

ALCOHOL AND DRIVING IN FRANCE: WHY WE HAVE SEEN CHANGES AND WHAT IS NEXT?

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INTRODUCTION

This material, while not presented at the conference, is an update of two papers presented at the International Conference on Alcohol, Drugs and Traffic Safety, T-92, in Cologne, Germany in October, 1992. The papers review the drinking and driving situation in France. They are:

1. Drinking and driving in France during the years 1983-91: changes in legal framework and analysis in road users' behavior (M. B. Biecheler, C. Filou); and
2. Drinking and driving law enforcement in a wine-producing country: a multi-criteria process from 1960 to 1990 (M. Ch. Jayet)

These studies present different types of changes in the drinking and driving issue in the early 1990s (behavior, risk, repression, habits and economy) after two decades of steadily reinforced legal policy (legal BAC limit, random testing and the use of breath alcohol testing, more severe punishment).

THE NATIONAL CHANGES

Drinking and driving in France during the years 1983-91: changes in legal framework and analysis in road users' behavior

1. Specific changes in drinking and driving behavior: stability of % over the legal limit and decline of legal and illegal alcohol use among young drivers (<25 years).
2. Overall decline of injury accidents without any specific decrease of well-known alcohol-related accident categories (single vehicle, night, week-end, young drivers).
3. No specific effect of drinking and driving law enforcement on the decrease of injury accidents.

Drinking and driving law enforcement in a wine-producing country: a multi-criteria process from 1960 to 1990

1. Economic and cultural weight of the wine production stake on the modes of developing drinking and driving legal policy enforcement (1970-90).
2. Heavy increase of the implementation of drinking and driving repression (detection, convictions, type of sentence) by the middle of the eighties (1986-90).
3. Trends of repression and fatal accident evolution are not parallel (increased rise of punishment scores and low decline of fatal accident numbers by 1986-90).
4. Steady decline of alcohol consumption in national population and specific changes in drinking habits (type of beverage, consumption time and amount) linked to the deep mutations having affected generally French life-styles from 1970 to 1990 (urban living, tertiary activities, women at work, aesthetic and dietetic standards).

The trends and changes observed in both studies indicate an on-going phenomenon of diversified social evolution which produces an overall regulating effect on drinking and driving, especially among young population. This evolution is the matter of a long term social process involving a multiplicity of active sectors (political, social, economic) as much as a legal control of drinking and driving growing tighter and tighter.

WHAT IS NEXT ?

No direct statistical relation could be clearly set out between behavior, risk and legal control on the basis of the criteria independently examined to study drinking and driving. However, the changes observed outline an underlying

complex system of preventive working process. Moreover, some environmental *criteria* (travel modes, drinking modes) and some specific sociodemographic *categories* (age, sex and occupation) are particularly brought out by the social changes. (the young generation (< 25 yrs) shifts to less alcohol consumption and less drinking and driving while working and maturity time-life combined with urban life for male (25-40 yrs) go with more circumstantial alcohol consumption (invitation, restaurant) and drinking and driving). Thus, future monitoring of drinking and driving situation implies to take into account the previous results carried out.

Systems approach, new criteria and in-depth categories give research directions to put forward the knowledge about drinking and driving preventive work and assessment. That assumes an in-depth modelling purpose based on a systems approach. Insofar as the alcohol related accident patterns are well-known (single vehicle, night, week-end, young drivers), and the travel and alcohol intake patterns actually well-known too, this set of patterns introduce an approach of interactive relationships between risk, mobility and alcohol habits. It would consist of developing a transversal analysis by the means of an investigation of each area based on common descriptive categories. Besides, some other rule violations such as speed as well as other licit drugs could positively be associated with this approach, knowing that reducing road traffic risk is not only a matter of reducing alcohol influence.

With reference to the conjunction of alcohol economy impact and to the availability of long series of official data, a more macro-approach would consist of developing an analysis about relationships between economic alcohol values (prices, types and amounts of household and restaurant expenses), social alcohol uses (types and modes) and alcohol road traffic emergencies (mobility and accident).

The following are summaries of the two papers presented at T-92:

"Drinking and driving in France during the years 1983 to 1991: changes in legal framework and analysis of road users behavior"

In the first part of the paper we describe the evolution of the regulatory action in France in the alcohol field since 1983 which is the year which institutes the single legal level in blood 0.8 g/l to define an indictable offence and furthermore as an equivalent the legal level in breath of 0.40 mg/l.

In the second part we show through different quantitative criteria (number of tests and % drivers over the legal limit observed from random tests, motoring offenses, non fatal and fatal injuries), the overall trends in the road traffic offence control system.

We then analyze on the basis of INRETS surveys (1985 and 1991) the evolution of the driver's behavior in the general population and in specific subgroups, mainly age groups (>25 years, 25-39 years, 40-55 years, older than 55 years).

As a final part, we examine the injury accident trends between 1983 and 1991, in contrasting accident series using criteria most frequently linked to the presence of alcohol in an accident (sex, age, night and number of vehicles involved). This overall set of data lead us to the following main conclusions:

1. The increased number of checks since 1988 has helped to maintain stable the general level of illegal alcohol use on roads in France (2% in rural areas);
2. The levels of alcohol use in traffic appear to be falling among young drivers; and
3. The decreasing trends for categories of accidents known to be associated with alcohol are of the same order than those observed for other categories of accidents. Thus, there is no specific overall effect of drinking and driving law enforcement in the decrease of the number of injury accidents.

"Drinking and driving law enforcement in a wine-producing country, a multi-criteria process from 1960 to 1990"

In the wine-producing countries (France, Italy, Spain, Greece, etc.), legal prevention of the drinking-and-driving risk has to work within a complex set of competitive socioeconomic and political stakes exclusively supported by the alcohol produce. In so far as a comprehensive view of the evaluation problem is required, it is necessary to look at the efficiency and effectiveness issues with reference to a range of socioeconomic interferences (economic alcohol benefits, social status or life-style and alcohol consumption, alcohol risk awareness).

The evolution of per se law enforcement in France is examined over the past two decades with reference to economic data about wine and alcohol production (agriculture, labor market, industry), resources (taxes, trade market, stock-exchange) and consumption. From the preventive point of view, long term social processes are observed working in a positive converging manner.

The phenomenon of increasing punishment of the late 80's as well as a lowering of accident rates came out jointly of steady socio-economic transformations observed in the area of wine production and consumption (life-style mutations, production and market redeployment). Growing justice commitment and law enforcement progress are as closely connected with observed self-governing mutations altering the trench alcohol socio-economy as determined by the advances of the detection technology (breathalyzer) and the improvement of the punishment process.

This approach shows that positive law enforcement evolution and specific alcohol related socioeconomic changes go hand in hand which confirms the need to widen the classical efficiency and effectiveness analysis by involving socioeconomic criteria in the process of law performance evaluation.

Conclusions and Commentaries

The particularism of the wine-producing countries introduces more easily the question of the multi-criteria process of drinking-driving law implementation. The historical French situation of wine production puts into light the deep relationship between the preventive process and a national background made of economic stakes and cultural habits. Nevertheless, the question is not of minor importance when the national context deals with beer and liquor manufacturing, the range of social and economic stakes interfering with legal process does not vary: production, distribution, consumption markets, drinking habits and cultural status of alcoholic drink are still of equal importance.

The national trends observed in France over the last 20 years show that the steady progress of drinking-driving detection and repression is not only a matter of technical improvement of the drinking-driving legal system. The growing justice and police commitment of the late eighties is factually linked to a growth of the social commitment going hand in hand with self-governing changes in the French society. Therefore, if the improvement of detection and punishment techniques (legal evidence + prosecution procedures) contribute to the performance of drinking and -driving law enforcement, the deep transformation observed in the social and economic background of drinking-driving regulation (wine production and distribution market, life style and drinking habits) has made possible the intensification of the repression during the late eighties. The main issue of the relationship between improved law enforcement and road safety improvement remains to be demonstrated and needs future time-series studies, knowing that law implementation is a long social term process.

The modelling purpose actually constitutes the more fitting technic for assessing complex sociological background of the working law process thus defined (economic, cultural, legal context). The attempt of modelling begins with the functionalist multi-criteria rationalization of the law process that we began (integration of economic and socio-cultural criteria among more usual criteria of law working assessment). The next phase belongs to the development or the application of appropriate modelling techniques. Furthermore, the considered model allows more discriminating national and cross-national studies because the law enforcement variations are reported to a larger set of relevant criteria themselves recording more national features of law improvement process.

For copies of these two papers, see the proceedings of T-92, the 12th International Conference on Alcohol, Drugs and Traffic Safety, Cologne, Germany, September 28-October 2, 1992, edited by Utzelmann, Berghaus and Kroj, Verlag TÜV Rheinland, Cologne, 1993.