félix & Portugal, 2017).

Taken together, some of the findings in this area indicate that more repressive drug policy (e.g., both pure prohibition and drug policy that incorporates prohibition) seems to breed demand for increasingly powerful and cheaper substances and may not be very effective in reducing the availability of drugs (Robinson & Scherlen, 2014). Again, this holds true for cannabis (Reinarman, 2009), and other illicit drugs as well, including opioids (Werb et al., 2013; Beletsky & Davis, 2017; Martin et al., 2017). If one considers how illegal substances have evolved in the last 50 years, this is obvious. The escalation of the War on Drugs in the 1970s and 80s gave rise to crack, which increased greatly in popularity during this time. During the 90s, there was an increase in the production and use of methamphetamine in the U.S. Increasingly, stronger strains of cannabis have emerged during cannabis prohibition and there are now highly concentrated forms of THC (i.e., butane hash oil and shatter) that are far stronger than older forms of this substance. Finally, the emergence and increasing availability of stronger opioids (i.e., fentanyl, carfentanil) are driving the current opioid overdose crisis.

Stigma, Treatment, and Drug-Induced Mortality

Stigma refers to a process of societal reaction that may result in labeling of a person based on their behavior (e.g., drug use). If this label is internalized it may start to affect subsequent behavior (Goffman, 1963). For example, the labeled person may start to perceive themselves a social outcast and this allows them to operate outside of typical social controls that most people follow (Lemert, 1951).

The stigma associated with drug use serves a dual function. While stigmatization may serve to discourage drug use, it might also discourage users from seeking and entering treatment because of the impact of being labeled an addict could have on other areas of their life (e.g., work, family, friends). For example, one could argue that under drug prohibition disapproval of any drug use is so high that it creates a negative stigma for those trying to seek help or leave that lifestyle (Stevens et al, 2019).

Taken as a whole, the studies on treatment uptake that were reviewed here suggest that in some cases levels of stigma may lessen after decriminalization of simple possession. For example, Portugal experienced a large increase in the number of people in treatment from 1998 to 2008 while demand for treatment declined – the number of females accessing treatment also increased suggesting that stigma may impact females more than males (Hughes & Stevens, 2010; Pombo & Da Costa, 2016). In other studies drug policy seemed to make little difference in treatment uptake (MacCoun, 2011; Adam & Raschzok, 2017).

Even though the Netherlands has technically not decriminalized drug use, the stigma there also appears to be quite low (Stevens et al., 2019). There are a variety of programs available for users and users rarely receive criminal records for simple possession of drugs (MacCoun, 2011; EMCDDA, 2019). Through the introduction of cannabis coffee shops, the Dutch also have altered the stigma around cannabis use by separating the cannabis market from the hard drug market (i.e., heroin, cocaine, methamphetamine). While there is still a certain level of social disapproval associated with using cannabis, it is regarded as different from other illicit drugs by the public. This calls into question the traditional interpretation of the "gateway drug hypothesis" and suggests that there is nothing about cannabis use that encourages harder drug use, but rather that association with criminal subcultures because of the criminalization of cannabis creates opportunities for harder drug use (Grund & Breeksema, 2013).

Lower rates of drug-induced mortality also suggest a reduction in stigma as they indicate that people are less likely to use alone or are more willing to seek out help when their addictions are out of control. The evidence reviewed here indicates that countries tend to have lower overdose mortality rates when compared to other countries (Gutheil et al., 2016; Hughes and Stevens, 2010; Lejčková and Mravčík, 2007). This can be further supported by more recent statistics from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). The European Union average overdose mortality rate is 2.2 deaths per 100,000.[25] The Netherlands and Germany are very close to this average (2.1 and 2.2 deaths per 100,000 respectively) even though they have

[25] These statistics are taken from the most recent E.U. country reports collated by the EMCDDA. The statistics for drug induced mortality are from 2016 as these are the most recent available.

very different drug policies (i.e., Germany's system is much more repressive and punitive compared to the Dutch tolerance approach). Interestingly, rates in Portugal and the Czech Republic are far below the average at .5 and .4 deaths per 100,000, respectively. Perhaps most shockingly, Denmark, a country that has recently repenalized drug possession, has a drug-induced mortaility rate of 5.5 deaths per 100,000 (EMCDDA, 2019).

There is strong evidence to suggest that some harm reduction programs are helpful for easing stigma around illicit drug use based on how they affect treatment uptake and overdose deaths. Research on drug consumption rooms and supervised injection sites indicate that people who use these facilities are more likely to enroll in detoxification programs and have higher rates of treatment uptake (Debeck et al., 2011; Hedrich et al., 2010; Wood et al., 2006, 2007).These facilities also appear to be useful for reducing overdose frequency and preventing overdose deaths (Marshall et al., 2011; Potier et al., 2014).

After experiencing a lack of success with a repressive approach in the 1970s and 80s, Germany has come to rely more heavily on mechanisms associated with social and public health services including targeted treatment and harm reduction programs (Holzer, 2017). The shift towards harm reduction approaches triggered normative mechanisms around stigma that affected how addicts are viewed – they went from criminals and alienated deviants to people who were sick and needed help (Fischer, 1995). Unfortunately, because German drug policy is rooted in a repressive approach, harm reduction programs have been subject to criminalization due to selective interpretation of the laws by the authorities (Körner, 2004).

Racial Disparities

Given the media attention devoted to race and policing in the U.S., it probably comes as no surprise to most that several studies have found widespread racial disparities in drug arrests. However, it comes as more of a shock when one realizes that these disparities and issues with prohibiting or limiting drug use also appear in the U.K., Australia, Canada, and several European countries with much more liberal systems.

The differences in racial arrest found in the studies conducted in the U.S. apply to both cannabis and hard drugs. This disparity cannot be explained by factors like difference in previous non-drug and drug-offending, sociodemographic variables, or geographic location (Males & Buchen, 2014; Koch et al., 2016; Mitchell & Caudy, 2015; Mooney et al., 2018). There are indications that these disparities play out in other countries as well in differential rates of drug law enforcement in Denmark, the U.K., and Canada (Møller, 2010; Lammy; 2017; Owusu-Bempah & Luscombe, 2020). There is also evidence that these disparities play out at other points in the criminal justice system (e.g., selection for drug diversion) (Baker & Goh, 2004).

To summarize, when compared to Whites minorities tend to be more heavily targeted with drug enforcement and receive harsher penalties at higher rates for the same drug offenses across multiple studies. This holds true in jurisdictions with prohibition and carries over when depenalization and diversion approaches are implemented.

Conclusions and Implications for Canada

The Policy Environment

The results of this analysis suggest that Canada should consider the option of decriminalization of simple possession of illicit drugs in the near future. Canada seems well-poised to implement a system like this based on a few contextual factors. Some insights on the proper conditions for decriminalization policy to thrive have emerged from the studies reviewed in this report (see for example, Stevens et al, 2019; Hughes, 2009). In some cases, these were intended to better understand how cannabis became decriminalized and legalized (Lenton, 2004; Hyshka, 2009) – these insights might also be applied to better understand Canada's policy position with regards to implementation of decriminalization policy.

First, Stevens and his colleagues (2019) point out the importance of considering how the country's culture relates to its politics:

> …Ireland's current consideration of alternative measures to criminalization follows a broader process of social liberalization, which has included referendum votes to legalize gay marriage (in 2015) and abortion (in 2018). Cultural values shape the nature of policy reform (7).

Canada is particularly well-suited in this regard as they have traditionally been a politically and culturally liberal country as they legalized abortion in 1988, medical cannabis in 2001, gay marriage in 2005, and recreational cannabis in 2018.

Second, Lenton (2004) and Hyskha (2009) point out in their historical analyses of cannabis policy reform, changes in policy tend to be more effective and successful if the public clearly understands them and supports the new measures. The opioid overdose crisis ensures that most members of the public have some grasp of what decriminalization would mean and the changes it would bring. Further, in many areas there is a long history of acceptance of harm reduction programs amongst the Canadian public. Finally, a recent Angus Reid Poll conducted in February indicated that there was 59% support for decriminalizing drugs (Grochowski, 2021).

Third, it is also important to have the support of the police when making this kind of a policy transition. In a report released in July 2020, the Canadian Association of Police Chiefs acknowledged that drug use disorders are a public health issue. They go on to state that they, "agree that evidence from around the world suggests our current criminal justice system approach to substance use could be enhanced using health care diversion approaches proven to be effective." (2).

A final group of stakeholders whose support is crucial but often ignored or overlooked is drug users (Lenton, 2004; Hyshka, 2009). This may be a significant source of problems with creating a new policy in Canada. In 2020, Vancouver applied for an exemption from the federal government that would allow them to decriminalize simple possession of small amounts of drugs (Crocket,

2021). However, several groups and organizations[26] both local and national have come out against this proposal. Their concerns[27] can be summarized as follows.

These groups claim that when planning the policy, Vancouver City Council engaged in a top-down process that relied heavily on consultations with law enforcement while ignoring the lived experience of drug users and ignoring changes in drug patterns that have occurred since COVID-19. They also suggest that the "Vancouver Model" will set a bad precedent for drug decriminalization in Canada and may result in more harm than the current system. The primary concern is around net-widening as they argue that the threshold limits are far too low and will penalize low-level users. According to these groups only full decriminalization with no penalties and very high (if any) threshold limits help to lessen the impact of drug related mortality. These groups also note that this new approach does nothing to address the harms caused by racial disparities that have existed in drug law enforcement for many years. To alleviate these types of concerns, federal policy makers should engage in meaningful consultations with drug users with lived experiences to inform their policy just as they would consult with medical experts or police.

Canada has a choice to make in terms of drug policy. The status quo can be adhered to and prohibition can remain in place. However, this will make it extremely difficult to address the problems identified in this report – racial disparities, limited enforcement and deterrence, and high rates (i.e., normalization) of drug use amongst youth. Further, there are problems that will continue to arise in the future that are impossible to address with the current system. The opioid overdose epidemic has accentuated the problems with repressive drug policies. Based on the research reviewed here, because of changes brought about by technology and globalization, supply side strategies will become increasingly futile in the future (Werb et al., 2013; Beletsky & Davis, 2017; Martin et al., 2017). New and more powerful synthetic drugs are constantly emerging produced by underground chemists in large quantities that can then be sold in an anonymous online environment which is incredibly difficult to police. Some recent research also indicates that some harm reduction site clients are knowingly using fentanyl despite being aware of its risks suggesting that a preference might be developing for more potent opioid drugs (see Karamouzian, Papamihali, Graham, Crabtree, Mill, Kuo, Young, & Buxton, 2020).

The motivation to adhere to the current system is a fear of the unknown. However, this report has presented a great deal of evidence suggesting that the negative ramifications of this change would be minimal. Findings indicate that crime would not increase in any meaningful or significant way. Policing and court efficiency would most likely improve and there would be fewer people in prisons and jails. If administered properly, there would be clear positive and mental public health improvements when compared to the current system of informal depenalization and prohibition

[26] These groups and organizations who have reacted include: BC Civil Liberties Association, Canadian Association of People Who Use Drugs (CAPUD), Canadian Drug Policy Coalition Canadian Students for Sensible Drug Policy (National), Canadian Students for Sensible Drug Policy, Vancouver Centre on Drug Policy Evaluation, Harm Reduction Nurses Association, Moms Stop the Harm, Pivot Legal Society, and the Vancouver Area Network of Drug Users.

[27] This list was compiled from letters written from VANDU (see: https://themainlander.com/2021/05/03/the-vancouver-model-of-decriminalization-will-set-a-dangerous-precedent-for-drug-users-across-canada/) and the MacPherson Group (see: https://www.drugpolicy.ca/wp-content/uploads/2021/05/Decrim-Done-Right-Statement-2-Update.pdf).

that Canada currently has. Drug use rates would likely remain stable and drug prices would likely remain stable. Decriminalization also seems to result in lower rates of drug related mortality and higher rates of treatment uptake. Finally, there is a pressing need to change the current system in a way that reduces the impact of the opioid crisis while also addressing the racial disparities that exist in drug enforcement (Lavalley, Kastor, Valleriani, & McNeil, 2018; Earp, Lewis, Hart, Veit, & Lester, 2021).

An important challenge to consider before implementing decriminalization is the level of funding that will be required for a shift of this nature. Decriminalization is often presented as a way to lower costs in the criminal justice system, and to some this might imply a reduction in taxes with reinvestment. However, it is important to realize that this policy shift is a massive financial commitment as well as a massive social commitment. In the following passage Smiley (2016) elaborates on the fiscal challenges faced by Portugal and proposes a possible solution:

> Portugal's funding problem is also not easy to solve. Funding Portugal's decriminalization model on a larger scale—for example, in a country like the United States—would be very difficult. One possible solution for future policies is to combine legalization and decriminalization. Marijuana is, debatably, the least harmful form of drug use, so legalizing marijuana for the tax revenue could be a fairly simple way to fund the decriminalization programs of other drugs. Revenue from marijuana would allow the State to pay for prevention programs for children and young adults, as well as treatment programs for addicts. This revenue could also be used by the police to fund supply reduction initiatives for more dangerous drugs. Decriminalizing the more dangerous drugs would also reduce the costs on the criminal justice system and help reduce the stigma of drug use and addiction. Combining both systems could be very effective in reducing the monetary costs of drugs on society, but the unknown long-term effects of marijuana could end up creating more harms for society. (855)

Given that Canada has already legalized cannabis, and this new industry is currently struggling to compete with the illicit cannabis market because of regulatory hurdles, gradual, limited, and evidence-based deregulation might present an interesting option (Levinson-King, 2019; Spears, 2019; Power, 2020; Williams, 2019a & 2019b; Heidt, 2021). However, as the author notes, more knowledge of the long-term effects of cannabis would be helpful (see also Sutton & McMillan, 2000; Sutton & Hawks, 2005).

Suggestions for Further Research: Implementation and Monitoring

Lenton (2004) also mentions that the policy approach must be supported by the available research and be amenable to evaluation and review after implementation (see also Hyshka, 2009). As discussed earlier, the evidence reviewed in this report suggests that compared to prohibition decriminalization is a superior policy approach for controlling drug use and minimizing the mental and public health harms.

To address the issues identified by drug user advocacy and other concerned groups mentioned above, federal policy makers would be well advised to review the current research literature on the lived experience of users and commission ongoing research in this area that could inform

decriminalization policy (see for example, Lancaster, Sutherland, & Ritter, 2014; Lancaster, Santana, Madden, Ritter, 2015; Tutenges, S., Kolind, & Uhl, 2015).

Based on the content of the complaints identified by the drug user advocacy groups it would also be wise to invest in more research exploring the connection between net-widening, threshold limits, and shifts in enforcement that may be triggered in response to liberalization of drug policies (for a starting point see, Belackova et al, 2017). This would also help to more specifically address concerns raised by drug user advocacy and other concerned groups around proper threshold limits.

Next, a re-examination of the health impacts of cannabis on society is necessary to determine if reducing regulations is a desirable option. Increases in tax revenue from sales in a less regulated system could provide money to support the costs of more harmful drug decriminalization. In addition, the government should reexamine how tax revenue from the cannabis is currently being used and distributed.

More insight about the healthcare and social programs used by Portugal to minimize the impact of problematic drug use would also be helpful. At this point, it is unclear if Canada has a comparable social support system in place that would be capable of accommodating drug users from many different walks of life. This would likely be qualitative research involving a rigorous review of these programs and ideally qualitative interviews with people who have worked in them.

Finally, there should be more critical examination of the harms caused by the administrative sanctions used by countries that have depenalized and decriminalized illegal drug use. When considering decriminalization many only consider how crime and health-related impacts of drug use a will impact society; however, there is considerable evidence to suggest that harms could increase if enforcement increases when decriminalization is implemented. In addition, the mental and public health harms of remaining under the status quo of prohibition should be considered in this research.

Substituting decriminalization, diversion, and harm reduction programs for simple drug possession will not solve the problem of drug use in the long-term. The motivation to change should arise from a realization that the current system of prohibition is, at best, expensive and ineffective, and at worst, a waste of taxpayer money and destructive to society. As time goes on, Canada will be forced to change its system in response to more powerful synthetic drugs at lower prices and the ongoing opioid overdose crisis. It is crucial to start further exploring options without delay.

Limitations

While it is important to consider indicator statistics, it is also important to realize that they must be interpreted with caution. First and foremost, a great deal of drug use goes undetected, so official statistics can be quite misleading. Indeed, Zeman and his colleagues (2017) caution that, "…the reliance on official crime statistics as the only source of data on crime rate and trends can lead to misleading and oversimplified conclusions." (pg. 1).

Second, changes in the rates of drug arrests may be more directly tied to differences in how laws are enforced in practice versus how they are written on the books or shifts in law enforcement

resource allocation (Belackova et al., 2017; Zeman et al., 2017). Radimecký (2007) explains below how vague goals that use official statistics as a measuring stick can create problems:

> As an illustration, when an unattainable and vague aim is formulated for primary prevention efforts, such as a decrease in the number of drug users, this proves to be dysfunctional in the long run as it is unachievable. This apparent failure may then lead to a call by some populist politicians for a tightening of drug controls through the introduction of harsher punishments for both drug dealers and users in order to more effectively deter young people from further use. *Despite the fact that there is no empirical evidence supporting such a punitive approach, the public and decision makers who are confused by the apparent ineffectiveness of drug education efforts might support such a measure. Of course, it is very likely that this repressive change in drug policy will also fail to achieve the initial goal—a reduction in the number of drug users.* Given these observations, in order to develop and implement a more realistic and effective drug policy, there must first be a convergence between rhetoric and practice, which can only be accomplished by a parsimonious utilization of accessible evidence. This important objective poses a real challenge for experts involved in drug policy formulation and implementation, regardless of whether they are researchers, practitioners, and/or civil servants (pp. 18-19).

Third, another limitation in this study was a lack of available research and statistics about the consequences of drug liberalization in some of U.S. states (i.e., Oregon and Maine) and South American countries (i.e., Uruguay and Argentina) that were reviewed. In the case of the U.S. states, it seems that the changes are too recent to be reflected in the research or the changes had not been fully implemented during the writing of this report. In cases of Uruguay and Argentina, there were language barriers as some government reports were only available in Spanish and the research infrastructure and interest around these topics do not seem to currently be in place.

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