2. Cannabis and Its Effects

AGGRESSION, VIOLENCE AND CRIME

Opinions in the literature on the relationship between cannabis and aggression, violence and crime are varied and contradictory. Laboratory studies of the acute effects of cannabis on human beings indicate that aggression and violence, at least under controlled conditions, are rare. Most investigators report a quieting or tranquillizing effect, although significant changes in behaviour are ordinarily difficult to detect at normal doses. No tendency towards aggression or violence was seen in connection with cannabis in any of the Commission experiments or social research. In a recent study, cannabis was much less likely than alcohol to produce signs of aggressiveness in a group of regular users of both drugs.108 In addition, no signs of cannabis caused aggression were seen in the Addiction Research Foundation's sub-chronic experimental study of daily marijuana use.436

In Blum's survey of cannabis users, very few instances of aggression or fighting were noted, even though the subjects were willing to acknowledge other negative aspects of cannabis use.59 One exceptional report from South Africa in 1938, where cannabis was given to a group of psychotic patients, noted that some of these individuals became irritable, excited and assaultive.512

In rodents, cannabis usually decreases aggressiveness and fighting, even at doses which do not produce marked sedation, although under some unusual conditions (extreme cold, or starvation, for example) and severe chronic drug administration regimes some increase in fighting has been noted.112,541,559,605 Cannabis has also been shown to reduce aggressiveness in monkeys.246 Generalizations which can be made from these animal studies to humans are, of course, limited.

Many of the Eastern studies discussed in the section under Adverse Psychological Reactions describe occasional impulsive anti-social or violent acts in certain chronic cannabis users. Most often, such behaviour is associated with acute psychotic reactions, usually in severely disturbed individuals. The incidence of such behaviour in even chronic cannabis users is reportedly very low. On the other hand, Eastern observers often report a high incidence of petty crime among certain chronic users in the lower strata of society.
The **Indian Hemp Drugs Commission Report** (1893-94) concluded:

In respect to his relations with society, however, even the excessive consumer of hemp drugs is ordinarily inoffensive. His excesses may indeed bring him to degraded poverty which may lead him to dishonest practices and occasionally, but apparently very rarely indeed, excessive indulgence in hemp drugs may lead to violent crime. But for all practical purposes it may be laid down that there is little or no connection between the use of hemp drugs and crime. 295[P. 264]

A book by P.O. Wolff, Marihuana in Latin America.- the Threat It Constitutes, published in 1949, is often noted in discussions of cannabis and crime in a critical review of the monograph, O.J. Kalant has pointed out that Wolff's report:

... is primarily a diatribe against marihuana .... The book is practically devoid of hard data. The material presented consists mainly of conclusions and opinions of various authors, and of anecdotal examples of one sort or another. 312 [P. 25]

Other investigators have come to similar conclusions regarding Wolff's report, and it would appear that it provides little scientifically documented evidence regarding the alleged association between cannabis and crime.

Gardikas reviewed 379 cases selected from among persons who had been arrested for the public use of hashish in Greece from 1919-1950. Nearly one-half of the individuals described had previous criminal records, and of the remainder, almost two-thirds were later arrested for non-drug criminal offences. Many were noted as "habitual criminals" by the police only after they had first been arrested for hashish use. The investigator attributes much of the later criminal behaviour to the use of hashish, but many other potentially important causal factors were not explored. Although a correlation between hashish arrests and other criminal records existed in the group described, a causal relationship was not documented, and methodological limitations in the study prevent extrapolation to the population of Greek cannabis users in general.
Chopra suggests that cannabis use may actually reduce the occurrence of violent crime and aggression by decreasing general activity.\textsuperscript{122,127} In a recent report from Egypt, Soueif indicated that persons imprisoned for cannabis offences had a significantly lower frequency of non-drug criminal offences than did non-hashish-using prisoners. In addition, among all those with such criminal records, non-users exceeded users in the frequency of crimes committed.\textsuperscript{584}

Although opinions are mixed, in general, reports from Eastern and non-industrial countries indicate that cannabis is not a significant cause of serious crime or violence, and is much less of a problem in this regard than is alcohol.\textsuperscript{1,23,71,114,127,321,347,453,458,613,627} The recent WHO report notes:

A revealing way to assess the contribution of cannabis to crime and violence through a comparison with alcohol. The latter provides an established base-line, both from everyday experience and from reliable statistics. On the basis of such comparisons, most authors are of the opinion that alcohol is much more closely associated with aggression and violence than is cannabis.\textsuperscript{678 [P. 32]}

Violent crimes associated with acute psychotic reactions to cannabis are rarely reported in the North American scientific literature, although anecdotal stories have appeared in the popular press. As discussed earlier, recent reports of United States military personnel in Vietnam indicate that violent behaviour does occur during acute panic reactions in some soldiers.\textsuperscript{87,119,201,202,213,401,561,597} Those conditions, although cannabis does not seem to contribute significantly to crime in the military (see earlier sections on Adverse Reactions).\textsuperscript{87,119,201,202,213,401,561,597}

Bromberg's studies were among the first systematic investigations of cannabis and crime in the North American literature. Although some correlation was observed between cannabis use and minor offences, no cases of murder or sexual crime due to cannabis were established. Bromberg concluded that there was no relationship between marijuana use and violent crime and challenged the validity of inaccurate case reports released to the general press by the United States Bureau of Narcotics.\textsuperscript{85,86,87} Some of these cases were later presented again by Munch,\textsuperscript{456} and these reports have recently been critically reviewed by Kaplan\textsuperscript{321} and Goode.\textsuperscript{232} Blumer reported that marijuana-using juveniles were much less likely to be involved in anti-social and criminal behaviour than groups who preferred alcohol. He also indicated a tendency for delinquent activities to decrease as individuals shifted from alcohol-prefering groups to the marijuana subculture. On the other hand, Blumer also points out that some
delinquents in his study used marijuana to ease anxiety and to fortify themselves for premeditated criminal acts. Other drugs including amphetamines, barbiturates and alcohol are also commonly used for this purpose.

The 1969 Woodstock Music Festival is often noted in discussions of cannabis and aggression. Cannabis was reportedly used by the vast majority of the nearly one-half million participants. Police indicate that no fighting or violent behaviour was detected. The significance of this happening, of course, is difficult to interpret because of the unique set and setting associated with the event. Other such festivals have not been as peaceful.

Some statistical studies in the past literature have shown a correlation between cannabis use and other minor criminal behaviour. Many reports of drugs and crime have included drug offences in with other violations and the data are, consequently, difficult to interpret. Reports of cannabis consumption among criminals, and the incidence of other crime among individuals arrested for drug offences, also suggest some statistical relationship. A causal effect has not been demonstrated, however, and a number of important psychological and socioeconomic variables complicate the interpretation of these data.

Goode studied 204 New York cannabis users from different backgrounds and occupations. Many were middle-class and nine had been arrested on marijuana charges. The overall arrest frequency in this sample was similar to the national average. but no matched control group was studied. The most frequent violation noted (over one-third) was associated with non-violent picketing or demonstrating. No other single violation occurred more than a few times in the arrest list. There was no correlation between levels of marijuana use and arrests. That is, frequent users were apprehended for crimes no more or less often than infrequent users. Goode also critically reviewed the scientific literature and law enforcement reports pertaining to the alleged criminogenic effects of cannabis and concluded that, "All 'studies' which claim to establish a causal link, upon close scrutiny, simply do not observe even the most elemental rules of rigorous empirical proof."232

The briefs presented to the Commission by the Royal Canadian Mounted Police and the Solicitor-General's department dealt at considerable length with the alleged association of illegal drug use and criminal behaviour in Canada. It was suggested that the use of drugs such as cannabis is, or will be, related to subsequent non-drug criminal activity. Of 239 cases during 1969 and 1970 relating drugs and other crime, provided to the Commission by the R.C.M. Police, 72 involved cannabis alone. (Alcohol-related crimes are generally not recorded.) Five of the 239 cases note crimes committed under the influence of cannabis. Two crimes of violence, three crimes against property. An additional 33 cases report convictions for
possession of cannabis, where the accused had prior records for other crimes. Another 16 cases involved persons arrested for non-drug crimes, but who were found to be in possession of cannabis at the time of their arrest. Six persons told police they committed property crimes in order to obtain cannabis, and another three, charged with non-drug crimes, admitted to the prior use of cannabis. Nine cases involved crimes of violence in connection with trafficking in cannabis. Reports of violence within the illicit drug market in Canada have been received by the Commission from other sources also, and similar examples were discussed by Cooper.25 Apart from these few isolated cases, the R.C.M. Police said that even though they "...lack evidence of crime committed in Canada by cannabis users" such data is available from other societies. We have been unable to find scientific documentation of a criminogenic effect in the international literature.

Major governmental inquiries around the world for three-quarters of a century have come to generally similar conclusions regarding the lack of a causal relationship between cannabis use and major crime.235,295,407,631,633,634,635,678

There is no scientific evidence that cannabis use, itself, is significantly responsible for the commission of other forms of criminal behaviour. While individuals with a delinquent or anti-social background have, in the past, apparently, been more likely to use cannabis than other individuals, the social situation has changed rapidly in North America. Few crimes committed under the influence of cannabis have been adequately documented, and a causal relationship between the use of the drug and other illegal behaviour has not been established. It may well be that an individual who is inclined to commit one illegal act (for example, a drug offence) may also be more likely than average to transgress in other areas as well. Some observers feel that the lessening of inhibitions often reported with cannabis use might, in certain predisposed individuals, increase the likelihood of anti-social behaviour. In addition, some criminal individuals might use cannabis or other drugs to lessen anxiety and give courage before a premeditated illegal venture.

Aggression may occur as a component of an acute adverse reaction in some instances, but such cases are apparently rare.