REVIEW

1. Epidemiological studies in Europe

Europe: prevalence of cannabis use	At the European level, continuity in drug use trends is shown over the last decades: the prevalence of cannabis use is about five times that of other substances, while last month cannabis users (15-64) who used the substance daily or almost daily range from 10 to 20% in Italy; to more than 20% in France, Spain and Germany; to less than 10% in UK. As for cocaine, it is Europe's most commonly used stimulant, more prevalent in the south and west of Europe. It is estimated that about 2.3 million young adults aged 15 to 34 (1.9 % of this age group) used cocaine in the last year. Only a few countries report last year prevalence of cocaine use among young adults of more than 3 %. Many cocaine users consume the drug recreationally, with use highest during weekends and holiday(EMCDDA, 2015).
Ireland	O'Gorman (2014a; 2014b;) underlines continuity and change in drug use and in drug markets in Ireland by means of existing data and ethnographic research.
Italy	A study led in Italy among students aged 15 to 19 shows increasing cannabis use, from 22% in 2009-2012 to 26% in 2014. Most of them are male users who use the substance occasionally: almost half of them used it less than six times a year, while 86% used cannabis only, avoiding mix with other substances (Molinaro, 2015).

2. Theoretical perspectives

Main scholars	The "control" perspective was inaugurated by Norman Zinberg, who suggested that determinants other than chemistry were to be considered to explain control over drug use. "Controlled use" of both alcohol and illegal drugs is assumed to be the result of a complex interaction between multiple determinants (drug, set, and setting), with a major role accorded to the social setting and the development of sanctions and rituals(Zinberg, 1984; Zinberg and Harding, 1982).
Self-managed behaviors and rules	Most drug users are able to apply a wide set of "self imposed behaviours and rules that regulate the selection of locations of drug use and

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	companions of the user, normatively determine the amount of drugs used, moods fit for use or unfit" (Cohen, 1999): these rules aim at "compartmentalizing" drug use so as to prevent disruption of everyday "life engagements" (Cohen, 1999).
Studies in natural settings	Based on this theoretical perspective, a large volume of studies were carried out in natural settings among users of different substances including heroin, cannabis, LSD, amphetamines (Zinberg, 1972, 1984; Robins et al., 1974, 1979; Cohen and Sas, 1998; Reinarman et al., 2004;; Shewan and Dalgarno, 2005; Uitermark and Cohen, 2006). Studies on controls over cocaine use have been particularly numerous (Cohen, 1989/90; Cohen and Sas, 1994; Erickson et al., 1994; Morningstar and Chitwood, 1983; Chitwood and Morningstar, 1985; Mugford, 1994; Waldorf et al., 1991; Decorte, 2000, 2001; Decorte and Muys, 2010; Zuffa et al., 2014).
Evolution of patterns of controlled use	These studies show that patterns of controlled use are prevalent; and, more important, looking at the evolution of patterns over time, a general trend towards moderation can be observed. This positive evolution can be explained through a social learning process: most users gain mastery of their drug consumption by learning from their own experience and that of others (Decorte, 2000; Decorte and Slock, 2005). Also "addictive" patterns of use appear to be far more reversible than usually believed, towards more moderate patterns of use or even towards abstinence (Robins et al., 1974; Shaffer and Jones, 1989; Waldorf et al., 1991; Winick, 1962). Moreover, a growing body of research on "self-change" shows that not only natural recoveries from substance abuse occur, but they are a common pathway to recovery (Peele, 2007; Klingemann, Sobell, Sobell, 2009). These results challenge the disease paradigm of addiction and its dichotomous approach (either abstinent or addict) to drug use. Rather, drug use patterns move along a continuum, as a result of a dynamic process of interaction between personal attitudes, beliefs and expectancies towards drug use and environmental circumstances.
Towards a new scenario	This theoretical approach has opened a new scenario on the social representation of drug users, in opposition to the traditional view of

	"helpless" individuals under the influence of drugs. The discovery of users' abilities to control drug use has also prompted innovation in drug addiction services, trying to link findings from research on controls to models of intervention in a Harm Reduction perspective (Grund, Ronconi, Zuffa, 2013; Zuffa, 2014; Zuffa, Ronconi, 2015.
Cannabis use	As for controls on cannabis consumption in particular, it was just the rise in marijuana use in the sixties, most of which was found to be "moderate rather than intensive and chronic", to spur public recognition of the possibility that illicit substances can be controlled as much as legal substances (Zinberg, 1984, 4). Cannabis can be said the "gateway" drug to the alignment of illegal drugs to alcohol in the perspective of "control". Since the seventies, public awareness of "controlled" cannabis use has grown, following the process of normalization of cannabis. We suggest to use the term "normalization" not only as a synonym of "growing social acceptance" (of a specific behaviour), but also as "perceived progressive alignment of an illegal drug to legal drugs". A change in social controls was already noticed by Norman Zinberg himself, in the turn from the sixties to the seventies: while in the sixties marijuana use was more ritualized (i.e. used in well determined occasions), in the seventies it already took place in a wide variety of settings and circumstances. In other words, the setting of marijuana use had become highly "flexible". Such increasing flexibility is to be interpreted as a result of both the "mild" pharmacology of the drug and the process of learning how to use it. Following the growing familiarity with every aspect of marijuana use, specific rituals that previously served as rigid external controls were replaced by internalized social sanctions, "*like those relating to alcohol use..(while) the rituals developed to support the sanctions no longer need to be followed*"(Zinberg, 1984, 136).
Social rules for social use	Among the "internalized" social sanctions, "using the drug socially" is one of the commonest rules, together with "avoiding to use without a reason". Also "not using at work" was frequently adopted, though users realized they could function pretty well even after assuming marijuana, due to its "mild" pharmacological

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	properties. Nevertheless, the "compartmentalization" of drug use, whatever flexible and mild the substance may be, is still associated to users' perception of "controlled use" of cannabis. In other words, in Zinberg's study, the flexibility does not result in an extensive intertwining of cannabis use in everyday activities, though it may not be considered detrimental to life engagements.
More recent studies	The "moderate" attitude towards cannabis use is confirmed by more recent studies on patterns and trajectories of use. For example, in a 2004 study on Cannabis in Amsterdam and San Francisco, data on patterns of use in Amsterdam show a high percentage of "daily use" (49), but only in the period of maximum use, while daily use dropped to 10% in the past year. This is consistent with the findings from the San Francisco sample, with 39% of daily use during the period of maximum use falling down to 7% in the past year (Reinarman et al., 2004). Trajectories of use in both cities show a prevalent trend towards moderation (reducing the frequency or even stopping use, after a period of more intensive consumption). The pattern increase/decline was respectively selected by 48.1% and 50.4 of Amsterdam and San Francisco sample, followed by "variable" (23.6% in Amsterdam and 25 % in San Francisco). A difference is reported in the "stable" trajectory (11.1% in Amsterdam, 1.9% in San Francisco) and in the "intermittent" (3.2% in Amsterdam, 9.5 % in San Francisco). The "escalating pattern" best conforms to a small minority of cannabis users in both cities (6% in Amsterdam, 6.4% in San Francisco). Dvorak and Day (2014), in a study involving 817 participants, noticed the link between individual behavioural and emotional regulation abilities and self-regulation in cannabis use: individuals with difficulty in emotional self-regulation appear at risk for experiencing negative consequences as a result of their marijuana use.
About cannabis problematic use	Review of relevant literature coupled with analyses of two Canadian data sources – a representative sample of the Canadian adult population and a smaller sample of adult, regular, long-term cannabis users from four Canadian cities – tofurther articulate each point. This article concludes with adiscussion of

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	appropriate treatment interventions and approaches to reduce cannabis-related harms, and offers suggested changes to improve the measurement of problematic cannabis use(Asbridge, Duff, Marsh,& Erickson,2014; see also Duff, & Erickson, 2014).

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