

# **Evaluation of the Medical and Psychological Assessment** (MPA) in Germany

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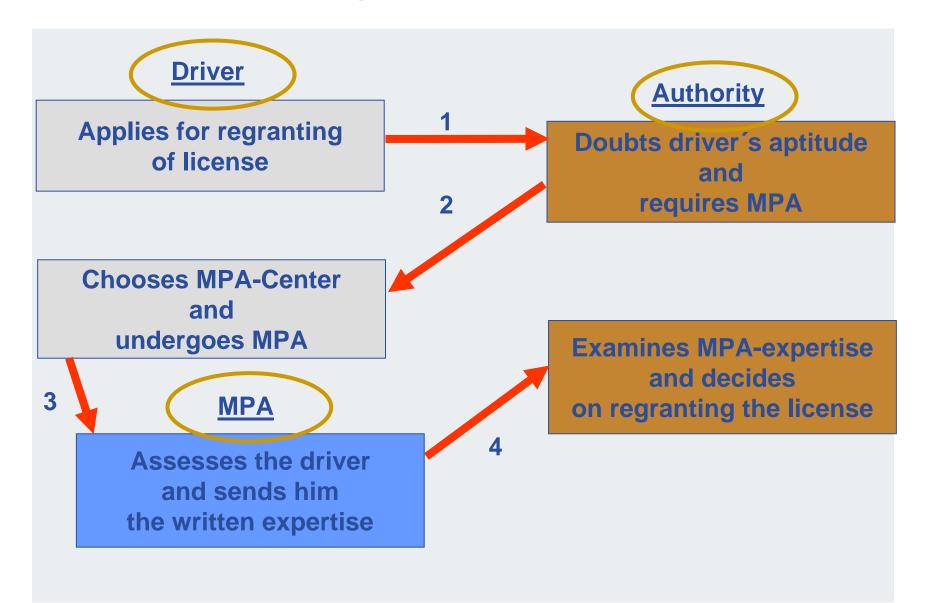


#### **Agenda**

- 1. Starting point
- 2. Questions
- 3. Study design
- 4. Results
- 5. Summary

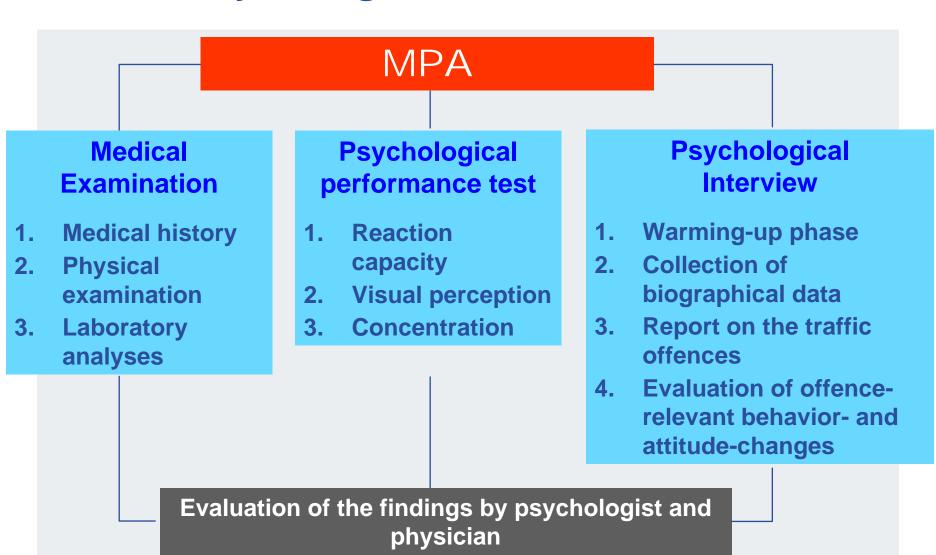


# **Medical-Psychological Assessment**





### **Medical-Psychological Assessment**



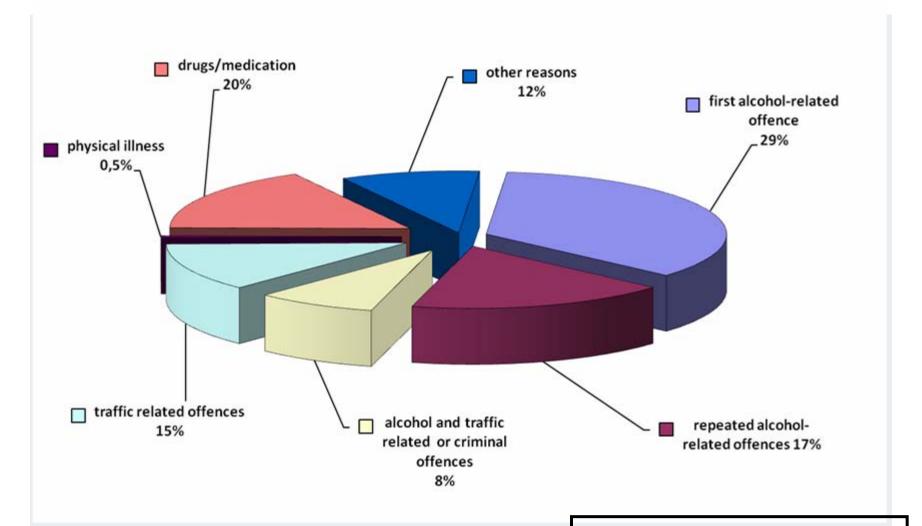


### Possible Outcomes of the MPA

### **MPA Positive Outcome: Partially Negative Negative Outcome: Outcome:** The driver's license The driver's license can be regranted *cannot* be regranted Participation in a Recommendations are course (§70) given according to the **MPA-results** Then the driver's license can be The MPA must be regranted repeated



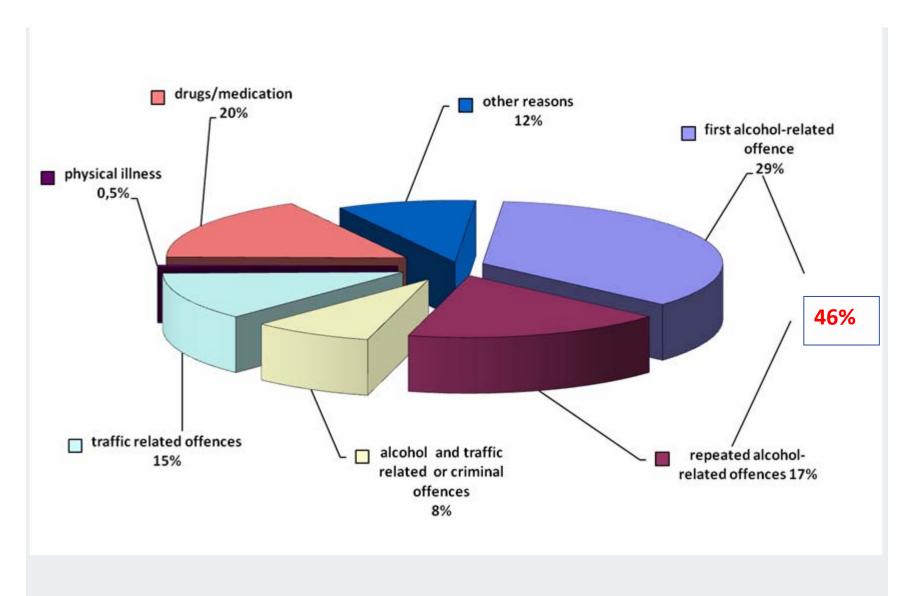
# **MPA** in Germany 2010



about 100.000 MPA in 2010:

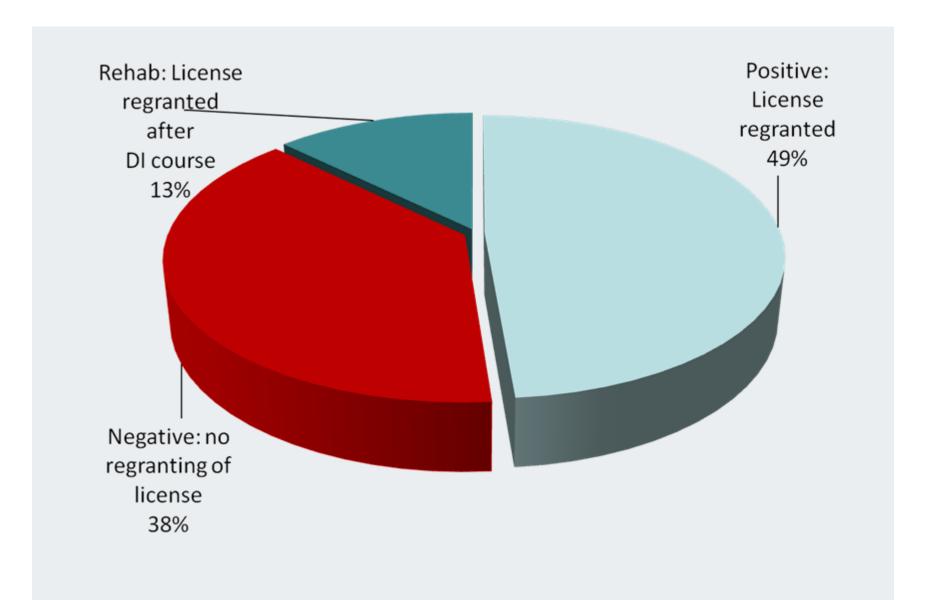


# **MPA** in Germany 2010



# MPA results 2010 (alcohol related cases only)







### **Starting point 2008**

#### Reasons for the study

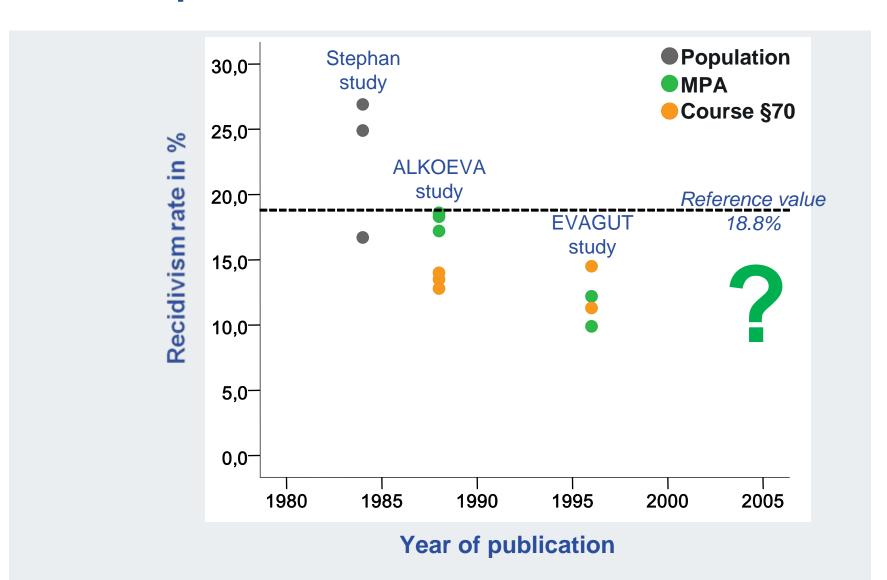
- No up-to-date recidivism figures available for the MPA in relation to drink-driving
- Further development and standardized application of the MPA assessment criteria
- Repeated examination of effectiveness of driver's license measures necessary

#### Intermediate changes of conditions

- Introduction of the 0.5 ‰ legal alcohol limit for drink-driving
- Changes in the framework conditions in Germany, including development and expansion of psychological advisory measures



# The data position in 2008





### **Starting point 2008**

# Organisations in the Association of Technical Control Boards (VdTÜV) and the University of Bonn – ZEM

ABV (TÜV Rheinland)

**DEKRA** 

TÜV Hessen

**TÜV Nord** 

TÜV SÜD

TÜV Thüringen



### **Questions**

- 1. How high are the recidividism rates of drink-drivers after an MPA in Germany?
- 2. Do the recidividism rates of drivers with a positive MPA outcome differ from those of drivers who have to undergo a § 70 driver improvement course?
- 3. How do the recidividism rates of drink-drivers without an MPA compare?



### Study design

- Retrospective recidivism analysis based on the Central Traffic Register (VZR)
- Drawing a sample of MPA clients from the records of members of the Association of Technical Control Boards(VdTÜV)

### MPA sample

- drink-drivers
- male MPA clients without other offences
- first drink-driving offence vs. multiple drink-driving offences
- positive prognosis vs. § 70 DI-course
- proportional sampling in accordance with the distribution of MPA alcohol cases in 2006 for the participating organisations (VdTÜV)

# **Vd**√Vd √Vd

### Study design

- Control group: Alcohol-related offence (OWi) sample
  - men with a first alcohol-related offence
  - stratified according to state-by-state distribution of the MPA groups
- **Data collection period:** 11/2005 10/2006
- Sample sizes

		Alcohol		
		first offence	repeated	
МРА	positiv e	<i>n</i> = 400	<i>n</i> = 400	
	§ 70	<i>n</i> = 400	<i>n</i> = 400	
OWi		n = 3,200		

• Recidivism criterion: drink-driving offence within three years



### **Hypotheses**

In connection with the predictive validity of the MPA and the effectiveness of § 70 courses, the following hypotheses can be established:

- The recidivism probabilities of the MPA groups are not higher than the recidivism probability of the OWi group
- The recidivism probabilities of the MPA groups are the same



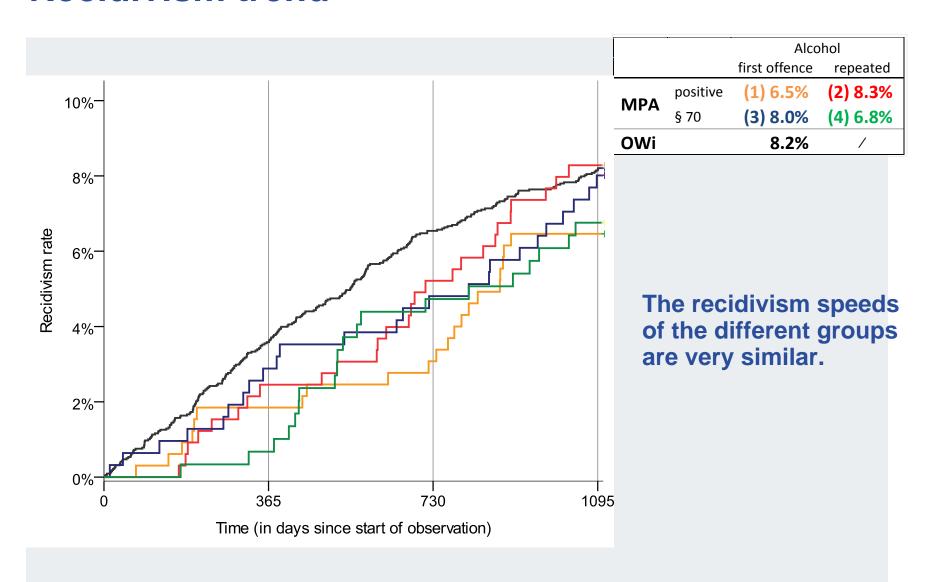
### **Recidivism rates**

		Alcohol	
		first offence	repeated
MPA	positive	6.5%	8.3%
		(21/325)	(27/326)
	§ <b>70</b>	8.0%	6.8%
		(25/312)	(20/296)
OW:		8.2%	
OWi		(261/3180)	

- The recidivism probabilities of the MPA groups are not higher than the recidivism probability of the OWi group.
- The recidivism probabilities of the MPA groups **do not differ** significantly (*p* = .768).

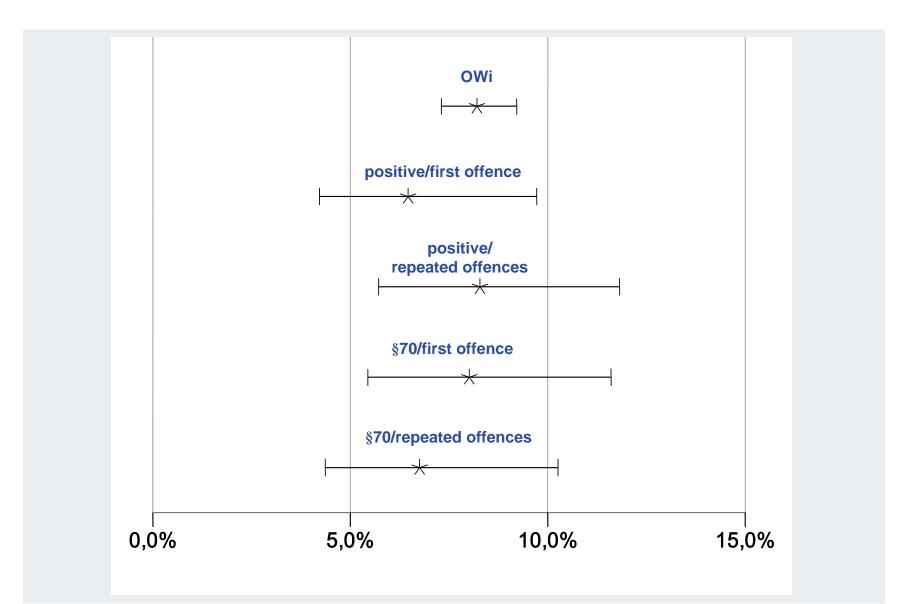


### **Recidivism trend**





### Recidivism rate (with 95% confidence-interval)





# Age distribution of the groups

	OWi	MPA
- 21 years	14,1%	6,8%
22 - 24 years	9,0%	10,2%
25 - 34 years	21,5%	28,7%
35 - 44 years	23,4%	26,3%
45 - 64 years	28,6%	
65 years and more	3,5%	1,4%
Total	n = 3180	n = 1259

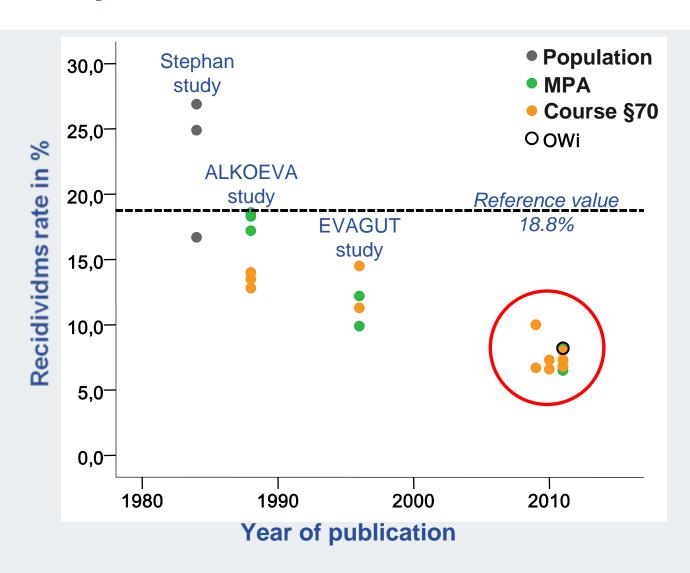


### **Summary**

- 92% of the drink-drivers assessed do not re-offend within three years. The positive trend of non-reoffending after MPA over recent decades is confirmed by the results obtained.
- Despite their poorer starting point, which is what triggers an MPA in Germany, the recidividism rates for the MPA groups are not higher than for the OWi group and do not differ compared to each other MPA group.
- The submitted results can therefore be interpreted as empirical evidence of the predictive reliability of the MPA for drink-drivers and of the preventive effect of the present German procedure for regranting the driver's license.



### The data position in 2011







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