

# **Assessment of Recidivism Risk of DUI Offenders**

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## ***Introduction***

In Austria traffic-psychology assessment is obligatory for drivers with a BAC of 0,16 % or more as well as for those who refuse the breathalyser test and who have 3 or more alcohol offences in traffic during the last 5 years. According to Austrian law, traffic-psychology assessment has to be based on the following three sources: performance testing, personality testing, and a personal interview (Driving Licence Health Act, FSG-GV, 1998). The goal of traffic-psychology assessment of DUI offenders is to assess the individual recidivism risk, i.e. to make a prognosis of the probability of future driving under the influence of alcohol .

## ***Performance Testing***

Performance testing examines whether the driver shows sufficient aptitude for driving a motor vehicle (minimum requirements). Especially the following abilities must be verified (FSG-GV, 1998): Observation capacity and ability to gain an overview of any given situation, reactive behavior, in particular reaction speed and certainty of decision and reaction, as well as stress-resistance, concentration capacity, sensory motor skills, intelligence and memory capacities.

Concerning DUI offenders, performance testing clarifies if the driver's traffic related performance is already decreased/impaired due to his or her drinking habits. Based on a recent analyses of randomly selected traffic-psychology expert reports of 140 drivers with a BAC of 0,16 % and more at the Austrian Traffic Safety Board, Christ (1999) found that 1/5<sup>th</sup> of this group didn't fulfil the minimum requirements. Yet, he argued that the percentage of drivers addicted to alcohol is slightly below 10%, because in some cases performance impairment could be due to the effects of age and/or other generally reduced abilities.

## ***Personality Assessment***

Traffic-psychology personality assessment examines a persons reliability in traffic. The most important parts of the examination are to verify the sense of social responsibility, the capacity for self-control, mental stability and whether or not there is a tendency towards risk-taking behavior or whether the driver tends towards aggressive behavior in road traffic and whether the subject's relation to driving shows a critical deviation from the norm (FSG-GV, 1998).

Referring to the above analyses of traffic-psychology expert reports of DUI offenders, Christ (1999) found that about 2/3<sup>rd</sup> of this group have negative results regarding their reliability in traffic. This confirms that the drinking habits of most DUI offenders are still below diagnostic

categories of defined diseases, analogous to the DSM-IV (see also Blocher, Winckler & Rösler, 1998; Hutter & Stupperger, 1996).

### ***Development of a multidimensional alcohol specific questionnaire (TAAK) \****

In order to optimize traffic-psychology assessment of DUI offenders at the Austrian Road Safety Board, a specific test was developed measuring attitudes related to alcohol on a multidimensional basis. This test is called "Testverfahren für alkoholauffällige Kraftfahrer" - TAAK (test for alcohol prone drivers).

#### Construction of TAAK scales

The TAAK scales were derived from literature reviewing empirical studies concerning differences between DUI offenders and drivers with no alcohol offenses in traffic (e.g. Bauer & Baab, 1995; Haffner, 1993; Kretschmer-Bäumel & Karstedt-Henke, 1986; Siegrist, 1992; Winkler, Jacobshagen & Nickel, 1990). Out of numerous variables showing discriminative power between these two groups, a limited number were selected for TAAK. Furthermore, long term experience with the traffic-psychology assessment clientele and driver improvement clientele contributed considerably to the construction of the scales.

The TAAK scales refer to the following aspects:

1. *Attitudes favoring alcohol consumption:* This scale focuses on functional drinking, its subjective meaning and the expected effect of alcohol (e.g. reduction of social restraints, relaxation, enhanced social competency, enhanced experience/adventure).
2. *Influence of alcohol related social environment:* This scale refers to individually perceived peer group pressure regarding alcohol consumption as well as taking a look at driving under the influence of alcohol or being passenger of a drunk driver.
3. *Alcohol specific norm acceptance:* This scale addresses attitudes towards regulations on alcohol and driving as well as enforcement criteria of law, e.g. with or without suspicion.
4. *Awareness of risks:* This scale deals with aspects of uncritical attitudes in DUI drivers. e.g. underestimation of risks when consuming alcohol, underestimate the probability of having an accident, strong believe in still being able to make the decision to drive.
5. *Lack of knowledge about alcohol specific issues:* This scale focuses on lack of basic knowledge regarding alcohol, i.e. absorption, the physical and psychological effect, duration of drinking, speed of break down and residual alcohol.
6. *Alcohol specific dissimulation:* An alcohol specific dissimulation scale has been added to the above five categories in order to measure the individuals tendency to answer in a socially desirable way.

The test consists of a total of 68 items. A new concept of blocked presentation of the test items had been developed: A part of a statement regarding a certain topic is followed by up to

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\* The elaborations concerning TAAK are based on Hutter (1998)

four continuing statements; each has to be answered in a multiple choice mode with four alternatives (agree absolutely not, rather not, rather, completely).

### Validity of TAAK

A sample of 473 persons representative for the Austrian traffic-psychology assessment clientele answered TAAK in a decisive situation. The results had no influence on the assessment. In order to validate TAAK additional data had been collected (e.g. family, education, profession, leisure time activities, driving record, accidents, fines, drinking habits, final decision of the assessment).

Regarding criterion validity a group comparison of 118 test twins (considering age, gender, intelligence) was carried out. T-tests for dependent samples showed significant differences between DUI offenders and drivers without alcohol offenses in the following TAAK scales:

- Lack of knowledge about alcohol specific issues: DUI drivers have higher values in the scale compared to drivers without alcohol offenses ( $p = .030$ ).
- Risk awareness related to DUI: DUI drivers have lower values compared to the non alcohol group ( $p = .000$ ).
- Alcohol specific norm acceptance: DUI drivers have lower values in the scale compared to drivers without alcohol offenses ( $p = .006$ ).
- Influence of alcohol related social environment: DUI drivers have higher values in the scale compared to the non alcohol drivers ( $p = .000$ ).

Moreover, significant correlation in the correct direction could be found regarding the final decision derived independently from the TAAK results (the psychologists were not informed about the TAAK files of the assessed subjects): Drivers with a negative final decision compared to drivers with a positive final decision show higher values in the scale 'lack of knowledge about alcohol specific issues' ( $p = .001$ ), lower values in the scale 'risk awareness related to DUI' ( $p = .000$ ), lower values in the scale 'alcohol specific norm acceptance' ( $p = .000$ ), higher values in the scale 'influence of alcohol related social environment' ( $p = .000$ ), and higher values in the scale 'attitudes favoring alcohol consumption' ( $p = .000$ ).

Finally significant correlations were found between TAAK scales and biographical data resp. data from the personal interview:

- Higher values in the scale 'lack of knowledge about alcohol specific issues' correlate to higher physical alcohol tolerance ( $r = .26$ ), more difficulties at the working place due to alcohol ( $r = .36$ ), higher amount of alcohol consumption at the working place ( $r = .15$ ) and higher BAC when driving a car ( $r = .30$ ).
- Lower values in the scale 'risk awareness related to DUI' correlate to higher BAC when having the first DUI offense ( $r = -.28$ ).
- Lower values in the scale 'alcohol specific norm acceptance' correlate to higher alcohol consumption at the working place ( $r = -.28$ ), more alcohol related problems at the working place ( $r = -.28$ ) and enhanced physical alcohol tolerance ( $r = -.36$ ).
- Higher values in the scale 'attitudes favoring alcohol consumption' correlate to higher age ( $r = .32$ ), more alcohol related problems at the working place ( $r = .19$ ) and more traffic fines ( $r = .19$ ).
- Higher values in the scale 'influence of alcohol related social environment' correlate to a lower tendency to drug consumption ( $r = .17$ ), to increasing age ( $r = .30$ ), more problems at the working place ( $r = .18$ ) and higher BAC in traffic ( $r = .37$ ).



## **Summary**

Driving while intoxicated is the most frequent reason why a person has to undergo a traffic-psychology assessment at the Austrian Road Safety Board. In order to optimize the prognosis derived from traffic-psychology assessment of DUI offenders developments concerning person-

ality and performance testing have been carried out at the ARSB within the last years. Validation studies regarding the newly developed multidimensional questionnaire TAAK measuring alcohol related conditions as well as the ART 2020 test devices measuring traffic related performance dimensions yielded empirical evidence for the significance of these assessment tools in order to identify unfit drivers.

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