

Question 5): In the section on substance-related disorders, DSM-IV distinguishes 11 categories of substances. For most of these substances, it also distinguishes between substance abuse and substance dependence. Among these many disorders, is Cannabis Abuse disorder uniquely suspect? Are the abuse disorders more suspect than the dependence disorders? Are the Cannabis disorders more suspect than those of other related substances: alcohol (high prevalence), hallucinogens (similar pharmacology), opioids (endogenous analogs), nicotine (similar health hazards). Does the political ecology of cannabis use cast suspicion on the disorder diagnosis or on its legal status or both? Why?

The Substance-Related Disorders in the DSM-IV are divided into two groups: the Substance Use Disorders (Substance Dependence and Substance Abuse) and the Substance-Induced Disorders (Substance Intoxication, Substance Withdrawal, Substance-Induced Delirium, Substance-Induced Persisting Dementia, Substance-Induced Persisting Amnesic Disorder, Substance-Induced Psychotic Disorder, Substance-Induced Mood Disorder, Substance-Induced Anxiety Disorder, Substance-Induced Sexual Dysfunction, and Substance-Induced Sleep Disorder). Of these, the mental disorders that I call into suspicion are the Substance Use Disorders, especially Substance Abuse but also Substance Dependence to some extent, and the Substance Intoxication disorders. With regards to Substance Abuse mental disorders, Cannabis Abuse disorder is not uniquely suspect considering the full extent to which all transgressions of public health code dealing with Substance Abuse disorder prevention and control are understood as maladaptive within modern mental disorder diagnostics. For all 11 substance categories, the DSM-IV tells us that if persistent or recurrent substance-related legal problems arise in conjunction with substance use, then Substance Abuse mental disorder is the likely cause or underlying pathology that explains the patient-citizen's "clinically significant...distress." It should be noted that pathognomonic diagnosis of Substance Abuse disorder via criteria A3, "recurrent substance-related legal problems", represents only one of 15 possible diagnostic criteria combinations that satisfy the diagnosis using the algorithm of the DSM-IV. The diagnoses arrived at with this single criterion that are

uniquely suspect are those that take into consideration legal problems that arise from ‘victimless infractions’ which are violations of substance prohibition laws. The legal problems that fall into this category would be those related to the possession, manufacture/preparation, and pharmacological delivery of substances or metabolic evidence of their consumption. My basic contention is that if health professionals are going to prominently figure such kinds of legal problems into mental disorder diagnostics, the strength, justification, effectiveness, and fairness of the public health regulation laws which have been transgressed—their context—must be considered as well.

In my Preliminary Statement, I made a list of all the occurrences of the concept of legal problems in the DSM-IV, all of which appear in Substance-related disorders section of the manual with the exception of the reference to “legal difficulties” in the description of conduct disorder. I will reproduce that list here, with some additions, because it also helps to address several parts of this question. I have added underlining to highlight the legal problems that arise from nonviolent and victimless infractions. Reading simply the underlined words brings into relief how these legal problems translate into mental illness.

First, there is “arrests for substance-related disorderly conduct” which appears as a parenthetical example immediately following the diagnostic Criterion A3 of **Substance Abuse**. Under **Alcohol Abuse (305.00)** mental disorder, it is written: “Legal difficulties may arise because of alcohol use (e.g., arrests for intoxicated behavior or for driving under the influence).” Under **Cannabis Abuse (305.20)** mental disorder, it is written “...legal problems that may occur as a consequence of arrests for cannabis possession.” Under **Cocaine Abuse (305.60)** mental disorder, it is written: “Legal difficulties may result from possession or use of the drug.” Under **Hallucinogen Abuse (305.30)** mental disorder, it is written: “...legal difficulties may arise due to behaviors that result from intoxication or possession of hallucinogens.” Under **Amphetamine Abuse (305.70)** mental disorder, it is written: “Legal difficulties typically arise as a result of behavior while intoxicated with amphetamines (especially aggressive behavior), as a consequence of obtaining the drug on the illegal market, or as a result of drug possession or use. Occasionally, individuals with Amphetamine Abuse will engage in illegal acts (e.g., manufacturing amphetamines, theft) to obtain the

drug; however, this behavior is more common among those with Dependence.” Under **Inhalant Abuse (305.90)** mental disorder, we find: “Users can also become agitated and even violent during intoxication, with subsequent legal and interpersonal problems.” Under **Opioid Abuse (305.50)** mental disorder: “Legal difficulties may arise as a result of behavior while intoxicated with opioids or because an individual has resorted to illegal sources of supply.” Under **Phencyclidine Abuse (305.90)** mental disorder: “Legal difficulties may arise due to possession of phencyclidine or to behaviors resulting from Intoxication (e.g., fighting).” Other relevant passages of the DSM-IV on this topic are: “The category of Substance Abuse does not apply to caffeine and nicotine”; “The term abuse should be applied only to a pattern of substance use that meets the criteria for this disorder; the term should not be used as a synonym for “use,” “misuse,” or “hazardous use”; “The essential feature of Substance Abuse is a maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated use of substances. In order for an Abuse criterion to be met, the substance-related problem must have occurred repeatedly during the same 12-month period or been persistent”; “There may be recurrent substance-related legal problems (e.g., arrests for disorderly conduct, assault and battery, driving under the influence) (Criterion A3)”; “Substance-Related Disorders are distinguished from nonpathological substance use (e.g., “social” drinking) and from the use of medications for appropriate medical purposes by the presence of a pattern of multiple symptoms occurring over an extended period of time (e.g., tolerance, withdrawal, compulsive use) or the presence of substance-related problems (e.g., medical complications, disruption in social and family relationships, vocational or financial difficulties, legal problems); “Although a diagnosis of Substance Abuse is more likely in individuals who have only recently started taking the substance, some individuals continue to have substance-related adverse social consequences over a long period of time without developing evidence of Substance Dependence.” [bold in original]

So what I am calling ‘suspect’ is the thorough-going insistence that legal problems arising from nonviolent substance prohibition infractions are psychopathognomonic for Substance Abuse disorders. While these sorts of legal problems can arise with any of the 292 controlled substances, they are specifically referred to in 6 of the 11 categories of substances in the DSM-IV. It should be noted that even if the substance in question is not part of one of the 11 categories of substances, the use of the substance can still be diagnosed as substance abuse with the label of **305.90 Other (or Unknown) Substance Abuse**. As noted above, the category of substance

abuse does not apply to caffeine or nicotine. Hughes (1994) notes in the *DSM-IV Sourcebook* that nicotine is the only substance in the DSM to have a dependence disorder but not an abuse disorder. He quotes from the DSM-III-R: “although Nicotine Abuse is logically possible...virtually no one who has not previously been dependent on nicotine uses nicotine-containing substances in a maladaptive way, e.g., episodic use of cigarettes that exacerbates a physical disorder” (pp. 169-170). Hughes goes on to note that “although social, occupational, and psychological problems may be caused by [tobacco] smoking (e.g., in restricted areas), there is no evidence that these are due to an intoxicated state or reach clinical significance” (pp. 112-113). The legal status of tobacco is clearly what keeps the mental disorder of Nicotine Abuse out of the DSM. The same thing could certainly be said about the reason that there is no Caffeine Abuse disorder. Nevertheless, there are clearly situations in which the self-directed consumption of caffeine and nicotine is significantly deleterious to one’s health, if not lethal. However, individuals who engage in this type of behavior do not qualify for substance abuse mental disorders. I should also note here that cannabis use does not have similar health hazards to nicotine use (as the question prompt states) aside from the potential for bronchial irritation and bronchitis when smoked. A recent large, population-based, retrospective, case-control study involving 1,651 Los Angeles area residents demonstrated strong, positive, and significant associations between tobacco smoking and the incidence of head, neck, and lung cancers but no significant positive associations with cannabis smoking and the incidence of those same cancers. In fact, a significant, albeit small, protective effect was demonstrated in one group of combusted cannabis consumers (Morgenstern et al. 2005). With regards to **Alcohol Abuse mental disorder**, as is noted above, the legal problems

that are potentially pathognomonic for this mental disorder are ones that arise from crimes with victims or with a very high potential for victimization. I am not calling this mental disorder into suspicion. Similarly, the legal problems alluded to that are consistent with **Inhalant Abuse mental disorder** also involve violent crimes (although in many places some victimless Inhalant use crimes exist). Surprisingly, for **305.40 Sedative, Hypnotic, or Anxiolytic Abuse mental disorder**, the DSM-IV does not mention any particular legal problems.

Substance Abuse mental disorders are understood to be a residual category for individuals who do not meet the diagnostic criteria for Substance Dependence mental disorder. The DSM-IV notes: “diagnosis of Substance Abuse is preempted by the diagnosis of Substance Dependence if the individual’s pattern of substance use has ever met the criteria for Dependence for that class of substances (Criterion B).” For Substance Dependence, one must demonstrate a “maladaptive pattern of substance use, leading to clinically significant impairment or distress” as manifested by satisfying at least 3 simultaneous diagnostic criteria (none are pathognomonic). Two of the criteria have to do with tolerance and withdrawal, the hallmarks of physiological dependence. I find nothing suspect about these, aside from the potential of confusing the negative effects of ceasing consumption of a substance that provides therapeutic benefits with a syndrome of withdrawal from that substance. Other substance dependence diagnostic criteria could be demonstrated to be present in a particular substance consumer simply due to the fact that the substance is prohibited. For example, a portion of Criterion A5—“a great deal of time is spent in activities necessary to obtain the substance (e.g., visiting multiple doctors or driving long distances)” —could be satisfied solely due to the fact the substance is

prohibited and therefore is unavailable for local or home production and/or distribution (especially true for biotic substances). Furthermore, if a substance is being used medicinally or therapeutically, it could certainly be the case that, as Criterion A3 states, “the substance is often taken in larger amounts or over a longer period than was intended.” Often, individuals ‘discover’ the therapeutic benefits of a substance that was initially intended to be consumed sparingly under an environment of prohibition. Once this therapeutic discovery is made, more of the substance will be needed than was previously intended. Moreover, one may go to greater lengths to obtain it (Criterion A5), similar to the lengths that people may go to in order to obtain any good medicine, even if the medicinal benefit is palliative rather than curative or complementary rather than central. Given the environment of prohibition and the importance of the consumption of the substance to the maintenance of one’s health, the time and effort involved in procurement may cut into time that could be used for doing other activities, such as those enumerated in Criterion A6: “important social, occupational, or recreational activities are given up or reduced because of substance use.” These scenarios could certainly be present in opioid, cannabis, and hallucinogen consumers, and thus their corresponding dependence mental disorder diagnostics for **304.30 Cannabis Dependence** mental disorder, **304.50 Hallucinogen Dependence** mental disorder, and **304.00 Opioid Dependence** mental disorder are suspect.

The substance intoxication mental disorders are also suspect. I believe that in the descriptions of these mental disorders, biases exist that run deeper than those related to judgments about behaviors involving substance prohibition code infractions found in substance abuse and substance dependence mental disorder diagnostics. These biases are

more so of the ethnopharmacologically-centric type. Substance intoxication disorders are understood to be applicable to those who demonstrate “clinically significant maladaptive behavior or psychological changes” following the consumption of a particular substance. Again, nicotine is exempt. In the introduction to the substance intoxication mental disorders section, the DSM-IV makes the following general observations:

Many substances may produce physiological or psychological changes that are not necessarily maladaptive. For example, an individual with tachycardia from excessive caffeine use has a physiological intoxication, but if this is the only symptom in the absence of maladaptive behavior, the diagnosis of **[305.90] Caffeine Intoxication** would not apply. The maladaptive nature of a substance-induced change in behavior depends on the social and environmental context. The maladaptive behavior generally places the individual at significant risk for adverse effects (e.g., accidents, general medical complications, disruption in social and family relationships, vocational or financial difficulties, legal problems).

Let us take a look at the particular criteria involving **292.89 Cannabis Intoxication** mental disorder, **292.89 Opioid Intoxication** mental disorder, and **292.89 Hallucinogen Intoxication** mental disorder. In order to diagnose a patient-citizen with Cannabis Intoxication mental disorder, the following three criteria must be satisfied:

Criterion A: “Recent use of cannabis.”; Criterion B: “Clinically significant maladaptive behavioral or psychological changes (e.g., impaired motor coordination, euphoria, anxiety, sensation of slowed time, impaired judgment, social withdrawal) that developed during, or shortly after, cannabis use.”; Criterion C: “Two (or more) of the following signs, developing within 2 hours of cannabis use: (1) conjunctival injection, (2) increased appetite, (3) dry mouth, (4) tachycardia”; and Criterion D: “The symptoms are not due to a general medical condition and are not better accounted for by another mental disorder.”

What is suspect here is the judgment/bias that the “symptoms” of ‘euphoria’ and ‘the sensation of slowed time’ are somehow clinically significant maladaptive psychological changes. How is euphoria maladaptive? Euphoria comes from the Greek word *euphoros* which means a feeling of well-being, health, happiness or elation. How can a feeling of

health and well-being be maladaptive? Euphoria can be understood as a maladaptive psychological change only if one believes that the social conditions that one *should* be adapting to are not conducive to feelings of health, well-being, and happiness—a deeply suspect position to hold and endorse. Similarly, the ‘sensation of slowed time’ is not necessarily one that is a maladaptive psychological change, especially if this allows one to appreciate moment-to-moment experiences more fully. These are psychocultural states that are de facto pathologized in the DSM-IV. Any ‘social withdrawal’ and/or ‘anxiety’ must be contextualized with the experience of ‘marijuana stigma.’ One should ask: how does the criminalization of cannabis use figure into the lived experience of the cannabinated state and the life experience of a cannabis user in general? With regards to other items, might some not find the benefits of substance consumption to be so positive that they would accept the temporary and reversible risks and impairments that accompany them? For example, in the case of opioid intoxication mental disorder, which is defined similarly to cannabis intoxication mental disorder, a maladaptive psychological change identified is “initial euphoria followed by apathy.” The apathy that follows may be rationally acceptable given the benefits of the experience of euphoria. Returning to cannabis intoxication mental disorder, items listed in Criterion D are simply objective signs of cannabis consumption to help the diagnostician confirm recent cannabis consumption by the patient-citizen. There is nothing pathological about any of these signs, with the exception of tachycardia in some cases. Some of these signs may in fact be indicia of therapeutic effects in some patient-citizens. Similar difficulties and suspicions arise when considering Hallucinogen Intoxication mental disorder. Diagnostics are structured similarly to Cannabis Intoxication mental disorder. One of the

maladaptive psychological changes associated with Hallucinogen Intoxication according to the DSM-IV are “ideas of reference” that developed during, or shortly after, hallucinogen use (Criterion B). The DSM-IV glossary of technical terms defines ‘ideas of reference’ as:

“The feeling that casual incidents and external events have a particular and unusual meaning that is specific to the person. This is to be distinguished from a *delusion of reference*, in which there is a belief that is held with delusional conviction.” A “delusion is of reference” is: “A delusion whose theme is that events, objects, or other persons in one’s immediate environment have a particular and unusual significance. These delusions are usually of a negative or pejorative nature, but also may be grandiose in content. This differs from an *idea of reference*, in which the false belief is not as firmly held nor as fully organized into a true belief.”

A criterion of psychopathology then is the fact that recent consumption of a hallucinogen leads one to *falsely* believe that incidents and events in one’s immediate environment have a particular and unusual meaning that is specific to oneself. Could this not actually be a *true* experience of meaning and reverence? Such experiences are common with several of the biotic substances that I listed in my general statement, such as cannabis, peyote, magic mushrooms, iboga, and ayahuasca (*Cannabis sativa* L., *Lophophora williamsii* J.M.C., 186 *Psilocybin-containing fungi* spp., *Catha edulis* Vahl, *Tabernanthe iboga* L., *Banisteriopsis caapi* C.V.M. & *Psychotria viridis* Ruiz&Pav.) What the DSM-IV may call “Hallucinogen-Induced Toxicity” consumers may come to view as a powerful spiritual experience that may proffer a kind of knowledge (*gnosis*) about oneself and the world. One type of knowledge that people report as an outgrowth of their use of certain psychoactive substances is a sense of unity and at-onement in a non-dualistic sense about themselves vis-à-vis the world. This ‘intuitive knowledge’ can in fact be grounded in modern day systems theory, Gaianism, and deep ecology—all these offering

a modern ‘scientific’ language to describe *gnosis* gleaned from the unitive experiences catalyzed by such substances, which are appropriately called entheogens (Capra 1982, 1988, 1996; Lovelock 1979; Bache 2000; Baetson 1980; Ruck et al. 1979).

I will conclude with a straightforward and succinct answer to the final question: *Does the political ecology of cannabis use cast suspicion on the disorder diagnosis or on its legal status or both? Why?* The political ecology of cannabis use casts suspicion on both the mental disorder diagnoses of Cannabis Abuse, Cannabis Dependence, and Cannabis Intoxication and on the legal status of cannabis consumption—prohibition. The political ecology of Cannabis-related psychopathology reveals the emergency demands for collective resistance and reform and the imperative of heading pleas for the repeal of prohibition and the adoption of a policy of restoration comprised of relegalisation, amnesty, and restitution (d’Oudney et al. 2006). Suspicion is cast on the diagnosis of Cannabis Abuse given the fact that clinically significant distress that manifests as recurrent or persistent cannabis-related legal problems does not remotely imply *de facto* psychopathology (Earlywine 2004), but, in my opinion, flawed and insincere public health regulation of Cannabis Abuse prevention and control, which a critical political ecology of Cannabis Abuse disorder can expose. Suspicion is cast on diagnoses of Cannabis Dependence because some of the described features of this disorder can be better explained with cannabis consumption political ecologies of health forced to operate under an environment of prohibition. The political ecology of cannabis use also casts suspicion on the diagnosis of Cannabis Intoxication, given that it shows how cultural ecological aspects of the psychological states induced by cannabis consumption are inappropriately pathologized in current diagnostics.

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