Cannabis-related beliefs and behaviour among French adolescents: school-based prevention may boomerang

Cannabis users may modify their beliefs about drugs and drug users by drawing a line between ‘hard drugs’ (e.g. heroin) and ‘soft drugs’ (e.g. cannabis) and by claiming that only ‘hard drugs’ are dangerous.

The prevalence of cannabis use among French adolescents and young adults is quite high, especially when compared to other European countries. Our recent study, carried out by the French Monitoring Centre for Drug and Drug Addiction (OFDT) showed that cannabis use among youth has steadily increased during the nineties. In 2003, at age 17, 47 percent of girls and 53 percent of boys have used cannabis at least once in their lifetime, and respectively 7 percent and 15 percent reported regular use (at least 10 uses in the last month).

According to previous studies, both qualitative and quantitative, cannabis users are prone to distinguish ‘soft drugs’ (such as cannabis) from ‘hard drugs’ (heroin, crack) in order to claim that their consumption would be relatively safer. In our study, we investigated the role of these factors associated with cannabis use and beliefs about so-called ‘hard drugs’ and ‘soft drugs’ among French adolescents, with a focus on exposure to preventative information at school. Indeed, such information is explicitly designed to fuel ‘anti-drugs’ attitudes among pupils and to prevent them from using drugs.

The information that could be spread through different channels: during a course by a teacher, during a specific lecture on drug prevention, performed by an official report or through posters and booklets. This information may be quite different from one school to another, but a recent official report based on in-depth interviews of representatives from the main organizations in the field of drug prevention in schools helped to match two of these channels to a specific context. Fins, since 1998, preventive information campaigns launched by official organizations depending on the French Ministry of Health have been enforcing the harm reduction principle, instead of promoting a drug-free society. These campaigns highlighted the difference between abuse, and addiction; they ranked drugs on the basis of health-related risks, with a special emphasis on cigarette and alcohol, which are the most commonly consumed. The national-level organizations in charge of these campaigns produce a lot of posters and booklets which are available in most high schools and provided to the police and to non-governmental organizations, and police officers specialized in drug prevention lectures are trained by representatives from those non-governmental organizations. These organizations usually make a strong difference between licit and illicit drugs, they argue that cannabis is a ‘hard drug’, nearly as dangerous as heroin. According to them, cannabis is a gateway drug. Such information spread could provoke addiction very easily, violence and crime; and they claim that cannabis kills yearly thousands of kids and induce the ‘social death’ of several hundred thousand. This message is very similar to the discourse endorsed by the Federal Bureau of Narcotics when marijuana was prohibited by the United States federal government in 1937.

The aim of the present article was two-fold. The first goal was to investigate the propensity to distinguish ‘soft drugs’ from ‘hard drugs’ as well as associated factors among French high-school pupils, including exposure to different kinds of preventative information at school. The second objective was to study the relationship between such propensity, exposure to preventative information and cannabis use.

**Research method**

From January to May 2000, the Centre for Sociological Analysis and Intervention (CASI) conducted a French national survey among high-school pupils. Overall, 39 high-schools were solicited and 33 agreed to participate, among which 200 classes were randomly selected. In each selected class, all pupils were asked to fill an anonymous self-administered questionnaire within the classroom. Among pupils registered in these classes, 7 percent were absent the day of the survey and 1 percent did not fill the questionnaire. Overall, 6,382 completed questionnaires were collected, resulting in a sample of 5,612 pupils aged 16-20 years old with valid answers for the key variables of interest.

**Results**

Six questions assessed the propensity of respondents to distinguish ‘soft drugs’ from ‘hard drugs’. The answers range from 0 to 10 and were computed with a numeric encoding of respondents’ opinions toward the following statements:

- **Statement 1:** There are ‘soft drugs’ and ‘hard drugs’
- **Statement 2:** ‘Soft drugs’ are a gateway to ‘hard drugs’
- **Statement 3:** Drug use is unhealthy, it increases delinquency, it causes accidents and harms
- **Statement 4:** For these four statements, you used ‘hard drugs’ only, ‘soft drugs’ only, both, or don’t know
- **Statement 5:** In order to use ‘hard drugs’, you need to use ‘soft drugs’

Availability of cannabis was assessed with two questions: respondents were asked whether they considered that they could very easily get cannabis if they want to, and how many cannabis users they knew. Of course, peer users also provide the individual with rationalisations sustaining the distinction between ‘soft’ and ‘hard’ drugs.

Three kinds of exposure to preventative information at school were distinguished: information spread through a course by a teacher, information on posters or booklets, and having followed a specific lecture on drug prevention. As stipulated above, information spread through posters and booklets is more likely to refer to risk reduction principle, whereas information spread through lectures is more likely to be based on beliefs about which present cannabis as a very dangerous gateway drug. Respondents were also asked whether they felt well informed on drugs or whether they would like to have more information on this issue.

Lastly, background characteristics were recorded: gender, age, geographic area (rural versus urban area) and having already received a grade in French. This variable was used as a control variable in the model.

**Method of analysis**

As drug use varies greatly with gender, especially in adolescence, separate analyses were performed for boys and girls. The response were compared using Pearson’s χ² and Student’s t test.

Then, we used a linear regression for modelling the score corresponding to the propensity to distinguish ‘soft’ from ‘hard drugs, with background characteristics, peer use, exposure to preventative information at school and perceived need of information as explanatory variables.

Finally, in order to grasp the global scale of relationships between cannabis use, propensity to distinguish ‘soft drugs’ from ‘hard drugs’ and their main determinants (exposure to lectures on drugs, peer use, perceived ability to get cannabis very easily), we computed a hierarchical log-linear model.
Determinants of the propensity to distinguish "soft" and "hard" drugs

Table 2. Factors associated with propensity to distinguish "soft" drugs from "hard" drugs. Logistic regression (Odds Ratio, 95% C.I.):

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
<th>Odds Ratio (95% C.I.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predisposed to use drugs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel well-informed about using drugs</td>
<td>0.1</td>
<td>0.2-0.7</td>
</tr>
<tr>
<td>Exposure to prevention materials at school</td>
<td>0.2</td>
<td>0.2-1.0</td>
</tr>
<tr>
<td>Predisposed to social context</td>
<td>1.8</td>
<td>1.0-3.3</td>
</tr>
<tr>
<td>Peer use</td>
<td>0.3</td>
<td>0.0-0.7</td>
</tr>
<tr>
<td>Peers of 10 years</td>
<td>0.0</td>
<td>0.1-0.0</td>
</tr>
<tr>
<td>Educational attainment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has already reported a grade</td>
<td>0.5</td>
<td>0.3-0.8</td>
</tr>
<tr>
<td>Age (in years)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

Several limitations of the present study must be acknowledged before discussing its results. Some are common biases in school-based surveys; some headsmasters may have refused to involve their school in the survey because they were facing drug problems, and abstention may vary by frequency among cannabis users. More specifically, this study failed to take into account the impact of anti-drug interventions on adolescents' beliefs and behaviors, as it did not control the relative efficiency of different preventive programs. However, we have needed to determine the extent of the content of preventive messages, and a different design was used.

Dispositional characteristics are not causally related to educational attainment. This result may seem quite counterintuitive, if one considers that educational attainment should influence the type of "anti-cannabis" beliefs and attitudes brought about by the dominant social order. But educational achievements could develop a cognitive ability to build up sophisticated justifications for avoiding all behaviors, including drug use. This would imply that some students may distinguish "soft" drugs from "hard" drugs even though they expose to prevention interventions and that other students are more likely to be influenced by messages and beliefs about the harm of cannabis use.

The propensity to distinguish "soft" drugs from "hard" drugs was also positively correlated to educational attainment. This result may seem quite counterintuitive, if one considers that educational attainment should influence the type of "anti-cannabis" beliefs and attitudes brought about by the dominant social order. But educational achievements could develop a cognitive ability to build up sophisticated justifications for avoiding all behaviors, including drug use. This would imply that some students may distinguish "soft" drugs from "hard" drugs even though they expose to prevention interventions and that other students are more likely to be influenced by messages and beliefs about the harm of cannabis use.

Conclusion

The effectiveness of anti-drug interventions conducted in French high schools in the late 1990s is highly questionable, and this result emphasizes the necessity to develop theory-driven and evidence-based preventive actions, with professionals of prevention and education in mind, and with government and non-government organizations which are prone to endorse an unbiased anti-drug discourse that may hamper them. The new French prevention campaign launched in 2005, which avoids a territorial tree and does not endorse the gateway theory, is certainly a step in the right direction. More generally, as cannabis use and related beliefs are built together and reinforce each other, one should neither underestimate the impact of beliefs on behavior, nor underestimate users' adherence to such beliefs.

References