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Drugs and Crime

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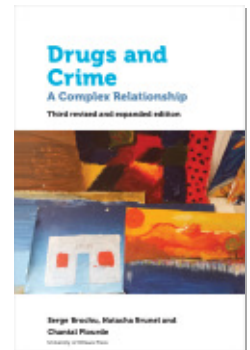
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Drugs: A Detailed Criminogenic Profile

In chapter 1, we presented a general overview of drug use among juvenile and adult offenders. Epidemiological data show that illicit psychoactive substance use is often associated with the commission of crimes among offenders apprehended by the criminal justice system. In this chapter, we examine the main characteristics of the most commonly used substances, intoxication, and dependence, and we detail documented links between criminality and various types of substances. We consider each of these factors in turn to fully understand the role of drugs in the drug–crime relationship.

We have organized this chapter to help the reader understand complicated issues while avoiding the intellectual pitfalls of addressing each theme in a separate chapter. We begin with a discussion of the pharmacological properties of various substances with respect to intoxication, the role intoxication plays in decisions to commit crimes, and, briefly, victimization associated with intoxication. We then look at the criminality of people who have developed drug dependence, a phenomenon that calls for a different analytical approach because a pharmacological lens alone is insufficient here. The complexity and sheer quantity of information about different substances is such that only health experts can find their way through the flood of data, so we concentrate on the essentials for the sake of concision and simplicity because our goal is not to write an in-depth pharmacological treatise.

There is clearly a difference between people who consume too much of a substance and become intoxicated once and those who do it so often and to such excess that they develop tolerance and dependence, or *substance use disorder* (SUD). Two effects of psychoactive substances are often associated with criminality. The first, intoxication, is a short-term effect. The second, SUD, results from a particular drug use pattern. For one thing, it appears that intoxication by one or more drugs can change the user's behaviour, opening the door to certain criminal tendencies, such as violent and aggressive behaviour, that would not emerge under other circumstances. For another, black-market drugs are very expensive, so people with increasing tolerance may turn to criminal activities to cope with a mounting financial burden.

Selected Important Definitions

Intoxication: A condition that follows the administration of a substance and results in disturbances in the level of consciousness, cognition, perception, judgment, affect, or behaviour, or other psychophysiological functions and responses.¹

Tolerance: A gradual decrease in the effect of a substance when consumed at the same dosage. To achieve the effects originally produced by a particular substance, the user may have to increase the dosage: more is needed to produce the same effect. Tolerance is not dependence.

Withdrawal: Symptoms that occur when individuals stop using psychoactive substances. Repeated drug use disrupts neurotransmission in various brain structures. The brain adapts to the disruption by modifying neuron function. Withdrawal syndrome occurs when substance use is discontinued abruptly because it takes time for neurons to get back to normal. Those who wish to prevent or relieve the symptoms and discomfort associated with withdrawal have two options: re-administer the substance and maintain dependence, or give their body time (days, weeks, even months for certain symptoms) to recover original neural function with or without pharmacological treatment.

Substance Use Disorder (SUD): According to the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*, the presence of at least two of the following symptoms within a twelve-month period:

- tolerance
- withdrawal
- substance taken in larger amounts or over a longer period than was intended
- persistent desire or unsuccessful effort to cut down or control use
- a great deal of time spent in activities necessary to obtain, use, or recover from the effects of the substance
- activities given up or reduced because of use
- continued use despite knowledge of problems caused or exacerbated by use
- craving, or a strong desire or urge to use the substance
- recurrent use resulting in a failure to fulfil major role obligations at work, school, or home
- continued use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance
- recurrent use in situations in which it is physically hazardous

Previously, an individual displaying at least three of the symptoms listed was considered dependent, but the DSM-5 now assesses the severity of the disorder on a continuum according to the number of symptoms an individual displays, from mild (two or three symptoms) to moderate (four or five symptoms) to severe (six or more symptoms).

According to Ben Amar (2007), psychoactive substances affect an individual's mind by changing how the brain functions, thereby altering perceptions, mood, consciousness, behaviour, and physical and psychological functions. Intoxication may be occasional or chronic (almost continuous or frequently repeated), and abuse of particular substances may result in tolerance or psychological or physical dependence.

We will begin with a brief discussion of the main categories of illicit substances and links between intoxication (effects and after-effects) and primarily expressive crime (violence). We will then examine dependence, or SUD, not in terms of different substances but in terms of repercussions on individuals and potential implications for their delinquency trajectories. Here we will focus on acquisitive crime (theft, trafficking).

Intoxication and Criminal Behaviour

Traditional and social media have played a significant role in reinforcing the conventional wisdom that intoxication plays an active role in the commission of crimes. Offenders themselves attribute their actions to intoxication, perhaps because it alleviates their feelings of guilt. Over 80 percent of Canadian federal inmates participating in a study on this subject stated that using illicit drugs on the day of the offence impaired their judgment,² and a third said that drugs had made them more combative³ (Pernanen et al. 2002). Various psychoactive substances seem to have properties that make people more likely to commit crimes. Some people even suggest that drugs have criminogenic properties: users commit crimes that they would not have committed had they not been under the influence of a drug. Although it is clear that consuming a substance that acts on the central nervous system (CNS) can affect cognitive function, mood, and even certain physiological functions, giving rise to reprehensible and sometimes violent conduct, the vast majority of drug use episodes do not result in the commission of crimes. Before we review the properties of the main psychoactive substances that can be linked to criminal behaviour, we must remember that a whole host of factors may influence an individual's intoxication and behaviour. These include the dose ingested and the context of use, which comprises the setting; the user's expectations regarding the effects of the drugs; personality; neurobiological and psychological characteristics (such as impulsive propensity); and past experiences. In other words, it is a dynamic interaction of various features of the drug-set-setting triangle (Valleur and Matysiak 2006).

Let us now examine, one by one, the illicit psychoactive substances most frequently consumed by offenders so that we may better understand the relationship between their individual properties and the perpetration of crimes. Because our theme is drugs, we will not be looking at alcohol in this chapter; nevertheless, we must bear in mind that alcohol is the psychoactive substance most commonly associated with violent delinquency (Makkai and Payne 2003; Pernanen et al. 2002).

Cannabinoids

Although cannabis use is declining in Canada (Health Canada 2011a), it is the most frequently consumed illicit drug here and around the

world and has been since prevalence study results were first reported (UNODC 2011). Cannabis (reefer, pot, ganja, weed) is the scientific name for Indian hemp, a plant used to produce marijuana and other derivatives. At different times and for different reasons, experts have classified this substance as a depressant, a psychotropic, and a hallucinogen. It is now typically classified as a psychotropic drug because it modulates the CNS. Tetrahydrocannabinol (THC) is the active ingredient in cannabis that produces the desired psychoactive effects. Cannabis is consumed in several forms, including marijuana (dried leaves and stems mixed with tobacco), hashish (compressed slabs consumed in cigarettes or water pipes), and oil (more concentrated, consumed in pipes). The THC concentration varies enormously from one product to another: marijuana contains between 1 percent and 20 percent, hashish between 2 percent and 30 percent, and hash oil between 10 percent and 20 percent or even up to 70 percent in some cases (Health Canada 2013a). According to the RCMP (2015), THC content in marijuana was between 1 percent and 3 percent 20 years ago; it is now 12 percent on average. A recent meta-analysis by Cascini, Aiello, and Di Tanna (2012) revealed high variability in the increase in THC levels worldwide but a general increase in cannabis potency between 1979 and 2009. "Of course, this is just an indication of the overall increase, but it is clear that this rise in mean THC seems to have been more rapid in the last decade" (Cascini, Aiello, and Di Tanna 2012, 34). Even so, the increase in THC concentration "does not exceed 5% globally" (*ibid.*)

Cannabis intoxication produces a state of relaxation, a sensation of well-being, and euphoria. It alters the user's perceptions and may cause anxiety and psychosis. Physically, it increases the heart rate, slows reflexes, and stimulates appetite (Ben Amar and Léonard 2002; Centre québécois de lutte aux dépendances 2006).

Evidence suggesting that the properties of cannabis directly induce people to commit crimes is inconsistent. As Ostrowsky (2011) points out, the properties attributed to the substance are many and varied, as are the reported relationships between cannabis use and violence:

Taken together, the results of some studies suggest that marijuana use and violence are positively associated, some research has found no association, and other studies even reveal that marijuana use can reduce aggressive behavior. These conflicting findings are

not overly surprising, considering that marijuana has been classified at different times by different investigators as a depressant, a stimulant, a hallucinogen, and a narcotic. (Ostrowsky 2011, 383)

Our own work has shown that some offenders use cannabis to reduce anxiety or manage stress related to a planned criminal activity or one that is under way (Brunelle, Brochu, and Cousineau 2005). In such cases, the psychopharmacological properties of the substance do not cause the crime, but they do enable the offender to commit it.

Although many consider cannabis to be relatively harmless, studies increasingly support the idea that cannabis may be a risk factor for the development of mental illness. In some people who are prone to psychosis, exposure to cannabis may trigger the illness, which is sometimes a precursor to violent behaviour (Boles and Miotto 2003; Fergusson et al. 2006). Studies on the links between cannabis, mental health disorders, and violence highlight the complex role that cannabis can play in violent behaviour and the importance of thoroughly analyzing the problem. It is becoming clear that we must pay special attention to the interaction between the drug and the individual as well as to the characteristics that make individuals more or less susceptible to the effects of cannabis if we want to understand how the substance can be involved in the emergence of violent behaviour. We must bear in mind that not everyone who develops a mental illness becomes violent. A minority of cannabis users develop mental health disorders, and only a few of those become violent.

Synthetic cannabinoids (e.g., Spice) are illegal substances that look and smell like natural cannabis and produce similar effects. These illicit substances may be sold in shops and online as “natural” products, a label that boosts their appeal and conveys a false sense of security about their effects. According to the National Institute on Drug Abuse, in 2012, use of Spice among adolescents in the United States was second only to natural cannabis (NIDA 2012). It is more potent and addictive than cannabis. Its growing popularity is no surprise considering its “promise of a stronger high than cannabis, easy access, affordability, [and] perception that the products are legal” (Spaderna, Addy, and D’Souza 2013, 526). Clinical studies and a very few empirical and other research undertakings suggest that synthetic cannabis can cause agitation, anxiety, aggression, mood swings, and odd behaviour (*ibid.*). We cannot generalize from these findings because they are drawn primarily from case studies, which tend to be

extreme situations, and from personal accounts. To date, no study has established a clear connection between this substance and criminality.

One issue in particular is of growing public concern: driving while under the influence of cannabis. Unlike substance-induced paranoia, drug-impaired driving is not a direct consequence of drug use, but it is nevertheless a crime. Research on drug-impaired driving is not nearly as advanced as that on drunk driving. Bergeron et al. (2007) studied the issue of driving under the influence of cannabis and alcohol. They recruited seventy-five male drivers aged seventeen to forty-nine (median age twenty-three; mean age twenty-seven) who had consumed cannabis within the previous twelve months. The volunteers were asked to complete a series of questionnaires about their perceptions, attitudes, and behaviours with respect to various driving situations.

A third of the men in the sample reported driving within an hour of having consumed cannabis (alone or in combination with alcohol) during the previous year. Unlike other participants, these men were regular thrill-seekers and heavy drinkers. They frequently engaged in risky driving, drove faster than the other participants, and were involved in more accidents. Curiously, although they recognized that cannabis can impair driving, most of them failed to perceive their own risk exposure. Moreover, they considered drunk driving to be more dangerous than driving under the influence of cannabis. Another study (Fischer et al. 2006) showed that forty-five Toronto university students who had consumed cannabis before driving at least once in the previous twelve months held similar beliefs. Although most of them recognized the risks associated with driving under the influence of cannabis, they believed they had ways to compensate for some of the drug's effects.

In a 2008 roadside survey of 1,533 randomly selected British Columbia motorists (median age thirty-four) driving between 9:00 p.m. and 3:00 a.m., almost 90 percent of the drivers provided a breath sample and just over three-quarters provided a saliva sample. Survey results showed that 10.4 percent of the drivers tested positive for at least one drug and 8.1 percent for alcohol. Cannabis and cocaine were the two drugs most frequently detected in the sample. The researchers also found that "drivers believed that one was significantly more likely to be stopped after drinking too much than after using drugs" (Beirness and Beasley 2010, 219).

A compendium of studies published by the Department of Justice Canada (2007) revealed conflicting findings about driving

under the influence of cannabis. While some studies suggest that the use of cannabis reduces accident risk because of its effects on the CNS and the precautions drivers take so as not to attract police attention, others conclude that it significantly increases risk because of its effects on psychomotor function. Given the paucity of scholarship in this area and the technological limitations on the ability of the police to detect this substance, it is still difficult to arrive at a sophisticated understanding of the precise role of THC or the dose and level of intoxication that affect driving performance. However, the effect of cannabis on the cognitive functions involved in driving appears to be dose-related (Ramaekers et al. 2004). This may partly explain the variable results of studies on the effects of cannabis on driving and accidents. Considering the number of accidents and the human and financial losses attributed to impaired driving, let us hope that more research will be done in this area and that the coming decade will bring advances in impairment detection tools and technology.

A final note on cannabis: recent work has shown that although it is not a significant predictor of criminality due to user intoxication, it is nevertheless strongly associated with drug-specific crime (possession and petty trafficking), especially in countries that adopt a repressive approach to the substance and those who use it (Pedersen and Skardhamar 2010), as we will see in a later chapter.

Stimulants

There are two categories of stimulants: major (cocaine and amphetamines) and minor (caffeine and nicotine). After cannabis, major stimulants are the most commonly consumed illicit drugs in North America. As the name suggests, their primary function is to stimulate the CNS and produce a burst of energy. People under the influence of stimulants experience greater alertness, endurance, and mental acuity. In addition to their stimulating properties, these substances suppress appetite and induce a state of well-being and a feeling of euphoria. We will concentrate on the two major stimulants: cocaine and its derivatives, and amphetamine-type stimulants.

Cocaine

According to the United Nations Office on Drugs and Crime, in its *World Drug Report 2013* (UNODC 2013b), cocaine (coke, crack, base,

freebase) is one of the most commonly used substances in the world. Cocaine, a psychostimulant derived from the leaves of the coca plant, comes in two main forms: cocaine hydrochloride and cocaine base. The first is a water-soluble powder that is typically snorted or injected, and the second is a non-water-soluble solid that can be smoked. Freebase and crack are the two most widespread forms of cocaine base.

Short-term effects of cocaine include heightened alertness and energy. It suppresses fatigue and hunger and induces a feeling of confidence. Undesirable effects of cocaine intoxication include agitation, anxiety, insomnia, hallucinations, and delirium. Withdrawal symptoms include irritability, fatigue, hunger, and depression (Government of Canada 2015).

Let us keep in mind that researchers investigating the criminality of cocaine users typically study individuals who are dependent or who misuse the substance, not occasional or recreational users. There is a clear distinction between a psychologically and socially healthy individual who uses cocaine occasionally and an individual who regularly uses crack on the street.

A study by Prisciandaro et al. (2012) revealed “associations between behavioural disinhibition and cocaine use in cocaine-dependent individuals” (p. 1185). An Ontario study of people in treatment for substance dependence (MacDonald et al. 2008) showed that “frequency of cocaine and alcohol use, disrespect for the law, aggressive personality, age, and sex were significantly related to violence” (p. 201). While the research suggests multi-causal explanations, cocaine use (often in combination with alcohol) appears to play a significant role in the perpetration of violence, which supports the hypothesis that the psychopharmacological effects of certain drugs are associated with violence.

Research from over a decade ago, though less careful than recent work, found that certain psychological symptoms associated with using cocaine could contribute to violent behaviour (Boles and Miotto 2003; Friedman, Terras, and Glassman 2003; Moeller et al. 2002). Cocaine use can induce extreme suspicion and intense paranoid delusions that the user may or may not recognize as psychotic experiences (Special Committee on Non-Medical Use of Drugs 2002; Erickson et al. 2000). It is not unusual for users to report trying to find a person they believe is hiding in a closet or watching the sky to spot a police helicopter that they believe is monitoring them. Others have been gripped with suspicion about a neighbour’s true identity, believing him or her to be a police informant. Individuals tend to respond to feelings of

paranoia in one of two ways: flight or fight. This is where another property of cocaine comes into play: it produces a sense of power that causes some users to engage in situations that have the potential to become very violent rather than retreat from them. Fortunately, some users who are prone to experiencing paranoia deliberately take other psychoactive substances that act as depressants (benzodiazepines or other popular black-market psychotropic substances such as Seroquel or cannabis),⁴ to mitigate these undesirable effects. Irritability produced by what cocaine users call a post-high “crash” can also lead to violence (Goldstein 1998).

We must nevertheless be extremely cautious in directly attributing criminal behaviour to the use of a psychoactive substance such as cocaine. Attempts to establish a straightforward, one-way association between cocaine and violence quickly break down when other causal factors and the methodological flaws of the studies are taken into consideration.

Amphetamine-type Stimulants

The most popular of the amphetamine-type stimulants (ATSs) are amphetamines, methamphetamine, and MDMA (ecstasy). According to the UNODC (2013b), “the use of ATS . . . remains widespread globally, and appears to be increasing in most regions” (p. x). Methamphetamine,⁵ which “accounted for 71% of global ATS seizures in 2011” (ibid., xi), continues to dominate the market for such substances. In 2015, methamphetamine use was not as widespread in Canada as elsewhere. The threat of a so-called looming meth epidemic made headlines for years, but, fortunately, it never really materialized, at least not to the extent predicted.

ATSs are CNS stimulants. Users experience higher levels of consciousness and dramatically enhanced perception. ATSs were initially prescribed for narcolepsy, depression, obesity, hyperkinesis, and even alcoholism, but are no longer necessarily indicated for these conditions (Goode 1999). People use them recreationally to derive greater pleasure from certain activities and to achieve euphoria; some like the fact that ATSs can help them lose weight, too (Boys, Marsden, and Strang 2001). Many of the effects of ATSs are similar to those of cocaine, described above.

These substances can have adverse effects when hyperresponsiveness to environmental stimuli induces annoyance, impatience, and

irritability, particularly during withdrawal (Wright and Klee 2001). Intravenous administration and pathological use of ATs can lead to hypervigilance, a distorted sense of reality, panic, emotional instability, hyperactivity, poor judgment, reduced impulse control, paranoid thoughts, and even prolonged psychotic episodes that can later lead to out-of-control aggressive behaviour (Boles and Miotto 2003; Miller 1991). According to Makkai and Payne's study of incarcerated male offenders (2003), "regular amphetamine users were more likely to be engaged in violent offending . . . and were significantly more likely to act impulsively with no planning" (p. xvi).

It is important to note that not all users experience violent episodes. In fact, these effects are virtually non-existent among truckers who use the drug to stay awake longer and among individuals for whom it was prescribed to treat obesity (Greenberg 1976). Aggressive behaviour is clearly not ubiquitous among those who use major stimulants. Even so, some people seek out these drugs believing that they will become more aggressive if they use them. The drugs' reputation alone gives people the confidence to carry out planned acts and a way to excuse their actions by blaming an external factor (Makkai and Payne 2003; Wright and Klee 2001).

Because of its connection to a particular subculture, ecstasy (MDMA) merits special consideration to achieve a better understanding of the drug and its effects. According to the UNODC (2013b), its prevalence in 2011 (19 million users, or 0.4 percent of the population) was lower than in 2009. Typically associated with raves, electronic music, and uninhibited sexual behaviour, and classified as both a stimulant and a hallucinogen (Health Canada 2013b), this drug is a powerful CNS modulator. Parrott (2013) reported that MDMA was primarily used recreationally twenty-five years ago and is now used mainly by subgroups of young people (ravers), and that "population surveys have revealed that it is the third most widely used illegal drug, after cannabis and cocaine" (p. 291). Ecstasy has several desirable and popular properties:

Like some other substances in the amphetamine family, ecstasy has hallucinogenic properties that produce marked changes in sensory perception to which are added certain specific properties. Ecstasy decreases psychic inhibitions, makes it easier to express emotions, creates a sense of empathy with others, and produces a feeling of freedom in interpersonal relations. (Rouillard 2003)

Ecstasy's combined empathogenic⁶ and entactogenic⁷ properties make users feel "connected" to one another. They want to be close to other people and tend to touch each other and allow themselves to be caressed. According to a recent study, ecstasy makes users feel "relaxed, happy, loving and sexually uninhibited" (Lee et al. 2011, 533). Some of the known undesirable effects, which may intensify if usage shifts from recreational to chronic or from moderate to heavy consumption, include irrational, impulsive, and even obsessive behaviours, impaired cognitive function, intensified negative emotions, and mental hallucinations (Parrott 2013; Rouillard 2003). Lee and her fellow researchers (2011) reported that the "thizzin'" effects of ecstasy (energizing, disinhibiting, numbing, etc.) can result in "violence and aggression as well as fun" (p. 528): "Violence and aggression were also attributed to an overall disinhibiting effect from the drug as well as to feeling 'superhuman'" (p. 534). According to Reid, Elifson, and Sterk (2007), "those with a higher prevalence of lifetime ecstasy use exhibit higher levels of aggressive and violent behavior" (p. 104). Basically, the more people use this substance, the more violence and aggression they exhibit. Reid and her co-investigators found that the effect of ecstasy use on the aggression levels of those with low self-control is not as great as on those with high self-control. In other words, "at high levels of lifetime ecstasy use, those with high self-control actually exhibit more aggression than those with low self-control" (p. 115). Ecstasy's effects are related to self-control: it has little effect on those with low self-control. On a related note, some ravers describe coming down from an ecstasy high as a "descent into hell" with adverse effects including depression, generalized anxiety, agitation, trouble sleeping, and erectile dysfunction (see, for example, Lee et al. 2011). It is easy to imagine how consuming large doses of a powerful stimulant combined with sleep deprivation during long nights of dancing can put people on edge.

Benzodiazepines

Doctors widely prescribe benzodiazepines (CNS depressant drugs: Ativan, Dalmane, Librium, Halcion, Restoril, Rohypnol, Serax, Valium, Xanax) for their anxiolytic and sedative effects. According to data published in 2011 by the U.S. Substance Abuse and Mental Health Services Administration, admissions for benzodiazepine abuse and dependence almost tripled from 1998 to 2008. Of those admitted,

95 percent “reported abuse of another substance in addition to abuse of benzodiazepines: [82 percent] reported primary abuse of another substance with secondary abuse of benzodiazepines, and [13 percent] reported primary abuse of benzodiazepines with secondary abuse of another substance” (p. 1). Generally speaking, doctors recommend this treatment for people with problems such as anxiety, insomnia, and alcohol withdrawal (Konopka et al. 2013; Landry, Gervais, and O’Connor 2008).

Most benzodiazepines are available in pill form and are administered orally, but some are administered intramuscularly, intravenously, or sublingually (Landry, Gervais, and O’Connor 2008). Benzodiazepines administered intramuscularly are fast-acting tranquilizers often used in emergency situations to control agitation, violence, and aggression, particularly in individuals with severe mental health disorders (Gillies et al. 2013; Landry, Gervais, and O’Connor 2008). Adverse effects associated with this class of substances include drowsiness, psychomotor retardation, confusion, hallucinations, impaired attention and judgment, memory loss, and withdrawal symptoms⁸ (Ben Amar and Léonard 2002; Landry, Gervais, and O’Connor 2008).

Benzodiazepines frequently turn up on the black market. Some users turn to these drugs for their disinhibiting properties, which can sometimes (though rarely), lead to aggressive or violent behaviour. In that sense, the pharmacological properties of these substances are similar to those of alcohol. Intoxicated individuals may show signs of emotional instability, cognitive and motor disorder, poor judgment, and memory loss. Benzodiazepines are rarely consumed alone. People use them to avert the side effects of cocaine and other stimulants, to partially counteract the effects of opiate withdrawal, or to replace a drug of choice when it is not available (Boles and Miotto 2003). Paradoxical reactions to this drug include anxiety, restlessness, psychomotor agitation, and insomnia.

Once again, other mediating factors complicate our understanding of the relationship between drugs and criminality. These include concomitant alcohol consumption, dose, history of aggression, personality disorders, impulsivity, and anxiety (Jones et al. 2011; Lader 2011; Saïas and Gallarda 2008). In their study of young offenders,⁹ Forsyth, Khan, and Mckinlay (2011) examined the link between violence and alcohol and benzodiazepine consumption, and found that diazepam (Valium) was the illegal drug most often identified as a factor related to the respondents’ offending behaviour, despite the fact that it is not

the most popular illicit substance. The researchers hypothesized that diazepam is more likely to be a factor in violence when used together with alcohol. Diazepam seems to exacerbate many of the negative effects of alcohol, including loss of control. A study by Lundholm and her co-investigators (2013) of a modest sample ($n = 194$) of remand prisoners yielded similar findings: “Influences of alcohol and unusually high doses of benzodiazepines are proximal risk factors for violent crime” (p. 110). In addition, withdrawal from sedative-hypnotic drugs is linked to irritability and anxiety, which may lead to violent behaviour. According to Boles and Miotto (2003), “in severe cases, sedative withdrawal may produce visual and auditory hallucinations” (p. 165).

As we have seen, the link between benzodiazepine use and violence is complex and still only partly understood. On the one hand, benzodiazepines are considered psychotropics and are used to treat aggressiveness and violent behaviours in certain clinical contexts. On the other, this class of substances may be linked to violent behaviour. The risk is modulated by factors such as the user’s personality, the context of use, and the dose.

Heroin and Other Opioids

According to Canadian Alcohol and Drug Use Monitoring Survey results for 2011, 0.4 percent of Canadians aged fifteen and older had consumed heroin at least once in their lives. That number, relatively low, is on the decline; in 2004, lifetime prevalence of heroin use was 1 percent. For youth, the rates have been steady at less than 1 percent for several years (Laprise et al. 2012).

As far back as 1925, Lawrence Kolb noted that, “both heroin and morphia in large doses change drunken, fighting psychopaths into sober . . . non-aggressive idlers” (p. 88). The psychopharmacological properties of opiates and opioids (codeine, hydromorphone, heroin, methadone, morphine, oxycodone, and meperidine) do not generally produce violent behaviour. Rather, in many cases, the sedative properties of heroin calm combativeness.

Heroin is a synthetic water-soluble salt, typically heated and injected intravenously. It can also be sniffed, smoked, or inhaled (“chasing the dragon”). Some users combine heroin with cocaine, amphetamines, benzodiazepines, and cannabis. Users typically describe a three-stage experience: the “flash” or “rush” (power, euphoria, well-being), relaxation, and the comedown (return to reality, depression).

The most acute phase may be accompanied by miosis, hypothermia, sweating, nausea, and vomiting (Touzeau and Courty 2012).

Methadone, which is available in Canada in pill form or as an oral solution, is a synthetic opioid that acts on the same receptors as heroin. Used for heroin withdrawal or in substitution programs, it is sometimes diverted to the black market for its analgesic properties. This is also the case for hydromorphone (Dilaudid), a molecule used to relieve pain such as post-operative pain; it exists in both oral and injectable forms.

Withdrawal, which usually begins a few hours after the last dose, is characterized by agitation, aggressiveness, irritability, dysphoria, anxiety, muscle pain, cramps, and diarrhea. Regular users fear withdrawal and try to avoid it at any cost. Cravings and an intense desire to get more of the substance to end withdrawal may drive people to commit crimes. Just trying to procure the substance can make people aggressive.

Here again, interpreting the relationship between opioids and criminality involves a complex assortment of interconnected psychopharmacological (including withdrawal symptoms), personal, and contextual variables.

Hallucinogens

The use of hallucinogens among people of all ages remains a relatively rare phenomenon. In 2012, about 1 percent of the Canadian residents surveyed reported using hallucinogens (Health Canada 2013), a rate that has been stable for the past decade. In this section, we will look at two types of hallucinogens: LSD-type (psychedelics) and dissociative anaesthetics.

LSD-type hallucinogens produce major cognitive and behavioural distortions. While the user's experience depends on his or her temperament and mood, these substances generally produce hallucinations and alter perceptions, thoughts, and feelings but do not cause persistent confusion or memory problems (Ben Amar and Léonard 2002). Taking a hallucinogen in an anxiogenic or traumatic setting can lead to a "bad trip" or flashbacks that can last anywhere from a few hours to several years (Pflieger 2005).

Dissociative anaesthetic hallucinogens are drugs with multiple properties and kaleidoscopic effects. PCP in particular is a very powerful hallucinogen that produces general anaesthesia by reducing

or eliminating sensation and the perception of pain. Its effects last between four and six hours.

They are more frequently associated with memory problems, strange or violent behaviour, and toxic psychosis. In addition to behaviour problems, overdosing can cause problems with the breakdown of muscle tissue (rhabdomyolysis) that may result in the accumulation of metabolic waste and lead to renal blockage. Chronic intoxication produces intellectual, psychological, and psychiatric problems.¹⁰ (Léonard and Ben Amar 2000, 148)

It is widely believed that PCP and similar substances (such as ketamine, also known as Special K), seriously impair the user's interpretation of external stimuli and that some people become disoriented after consuming it. However, scientific studies have not found a clear association between PCP use and hostile behaviour (Crane, Easton, and Devine 2013; Hoaken and Stewart 2003). This is partly because it is difficult to differentiate its effects on such behaviours from the direct effects of other substances it is usually used in conjunction with and partly because many other factors, including the user's personality, must also be taken into account (Crane, Easton, and Devine 2013). Once again, users' psychological characteristics (antisocial personality) and psychiatric history may be better predictors of the expression of violent behaviour than PCP use (Hoaken and Stewart 2003). It remains that "violence may be more likely to occur when PCP is present" (Crane, Easton, and Devine 2013, 155).

Drug Interactions

As we saw in our review of the various substances, using more than one drug at once is evidently a widespread practice. It is not uncommon for users to consume a cocktail of several substances, one of which may be alcohol. The terms *polyconsumption* and *polydrug use* apply when drug users voluntarily and deliberately engage in this practice. Polyconsumption may be simultaneous or sequential. Users may practice polyconsumption to enhance the effects of a drug or ward off its adverse effects.

Obviously, products sold on the black market do not have to meet quality control standards or comply with strict manufacturing practices that ensure the product sold is actually what the buyer

believes it to be. In many cases, while the substances sold contain some measure of what they are supposed to contain, they are cut with cheaper products that produce similar effects but may have psychoactive properties unlike those the user is seeking.

Intentional or *accidental* consumption of a combination of drugs can have a major impact on the user's reaction to environmental stimuli. Although the simultaneous or sequential (within a certain period of time) use of certain substances simply produces an additive effect, mixing certain other drugs can synergistically produce effects the user would not expect from any of those drugs taken alone. Given that the effects of even a single drug are not always well understood, it goes without saying that the effects of drugs in combination are difficult, if not impossible, to predict with any accuracy. As we probe the relationship between drugs and criminality, this synergistic phenomenon makes establishing "pure," direct associations between a drug and a behaviour much more complicated, if not downright impossible. Since studies take place not in an experimental context but in a "natural" environment, polyconsumption, more often the norm than the exception, must be taken into account when interpreting and drawing conclusions from results (Dafters 2006; Reid, Elifson, and Sterk 2007).

Victimization While Under the Influence of a Psychoactive Substance

In this chapter, we have focused on the properties of drugs that may cause people to engage in unlawful behaviour while intoxicated or in withdrawal, but we feel it is important to draw the reader's attention to another facet of the drug-crime dynamic: victimization of the user. Psychoactive substances may increase the user's risk of becoming a victim of violence. The death rate among drug-dependent people is higher; while this is due in part to disease, overdose, and suicide, it is also due to violent acts such as homicide, assault, and robbery.

Australian researchers Darke, Duflou, and Torok (2009) conducted a study of toxicology and violent death over a ten-year period ($n = 1,723$), comparing analyses of suicide and homicide cases. Their findings were consistent with those of other studies and indicate the relatively frequent presence of psychoactive substances in victims of violent death. However, certain differences were observed between homicide and suicide cases, with the former being more likely to have an illicit substance (cannabis, opioids, psychostimulants) detected. A

meta-analysis (Kuhns et al. 2009) of toxicology study findings among homicide victims indicated that, “on average, 6% of homicide victims tested positive for marijuana, 11% tested positive for cocaine, and 5% tested positive for opiates. [In general,] the proportion of homicide victims testing positive for illicit drugs has increased over time” (p. 1122).

Another major study of 1,565 ethnically diverse and socio-economically disadvantaged U.S. high school students examined the association between dating victimization and psychoactive substance use. The study concluded that, “compared to their nonabused counterparts, youth who experienced dating violence were more likely to smoke cigarettes, drink alcohol, binge drink alcohol, . . . use marijuana, [and] use ecstasy” (p. 701), among other things. However, multivariate analyses showed no association between substances other than alcohol and cigarettes and dating violence, possibly because of underlying variables such as antisocial personality or the co-occurrence of polydrug use (Temple and Freeman 2011).

A number of studies have examined the link between intimate partner violence among adults and psychoactive substance use from the points of view of perpetration and victimization (Smith et al. 2012; Afifi et al. 2012). Although they differ in some respects, these studies all found a relationship among the perpetration of violence, victimization, and specific psychotropic substances.

The findings from this study, especially when adjusting for the correlation between victimization and perpetration, were largely consistent with what might be expected when considering the psychopharmacological effects of the drugs. Alcohol and cocaine were most strongly associated with intimate partner violence, while cannabis and opioid analgesics were most strongly associated with victimization. (Smith et al 2012, 244)

In recent years, certain illicit substances, known as date-rape drugs, have been specifically associated with sexual victimization. These include two odourless, colourless substances that dissolve easily in alcoholic beverages without altering their taste and are rapidly eliminated in urine: Rohypnol and gamma-hydroxybutyrate (GHB). Rohypnol, or flunitrazepam, is a benzodiazepine hypnotic not approved for medical use in Canada or the United States.¹¹ Its effects manifest as sedation, muscle relaxation, and sleep. It can produce

anterograde amnesia.¹² Rohypnol is sometimes deliberately used with other CNS depressants, such as alcohol, heroin, or marijuana, to enhance their effects (Negrusz and Gaensslen 2003).

GHB was first synthesized in the 1960s. Little effort has been put into commercializing GHB, but it has long been available in health food stores as a food supplement. It is often sold illegally as an aphrodisiac. Some bodybuilders say that GHB helps metabolize fat and build muscle mass. Ravers use it for its euphoria-inducing properties. Only a few cases of sexual assault following the administration of GHB alone and unbeknownst to the victim have been scientifically documented. Victims have no memory of events during and after victimization. According to data from Quebec's Addiction Prevention Centre (2006), 19 percent of Montrealers attending raves had used GHB in their lifetime, which suggests that many people choose to consume it voluntarily. Considering that people use the substance to reduce anxiety and inhibition, it is worth monitoring the evolution of GHB use in relation to criminality closely.

Many people who use drugs do so socially. Substance use can affect how people interact, increasing the risk of arguments, disagreements, quarrels, and violent altercations within groups of users. Intoxication can compromise people's ability to detect situations that could put them at risk of victimization and take adequate measures to protect themselves. It can also lower their defences and weaken their coping skills, thus drawing them into altercations that are likely to end poorly for them. Drug users may also be considered ideal targets for victimization, not only within communities of users, but also by non-users who see them as people who will have a hard time defending themselves, who may find it difficult or embarrassing to report incidents, or who may not seem credible to the police or the courts. It is also worth noting that the illegality of the drug market and barriers to setting up supervised consumption sites force users to consume their drugs in hiding, unprotected, which can place them in uncomfortable situations and expose them to a higher risk of victimization.

To sum up, intoxication makes users vulnerable to victimization because of its deleterious effects on judgment and decision-making and because it exposes individuals to high-risk situations (Temple and Freeman 2011), such as physical confrontations and having unprotected sex, and to places they would not otherwise frequent.

The Role of Intoxication

Certain illicit drugs may have a mediating effect on criminal behaviour, such as violence, our focus in this chapter. Since the general pharmacological characteristics of most of the more common psychoactive substances are quite well known, we can infer the different mechanisms by which certain drugs contribute to the user's behaviour. However, studies have so far failed to provide us with a thorough understanding of the specific role intoxication plays in the perpetration of crime. Research into the nature of the intoxication–crime dynamic appears to have stalled because the factors involved are numerous and extremely complex. Among other things, researchers have to take into account dose, product purity, route of administration, frequency of use, and the individual's natural and acquired tolerance. Moreover, in their quest for intense sensation and quick and easy pleasure, many users consume drug cocktails, most of which include alcohol. This makes it difficult to distinguish the effects of each individual substance in the mix. To further complicate matters, personal and contextual variables must also be taken into account.

Dependence and Criminal Behaviour

We turn now to another repercussion of taking psychoactive substances: the potential for developing dependence and possible links between dependence and criminality. Only a minority of users develop dependence, but it can be devastating. The consequences of addiction include the heavy financial burden of procuring drugs, mounting debt, and engaging in criminal activity to pay off that debt. That certain drugs are illegal makes them very expensive relative to the income of most drug-dependent people. For example, participants in the North American Opiate Medication Initiative (NAOMI), a clinical research project on diacetylmorphine¹³ treatment for opioid-dependent people, spent an average of \$1,500 a month on drugs (Oviedo-Joekes et al. 2008). However, a number of studies, including our own and some of the major classic studies, show that, before getting involved in criminal activity, people who regularly and frequently use drugs generally employ seven main strategies to manage the cost of their drug use (Faupel 1991; Grapendaal, Leuw, and Nelen 1995; Manzoni et al. 2006). These strategies are not mutually exclusive. On the contrary, engaging in more than one type of income-generating activity is often

the only way to get enough money. Let us look at the strategies drug-dependent people employ to support their habit so that we can better understand another facet of the drug–crime dynamic.

How Users Support Their Habit

Some drug-dependent people manage to hold down a *job*, at least for a period of time. Under-the-table or part-time work is common, but many have regular jobs. For a significant number of these people, working provides some structure in their lives, which limits their drug use and involvement in criminal activity.

A drug-dependent individual having trouble making ends meet may try to *reduce overall spending* and will even forgo necessities. Many drug-dependent people *turn to friends and family* for money and other forms of help. Some try to get free meals, live with a succession of family members, friends, and acquaintances, or get drugs in exchange for doing odd jobs for other users. Those whose needs are not met by their social network may turn to panhandling.

Many heavy psychoactive substance users receive *government income support*. The recently employed claim employment insurance benefits. Others collect workers' compensation, and still others are on social assistance.

Some users engage in *activities associated with the drug business*. They may act as steers who direct potential customers to dealers. They may rent their needle and other paraphernalia to rookies, help less experienced users inject their drugs, or test the quality of a substance for a reseller (Johnson et al. 1985, 63–65). These are just a few of the possibilities available to regular users, who engage in these activities opportunistically. Compensation is commensurate with risk.

Some perceive *prostitution*, or rather, *sex work*,¹⁴ as a feasible way to make money, but it is not the most common income-generating activity for people who misuse illicit drugs (Manzoni, Fischer, and Rehm 2007). For those who do engage in sex work, it is often a supplemental activity that they avoid for as long as possible. Many drug-dependent people who feel they have no other choice find sex work so distressing that they use even more drugs to bolster their courage or numb themselves (Cobbina and Oselin 2011).

A more common drug procurement strategy, particularly among female cocaine (crack) users in North America, is to *exchange sexual favours for drugs* (Logan and Leukefeld 2000; Maxwell and Maxwell

2000; Young, Boyd, and Hubbel 2000). Many women report receiving cocaine as a gift (Marsh 2002) and think it is normal to perform sexual favours in return. The costlier the product, the more personal favours are performed. We wish to make it clear that exchanging sex for drugs is not the same as sex work. The people participating in the exchanges generally do not consider these transactions to be sex work because it is not a job for them and no money changes hands.

For users who have exhausted some or all of these options but still cannot generate enough income to pay for their drugs, crime becomes a viable option. The extent to which people engage in criminal activity (usually lucrative crime), essentially for the purpose of acquiring drugs, varies from one person to the next and is proportionate to how much they are using.

Crime as an Income-generating Activity

Acquisitive crime is just one of many ways to fund dependence on an expensive substance, but it is preferred by a significant proportion of drug-dependent people (Casavant and Collin 2001). In a study of drug-dependent young offenders in addiction rehabilitation centres, Brunelle and her associates (2014) found that 67 percent of those in the high-delinquency group (compared to 38.9 percent of those in the low-delinquency group) said they committed their crimes to get drugs.

Manzoni, Fischer, and Rehm (2007) found that about 40 percent of people who used opioids and other drugs had engaged in illegal income-generating activities in the previous thirty days, but NAOMI researchers found even higher prevalence rates among participants in their study, all of whom were opioid users. In the month preceding assessment, 73.3 percent of the participants were involved in illegal acquisitive activities; the median number of days during which they were involved was fifteen; 94.4 percent had been charged in their lifetime for a crime; 81.7 percent had been convicted; and the median lifetime number of months of incarceration was twelve (Oviedo-Joekes et al. 2008). Other researchers have observed income-generating crime (including trafficking) among amphetamine and cannabis users (Lacharité-Young et al. 2017; Wilkins and Sweetsur 2011).

We know that it is difficult to separate acquisitive offences from the need to satisfy cravings. Individuals may engage in different criminal activities simultaneously or successively; some drug-dependent

people develop a main hustle, while others are opportunistic, taking advantage of situations that crop up. It seems that a proportion of drug-dependent people commit more crime at certain points in their drug use trajectory, especially during periods of heavy drug use. The drug–crime relationship becomes firmly established when people progress to heavy, regular drug use, with its attendant financial demands, which can be difficult or impossible for most users to manage via conventional means. However, the pattern of association between drugs and crime is not the same for everyone. Manzoni and his collaborators (2007) observed “substantial differences among the cities regarding both the extent and frequency of illegal activities Crack use was strongly associated with property crime in Toronto, while cocaine use was strongly related with sex work in Montreal” (p. 342). The authors concluded that local drug culture dynamics are associated with particular crime dynamics. They found that, generally, use of a specific drug is associated with a specific type of crime. For example, frequent use of crack increased the risk of involvement in all three types of crime studied (drug dealing, property crime, and sex work), while heavy heroin use increased the risk of involvement in property crime and sex work, but not drug dealing. Heavy cocaine use was strongly associated with sex work, though heavy use of prescription opioids was not associated with any particular type of crime. This suggests that subculture is another factor in the specific associations between drugs and criminality.

Let us now turn to the criminal activities most common among people who are dependent on costly drugs.

Acquisitive Crime

Acquisitive crime is probably the best-documented type of crime associated with the use of costly drugs. The results of a study by Manzoni and his fellow researchers (2006) clearly showed that “frequency of heroin, cocaine, and crack use, gender, housing status, and past criminal justice involvement were excellent predictors of property crime” (p. 351). This categorical statement must be qualified, however. In 2007, the same researchers published a follow-up study in which they reported that only 16 percent of the participants (regular heroin users) reported having committed a property crime (mostly non-violent theft) in the previous thirty days. This suggests that theft is not necessarily a part of everyday life for drug-dependent people.

Their trajectory is not linear; they cycle into and out of periods of unlawful behaviour. Nevertheless, it is clear that no matter the type of drug consumed, people who are dependent on illicit substances commit more property crime than those who are not (Makkai and Payne 2003). Thus, there is every indication of a positive association between dependence and non-violent theft.

Petty theft is one type of acquisitive crime committed by regular illicit drug users. These offences are relatively simple to carry out and unlikely to be prosecuted. An individual may “borrow” mom’s jewellery without telling her, filch some cash from a buddy’s kitchen table, or betray the boss’s trust by pilfering the till. Some people take the opportunity when visiting acquaintances to rifle through drawers looking for objects of value. These victims are unlikely to report the thief, who likely can resolve matters amicably if caught. Even when the police do get involved, diversion is the most likely outcome (Casavant and Collin 2001; Faupel 1991; Grapendaal, Leuw, and Nelen 1995).

We must keep in mind that money is not the only method of payment in the black market. Small-time drug dealers may accept stolen goods as payment. Some dealers will even tell deeply indebted clients to procure specific items as payment. Big stores are targets of choice because of the vast selection of products they carry and the anonymity factor (Faupel 1991).

Shoplifting generally accounts for a larger proportion of the income of drug-dependent females than of their male counterparts. Although there are advantages to this type of theft, the risk of arrest and prosecution is higher than for stealing from acquaintances, particularly as technology now enables merchants to monitor and stop thieves on the spot. Many shoplifters resort to a well-worn justification to assuage their guilt so they can keep stealing: the stores belong to rich owners (shareholders) who will not notice the missing goods and who will even get their money back from insurance payments or by raising their prices (Grapendaal, Leuw, and Nelen 1995). Common consumer goods, such as clothing, food, and alcohol, are the items most frequently stolen by heavy illicit drug users, but they may also pocket cough syrup containing codeine or other products that can help alleviate withdrawal symptoms. Goods are kept for personal use, offloaded within the thief’s network, or fenced for, at most, a third of their retail value.

Breaking and entering is another lucrative offence, but it demands certain skills that not all drug-dependent people possess. The thief

must be lucid and clever enough to case the target and figure out the best time to break in without arousing neighbours' suspicions. The thief must have an intimate knowledge of alarm systems and be able to quickly assess which goods will fetch the highest prices on the black market. Stolen goods are either sold by the thief on the street or in bars, passed on to a fence, exchanged with a dealer for drugs, or offloaded to a shopkeeper who may or may not be aware of their provenance. Regular thieves typically prefer to do business with fences so they can get their money quickly and relatively hassle-free, but they get paid just a small fraction of the stolen item's retail value. Proceeds of breaking and entering can enable the thief to buy drugs, but some report using drugs to fortify themselves to commit the crime or to enhance the thrill of the illicit activity (Brochu and Parent 2005; Brunelle et al. 2005).

Although *robbery with violence* is one of the fastest ways to acquire large sums of money, most heavy drug users who commit crimes avoid this type of theft because it involves direct contact between offender and victim (Grapendaal, Leuw, and Nelen 1995). The most common form of robbery with violence committed by heavy users of illicit drugs is mugging, which usually happens in relatively isolated public places. The victim, too, may be involved in illicit activity, such as buying drugs, or may be intoxicated. Drug dealers are also frequently the target of robbery with violence (Faupel 1991). Some drug-dependent individuals come to enjoy the rush of certain types of crime, which they compare to using powerful stimulants (Brochu and Parent 2005). In many cases, these violent acquisitive crimes are a last resort for people desperate to get enough money to satisfy their cravings or avoid withdrawal.

Acquisitive crime may go hand in hand with dependence because it enables people to buy drugs, but we must keep in mind that intoxication and withdrawal can make it more difficult to engage in these activities and increase the risk of arrest.

Trafficking

Drug trafficking comes in all shapes and sizes. Who could have predicted that drugs would one day be sold on the Internet? As surprising as that may seem, Décarry-Hétu has shown that cryptomarkets—illicit online drug markets—are having a significant impact on the drug trade (see, for example, Aldridge and Décarry-Hétu 2016) and are

likely to play a larger role in the coming years. Still, many dealers prefer more traditional approaches: setting up shop in their apartment; offering home delivery and never being out of earshot of their cell phone or pager; and doing business on the street, in bars, or at raves. Some are actively involved in an organized network, and others are involved indirectly (runners, lookouts).

Some users resell a portion of the drugs they have purchased to finance their own habit. These micro-traffickers buy their drugs in larger quantities to lower their cost, then resell small amounts to novice users. According to a study by Small and his fellow researchers (2013), "dealing was perceived to be an effective means to support one's own drug consumption" (p. 482). As a fringe benefit, they always have drugs available, which means they never have to experience withdrawal.

Users may nevertheless hesitate to get involved in micro-trafficking, particularly in the early stages of their criminal career, opting instead for other activities associated with the drug trade, such as transporting varying quantities of drugs from one place to another or temporarily storing drugs in their apartment. Some resell their prescribed methadone.

These users may have no idea that their minor involvement is considered trafficking in the eyes of the law. Their ignorance of laws (such as Canadian laws) that consider the possession of small quantities of drugs to be trafficking, and therefore an offence, puts them at risk of getting caught and saddled with a criminal record. This typically comes as a surprise: "I thought it was okay to have a small amount like that at home," and "I didn't think I was trafficking; I was just selling some of my stash to my friends to pay for my own drugs," are common refrains among justice-involved people in treatment.

While it is not easy to accurately estimate the proportion of individuals who are involved in reselling drugs and use drugs regularly and frequently, we can say with certainty that, sooner or later, a very large number of them are drawn to drug trafficking, if only on a small scale. According to Manzoni, Fischer, and Rehm (2007), "The most prevalent criminal activity among all [study] participants was drug dealing, in which about 27% had been involved in the previous 30 days" (p. 354). A significant proportion of heavy users, particularly of heroin and cocaine, opt for this activity because their drugs are very expensive. It is important to note, however, that gender is a determining factor. The world of drug trafficking is still so macho that women have a

hard time carving out a niche for themselves. They do not sell the same drugs as men, and they are often systematically victimized (Brochu and Parent 2005; Felson and Bonkiewicz 2013; Sommers, Baskin, and Fagan 1996).¹⁵ Manzoni, Fisher, and Rehm (2007) also noted that the men in their sample were “twice as likely to have committed a property crime or to have been involved in drug dealing and had a much lesser likelihood of having engaged in sex work than females” (p. 361).

Another factor that motivates people to get involved in the illicit drug trade is the lure of fast money. It does not take long for psychoactive substance users to figure out that this an excellent way to ensure easy, convenient access to drugs without spending a lot of money. Earnings vary dramatically from one study to the next and can be anywhere from \$500 to \$10,000 per week for what is, in many cases, a part-time activity (Denton and O’Malley 2001; Jacobs and Miller 1998). It all depends on the quantity and quality of the drugs sold, the level of the transaction, and many other factors.

Neophytes are also attracted to this work because they think it is easy and they are unlikely to get caught (Decorte 2000). Some heavy users of illicit psychoactive substances say they worked for a long time and did many deals before they were arrested (Hunt 1990). However, once an individual becomes known to the justice system, the risk of arrest rises dramatically (MacCoun and Reuter 1992).

Arrest is certainly not the drug dealer’s only worry. Those selling on consignment may be far more concerned about having their goods or revenue stolen. Other “occupational hazards” include being threatened, injured, or killed (Jacobs, Topalli, and Wright 2000; Pearson and Hobbs 2001). Naturally, under the circumstances, people take steps to protect themselves, such as carrying a gun, but here again, there is significant variation depending on the type of market. Felson and Bonkiewicz (2013) found that “participants in crack-cocaine markets are more likely to possess guns than participants in powdered-cocaine, opiate, and marijuana markets” (p. 319).

Drug trafficking as an occupation is compatible with the lifestyle of regular illicit drug users. Their schedule is conducive to catering to their clients’ needs. Sharing and small-scale reselling may help cement social relationships (Kokoreff 2005). They tend to sell drugs in their own neighbourhood and to people they know or friends of friends.

Even though a considerable proportion of people dependent on heroin or cocaine eventually end up involved in small-scale dealing to friends and acquaintances, few of them depend on it as their sole

source of income despite the benefits we have described. In most cases, it is something they do intermittently (DeBeck et al. 2007; Denton and O'Malley 2001; Small et al. 2013).

Other Lucrative Criminal Activities

Another relatively common criminal activity among drug-dependent people is *pimping* (Evans, Forsyth, and Gauthier 2002), an activity that profits from the sex work of others and typically goes with other types of crime, such as dealing in drugs and stolen goods.

People sometimes specialize in the *sale of stolen goods*, but it is more commonly practiced as a lucrative side hustle by people with the right kind of network (Denton and O'Malley 2001). The illicit drug distribution scene usually provides plenty of opportunities for the exchange of stolen goods, which are sometimes used to pay for drugs.

A small number of people who use illicit psychoactive substances *commit forgery, cash fraudulent cheques, or use stolen credit cards*. Forgery requires specific skills and membership in certain socio-economic groups, which are not available to all heavy drug users (Johnson et al. 1985).

Links Between Dependence and Criminal Activity

The most obvious link between drug dependence and criminality has to do with the economics of buying drugs. Some drugs, such as heroin and certain stimulants, including cocaine, can create dependence in many users. People become unable to function without their drug, and dependence dictates how they live their lives. A user who is dependent on one of these substances must use it several times a day to avoid physiological or psychological withdrawal. Over time, buying drugs becomes terribly expensive. Heavy users support their habit in a variety of ways. One or more paid jobs may be a substantial source of income for those who function in normal society. Others reduce their spending elsewhere, depend on family, friends, and government income support, and engage in activities related to the drug business to support their habit. For some, these income sources eventually dry up or no longer suffice. At that point, income-generating crime begins to look like a good way to support a very expensive habit. Small-scale drug trafficking and thefts of all kinds are among the most common crimes that drug-dependent people commit.

The vast majority of small-scale dealers used psychoactive substances before getting involved in drug trafficking. In fact, the likelihood of being involved in the illicit drug trade escalates in step with the individual's drug use beyond a certain level. Resellers are introduced to the business through contacts, and tend to be relatively young people who work part-time selling their merchandise to a circle of people they know, most of whom live in roughly the same community as them. In most cases, there is little structure involved. This very profitable venture enables them to support their own habit and make ends meet. Small-scale dealing is more of a lifestyle choice than a criminal specialization for most, and they willingly employ other means to earn a living.

Theft is also an important source of income for many drug-dependent people, but it is impossible to identify a single pattern linking the use of psychoactive substances and acquisitive crime. Trajectories differ depending on the circumstances, the individuals, and the drugs involved. A particular individual's lifestyle is certainly an important factor to consider in any attempt to understand the relationship between drugs and criminality. Still, it seems that people who adopt deviant lifestyles are more inclined to employ illicit means to meet their needs. They steal not only to support their habit, but also because it is part of their lifestyle.

One might think that a user from an affluent background with access to money would be less likely to resort to crime to finance a drug habit and that users from different backgrounds and socio-economic classes will engage in different types of crime. Many an office worker has confessed to supporting a drug habit by selling stolen company property. Similarly, it is easy for some medical professionals to divert a portion of their patients' prescriptions for personal use. Studies of this phenomenon are few, however; most research focuses on the criminal activities of low-income heavy users who do not practice well-paid professions. No surprise then that existing scholarship all but excludes occupational crime and high-level fraud.

Involvement in crime varies from one person to the next. It depends on the individual's relationship with drugs (tolerance, dependence, etc.), the cost of drugs, the appeal of certain types of activities, time, place, socio-economic class, contacts, opportunities, and other circumstances.

The abuse of illicit psychoactive substances is a serious problem. Among users, drugs and crime intersect to a significant extent. Although stemming partly from drug use itself, involvement in criminal activities has more to do with difficulty managing drug use: taking too much at once, using a synergistic combination of drugs, withdrawal symptoms, and dependence.

Research on illicit drugs and crime tells us that any substance that affects the CNS can influence the intoxicated person's behaviour in some way. Since the general psychopharmacological characteristics of most of the more common psychoactive substances are well known, they may serve to explain the unlawful behaviour of some intoxicated individuals. Drug use can diminish an individual's behavioural repertoire to such an extent that alternatives to violence may not be available to him or her. What is more, dependence on certain substances can further limit the options available to an intoxicated person experiencing the early symptoms of withdrawal who will do anything in his or her power to stave it off. These are the ideal conditions for both criminality and victimization.

Still, even though drugs have the potential to induce specific effects that may result in (violent) expressive criminality, scientific observation makes it clear that these properties do not cause all intoxicated or dependent individuals to act the same way. All of the following and more must be taken into account for each individual: the dose ingested, product purity, route of administration, frequency of use, the individual's natural and acquired tolerance, his or her personality and genetic makeup, the setting, acceptance or rejection, and access to the substance or substitutes. Drug use may even make it harder for some people to commit crimes. There is more to intoxication and its consequences than pharmacology. The molecule itself is not solely responsible for the link between drugs and crime; user- and context-specific factors are also part of the equation.

We know that many people who use illicit psychoactive substances regularly and frequently, particularly high-cost substances, are involved in unlawful activity. For some, crime is their primary source of income. Their need for drugs demands an ample income stream that seems best assured by criminal activity. We must nevertheless point out that others resort to crime only on "bad days" (such as when a dealer who has waited too long to get paid starts making threats). Some drug users' criminal careers are brief, abandoned at the first sign of trouble. For others, criminal activity delivers a rush of

adrenaline and a supply of cash that they come to depend on. Criminal involvement varies considerably, depending on the individual and his or her context, as well as where they are in their dependence trajectory. A considerable proportion of dependent users' acquisitive crime stems from the need for money arising from dependence on high-cost drugs. However, it may be misleading to think of pharmacodependence as being at the root of that relationship because pharmacological properties alone do not lead to dependence, and dependence alone does not drive criminality.

Cautious interpretation is called for because research in this area is methodologically flawed. First and foremost, it provides information about a subgroup of users, not all users. Participants tend to be recruited from among dependence rehabilitation service clients or the incarcerated population. The first thing to keep in mind is that not all people who use licit or illicit drugs misuse them or become dependent. Some manage their drug use well for long periods of time. Furthermore, not all drug users engage in criminal activity other than buying and possessing drugs, where this is criminalized. Among those who do get more involved in illegal activities, motivation and frequency can vary enormously, depending on the individuals and their socio-economic status. And of course, not everyone who commits a crime gets caught or convicted.

As we have said, the relationship between drugs and crime does not spring solely from the toxicity of a given substance or from dependence. To achieve a better understanding of the dynamics, we must take other factors into consideration. For example, buying, selling, and consuming certain substances may occur within a criminal context or coincide with high-risk illegal activity. Some people who misuse drugs have a compromised behavioural repertoire due to exposure to a combination of risk factors in childhood. In many cases, the delinquent response is implicitly linked to the personal and social context within which intoxication and dependence are just some of the many factors to consider.

In light of this complexity, some researchers have abandoned the idea of a direct causal relationship, focusing instead on personal and psychological factors that can lead to the development of problematic behaviours. We will address that later in this book. For now, we turn our attention to the Canadian political context and what it means for the use of psychoactive substances.

Notes

1. Lexicon of alcohol and drug terms published by the World Health Organization (available at http://www.who.int/substance_abuse/terminology/who_lexicon/en/#).
2. Ninety-two percent said that alcohol affected their judgment.
3. Half of the study participants attributed this effect to alcohol.
4. Alcohol is also very popular among cocaine users.
5. Twice as potent as amphetamine, it is considered a “club drug,” a category that includes ecstasy, gamma-hydroxybutyrate (GHB), PCP, and ketamine. These drugs are associated with raves and after-hours clubs.
6. Putting oneself in another person’s shoes, empathizing with what that person is feeling.
7. Sensation of floating, happiness, and physical well-being.
8. Nervous system dysfunction upon cutting back consumption (Léonard and Ben Amar 2000).
9. Study participants were aged fifteen to twenty; the average age was 18.5 years. One hundred and seventy-two completed a survey and thirty participated in qualitative interviews.
10. Translation of: “Ils sont plus fréquemment associés à des troubles de la mémoire, à des comportements étranges ou violents et à une psychose toxique. Outre des problèmes de comportement, le surdosage peut causer des troubles du métabolisme musculaire (rhabdomyolyse) susceptibles de provoquer un blocage rénal dû à l’accumulation de déchets métaboliques. L’intoxication chronique entraîne des problèmes intellectuels, psychologiques et psychiatriques.”
11. This substance is used legally under medical supervision in over eighty countries around the world.
12. Forgetting events that occurred following consumption.
13. Pharmaceutical grade heroin.
14. The term “prostitution” implies a moral judgment and has criminal connotations. The term “sex work” helps to distinguish between the economic activity and the individual performing it. Sex work is no longer illegal, but Canadian laws have always been written to discourage the sale of sexual services. In its historic December 2013 ruling, the Supreme Court of Canada unanimously struck down three prostitution laws that banned soliciting, brothels, and living off the avails of prostitution. The Court reasoned that these laws were incompatible with the Canadian Charter of Rights and Freedoms because they exposed vulnerable women to violence and murder by preventing them from protecting themselves. The *Protection of Communities and Exploited Persons Act* of 2014 prohibited purchasing and advertising sexual services, receiving material benefit derived from such services, and all activities related to procurement and communication in a public place for the purpose of selling sexual services. The Act protects sex workers because the sale of sexual services remains legal. While the government maintains that the act creates safe working conditions for sex workers, many advocacy groups argue that it recriminalizes sex work and exposes sex workers to violence.
15. Victimization may take the form of assault with the intent to take over a seller’s territory, robbery with violence, threats relating to debt repayment, arguments about the quality of the drugs sold, or assault to assert dominance or control within the organization.