

# High BAC-drivers – Austrian experience with mandatory psychological measures.

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## Abstract

In August 1997 new legal measures concerning alcohol offenders have been introduced. Any offender who is caught with more than 0,12 percent BAC has to undergo a psychological driver improvement measure. Any offender who is caught with more than 0,16 percent BAC additionally has to undergo a psychological and a medical examination. With the lowering of the alcohol limit to 0.05 percent BAC (in January 1998) enforcement increased a lot. Thus for the following months and years a lot of information about the high BAC-drivers has been collected. This paper will present information based those psychological examinations conducted at the Austrian Road Safety Board, which currently catches hold of the majority of drivers who have to undergo a psychological examination. Data on trip related issues, individual histories of alcohol consumption and alcohol related problems, personality factors, social and professional background, psycho-physiological-performance are available as well as data on the judgement by the psychologist including diagnosis of problems and recommendations. This huge data set allows to test for several hypothesis. Especially the diagnostic criteria in psychological examination will be presented and discussed.

## Introduction

Who are the people who violate the alcohol limits? Assumptions on this question may still be biased a lot in most countries of the world and are still vague in Austria, too. Since about three years the available data for the consideration of this issue have become more reliable, however, for the highly intoxicated drivers especially.

Two facts result in improved information:

- since August 1997 every driver who was caught with more than 0,16 percent BAC has to undergo a psychological and a medical examination,
- after the lowering of the alcohol limit to 0.05 percent BAC in January 1998 enforcement increased a lot.

This new and clear legislation probably has influenced prosecution of offenders on several levels. Mechanisms which criminology describes with the term “normalisation” seem to decrease. In former days people had a higher chance to escape from prosecution and that chance was often

related with higher social status. Nowadays police on the road has become more strict, exculpation is much less accepted now. Officials at the authorities have no option to impose less severe consequences if a certain BAC-level has been measured. The fact that any offender above 0,16 BAC has to undergo a psychological examination provides us with a valuable data base to describe the offenders.

## **Materials and methods**

This paper will present information based psychological examinations conducted at the Austrian Road Safety Board. It currently catches hold of the majority of drivers who have to undergo a psychological examination. The data concern 201 subjects who had been examined during the first three months of the year 1998 (immediately after the lowering of the BAC-limit). To achieve a relatively mixed and representative sample the data were collected from three different Austrian regions (Vienna, Lower Austria, Burgenland) and from 14 different psychologists.

A psychological expertise is based on three sources of data:

- psychophysical performance tests (observation capacity and ability to gain an overview of a situation, reactive behaviour, in particular reaction speed and certainty of decision and reaction, as well as stress-resistance of the reactive behaviour, concentration capacity, sensory-motor skills, intelligence and memory capacities),
- psychological personality test (e.g. the sense of social responsibility, the capacity for self-control, mental stability and the tendency toward risky behaviour, proclivity toward aggressive interaction in road traffic),
- an elaborate interview with the subject on several facts which are considered crucial for the assessment of recidivism risk.

The content of the psychological expertise is to some extent determined in the Austrian legislation to ensure that all relevant aspects are considered.

Concerning the assessment of recidivism risk of alcohol offenders the data from the interview are considered of great importance for the judgement. Data on trip related issues, individual histories of alcohol consumption and alcohol related problems, attitudes towards alcohol consumption and assessment of the offence set by the subject are seen as relevant predictors as well as social and professional background.

So the data collection put the focus on these data and supplemented them with the final judgement which also includes recommendations on how to proceed to minimise future recidivism.

## **Results**

### **Social background of the offenders**

The average offender is 40 years old (mean 40,1 years, std.11,7), he is male (92,5% of the sample), comes from a rural area (70%, vs. 30% from urban areas) and does not have a very high social background (only 3% have a university degree and only 11% have completed grammar school or equivalent).

### **The aptitude to drive as judged by the psychologist**

There was no case in which a reissue of license without restriction has been recommended.

In some cases (2%) no chance to achieve a license again was judged.

In 34% of the cases a reissue under certain restrictions was recommended (usually participation in a Driver Improvement course and afterwards a probation period).

In 62% of the cases at present a reissue of the license was not recommended.

In only 45% of the cases driver improvement was considered to be a sufficient measure to achieve driving aptitude again.

In one third of the cases another psychological expertise was considered necessary before reissue of the license.

### **The offence:**

The average BAC was 0,19 percent (or 0,953 g/litre in breath, std=0,176).

48% of the offenders report that they felt impaired, however, only 4,5% reported that they had a hang over the next day. In two third of the cases the DUI-offence was a result of an everyday situation, only 32% of the offenders say it was an exceptional occasion.

### **Drinking habits of the offenders**

43% report daily consumption, 29% weekly, 21% less often, the remaining do not provide data on this issue.

56% provided data on certain amounts of alcohol consumption – they report an average consumption of 60g/day (std=41,926).

62% provided data on thresholds when they feel a first influence from alcohol – they report a threshold of 50g (std=25,967).

18% provided data on the threshold when they feel drunk - they report a threshold of 127g (std=62,255).

Those 35% who report on maximum consumption say that it is 127g (std=69,018).

### **Alcohol history:**

11% of the offenders report that they have already undergone a medical treatment to disaccustom from alcohol. 3,5% consulted professionals to get help for their alcohol problems.

22% of the offenders report various health-problems.

### **Assessment by psychologist:**

The following critical issues have been judged by psychologists:

currently exaggerate alcohol consumption – 47% of the cases

loss of control in case of alcohol consumption – 27% of the cases

increased alcohol tolerance – 54% of the cases

no insight in problematic drinking patterns – 43% of the cases (48% have insight)

no change in problematic habits – 53% of the cases (38% changed their habits)

serious deficits in psychological performance tests – 29% of the cases

permanent abstinence from alcohol considered necessary – 32% of the cases

abstinence from alcohol for a couple of months considered necessary – 23% of the cases

another psychological assessment necessary before reissue of license – 34% in any case (and in 10% of the cases if certain facts occur).

### **How is the judgement of the psychologist determined?**

Age, frequency of reported alcohol consumption, the reported threshold when an influence of alcohol is felt and deficits in performance tests as well as reported changes in behaviour are the most important determinants for the various judgements done by the psychologist.

The judgement to be discussed here in detail:

*Is Driver Improvement in this very case a sufficient measure to restore driver ability?*

The significant (t-test, chi-square) determinants are:

- Age
- Consumption frequency
- Threshold when a first influence from alcohol is felt
- Serious deficits in psychological performance tests
- Insight in problematic drinking patterns (concluded by psychologist)
- Reported maximum consumption

- Drinking situation before offence (everyday-, or exceptional situation)
- BAC-level at offence
- Currently exaggerate alcohol consumption (concluded by psychologist)
- Reported feeling of impairment at offence

Not significant:

Sex, reported hang-over, reported alcohol treatment, increased alcohol tolerance (concluded by psychologist), reported health-problems, reported average consumption per drinking event, threshold when feeling drunk, loss of control when drunk, change in problematic habits (concluded by psychologist)

This judgement of the psychologist (saying driver improvement is not sufficient) is highly correlated with the recommendation to abstinence (,848). The significant determinants for abstinence recommendation correspond almost completely with the determinants described above.

## **Discussion**

The people who drive with high alcohol concentration still seem not to be a representative sample of the driver population. In terms of social background the high proportion of men is confirmed once again, still people with lower social status seem to be over-represented.

In the judgement of the psychologists this group of drivers has a very high recidivism risk and Driver Improvement is often seen insufficient to restore driver's aptitude again. Additional measures are seen necessary very often. Life-long abstinence is often mentioned as the only way to counteract recidivism.

The judgement of the psychologists becomes conceivable if several facts are considered. Hard facts are only available concerning the offence and the seriousness is confirmed. Some of the other facts reported underlie social desirability. But there are indicators and contradictions which indicate problematic habits.

With an average BAC level of more than 0,19 percent less than half of the offenders admit that they felt any impairment and even less than five percent felt undesirable consequences the next day. These are strong indicators for continuous alcohol abuse.

The analysis of the determinants for the judgement of the psychologists shows that a wide range of indicators is used which address quite different aspects of the person, his/her habits and also the offence.

The criteria for decision are continuously improved at the Austrian Road Safety Board, and of course, this analysis does not give a complete picture of the criteria.

This data collection is a first step to validate the criteria. More detailed analysis of the available data is intended. By the use of multivariate methods the practice of the psychologists will be confronted with the guidelines developed at the Institute of Traffic Psychology.

In an next step data on the driver record of the examined subjects will be collected. These data will be used especially to come to clearer criteria for the distinction between different groups of DUI-offenders.

At present the extremes – the typical client for driver improvement and the alcohol addict are easy to describe and detect. There is, however, a big group of offenders who is between these extremes. A profound judgement on their problems and risks is a precondition needed to decide on appropriate intervention. There is still a discussion whether new types of driver improvement courses – probably linked with alcohol counselling or medical treatment – should be offered to some specific groups of alcohol abusers or pre-alcoholics.