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Social Attitudes to Road Traffic Risk in Europe

Driving a Motorcycle while Impaired

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DUI CHECKPOINTS

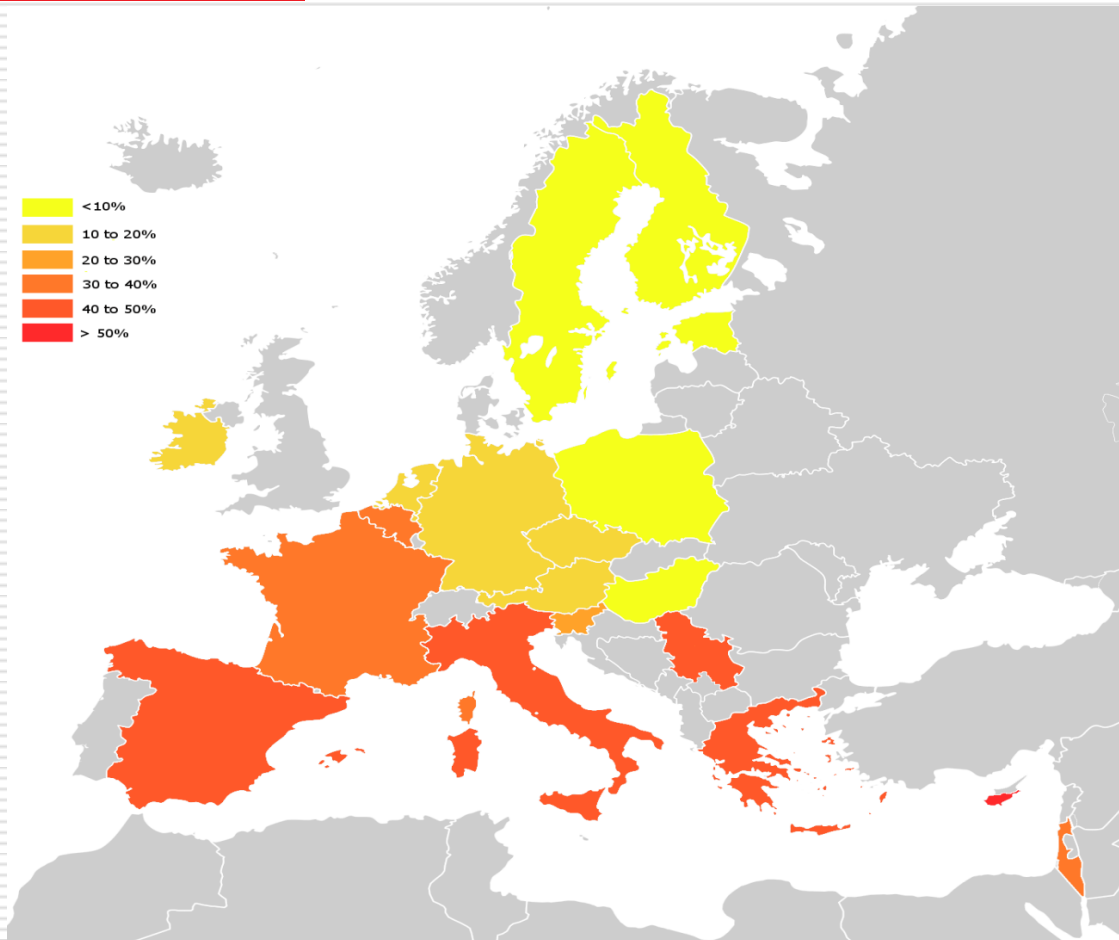
Topic

- ❑ The chapter deal with several impaired behaviour.
- ❑ This presentation will focus only on alcohol.
 - Driving a motorcycle under the influence of alcohol is one of the most dangerous situation in road safety.
 - They are more sensible to the effects of alcohol than car drivers. ¹
- ❑ Present an overview of the drink-driving behaviour.
- ❑ How the motorcyclists deal with road safety measures.
 - The attitude towards restraining measures.
 - The effects of legal norm and enforcement campaign.
- ❑ Identify the drink-driving predictors.

Drink-driving across 19 European countries

There is a great variability between countries.

- Southern countries declared more drink-driving.*
- What could explain these differences :
 - Legislation ?
 - Enforcement campaign ?
 - Cultural differences ?
 - Norm influence ?



* $F_{(2, 4464)} = 323.07, p < .001, \eta^2 = .13$

Figure note : Percentage of motorcyclists who reported that they drove, at least once during the last month, after having drunk even a small amount.

Attitudes toward legal measures

Overall, a clear majority is in favour of more restrictive policy

□ Alcohol Interlock

- 79% approved this measures for recidivist.
- 73% approved this measure for all drivers.
- Italy was the only country where the majority disapproved alcolock.

□ Penalties

- 78% agree that drink-driving offences should be much more severely penalized.
- A great variability across countries (from 51% in Italy to 92% in Hungary)

□ Legal BAC change

- 60% thought that motorcyclist should be allowed to drink « no alcohol at all » or « less alcohol than the present ».
 - Southern countries were less in favour of more restrictive BAC than Northern and Eastern countries.
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Attitudes toward legal measures

Consistent pattern between attitudes and drink-driving behaviour.

- Drink-driving is negatively correlated to legal measures.
- The more the motorcyclists declare drink-driving behaviour, the less they are in favour to legal restrictions.
 - The strength of the relation differs according to the region:

	Eastern		Northern		Southern	
	Few Drink-Drive	Much Drink-drive	Few Drink-Drive	Much Drink-drive	Few Drink-Drive	Much Drink-drive
Alcolock for all	-.07	-.07	-.09	-.11	-.17	-.21
Alcolock for recidivist	-.10	-.12	-.11	-.10	-.13	-.17
More severe penalties	-.19	-.16	-.24	-.19	-.19	-.24
Reduce legal BAC	-.27	-.21	-.35	-.24	-.41	-.33

Alcohol Check and feeling of impunity

No link between the number of check and the perceived risk to be fined.

- In average 62% had never been checked over the last 3 years,
 - More than 80% in Italy, Belgium, France and Slovenia.
 - Around 50% for Czech Republic, Spain, Cyprus and Finland.
- And they were rarely checked in a typical journey.

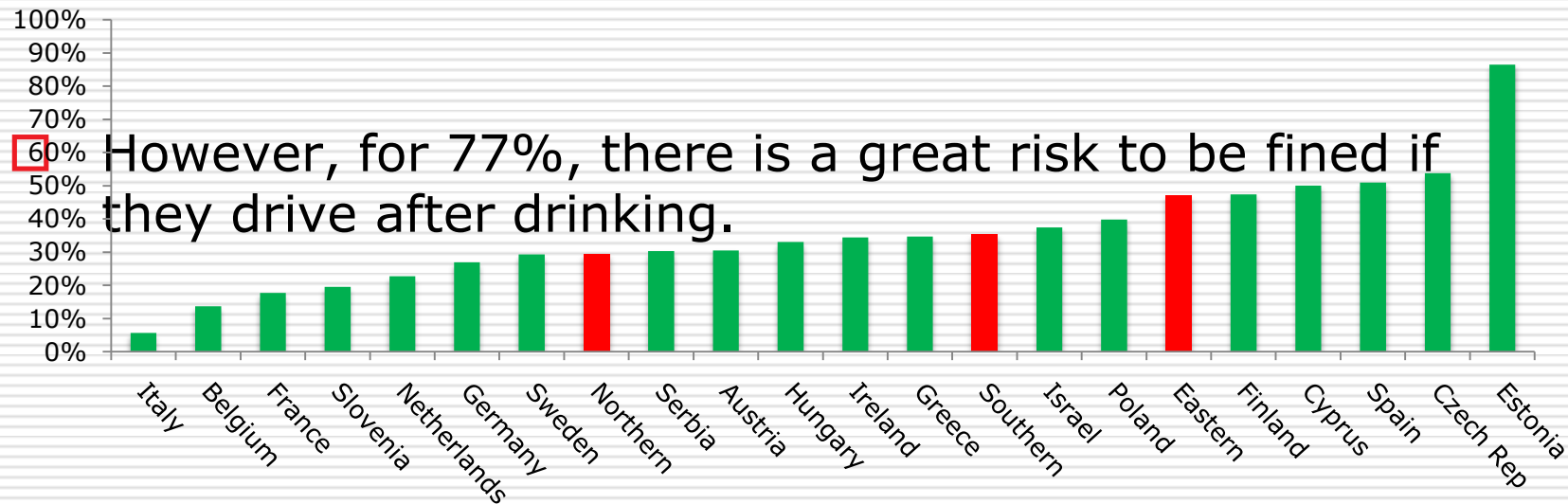
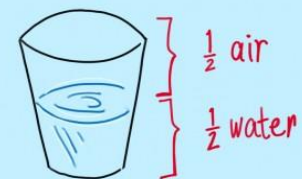


Figure note: Percentage of motorcyclists who reported an alcohol check in the past 3 years

A fines effect ?

Despite a fine the majority of the verbalized reoffended recently.

- 3% ($n = 126$) reported being fined in the past 3 years.
- Overall, those who reported drink-driving had 4 times* more probability to receive a ticket :
 - Controls are efficient because they catch the offenders.
 - Controls are inefficient because they still drink before driving.
- 55% of fined motorcyclist drunk-drive over the legal limit during the last month.
 - Fines could reduce reoffending.
 - Fines may not be *the* solution for preventing DWI recidivism.



technically,
the glass is always
full.

* Results from a multiple ordinal regression; Odds ratio are [2.5], [3] and [5.5] for Eastern, Northern and Southern countries respectively.

A legal BAC effect ?

Results differ according to the type of consumption.

- More drink-driving in 0.5 g/l countries.
 - Significant differences for « even a small amount »* and marginal for « over the legal limit »**.
 - Individuals tend to use their rights.

- No difference between 0 and 1 unit legal BAC
 - When they can drink only 1 unit, they prefer to stay sober.

- Reduce the Legal BAC to 0.2 g/l could be an efficient policy to decrease drink-driving *for those who respect the law.*

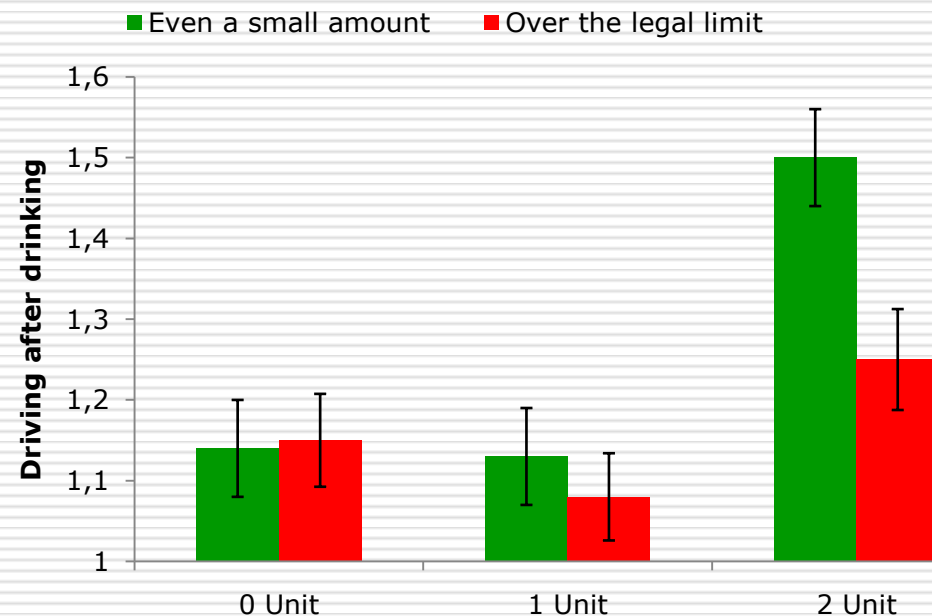


Figure note : Drink-driving mean according to the legal BAC. Error bars indicate a 99% confidence interval.

* $F_{(2, 4464)} = 124.16, p < .001, \eta^2 = .05$; ** $F_{(2, 4462)} = 38.14, p < .001, \eta^2 = .01$

Age and gender.

To be taken with caution.

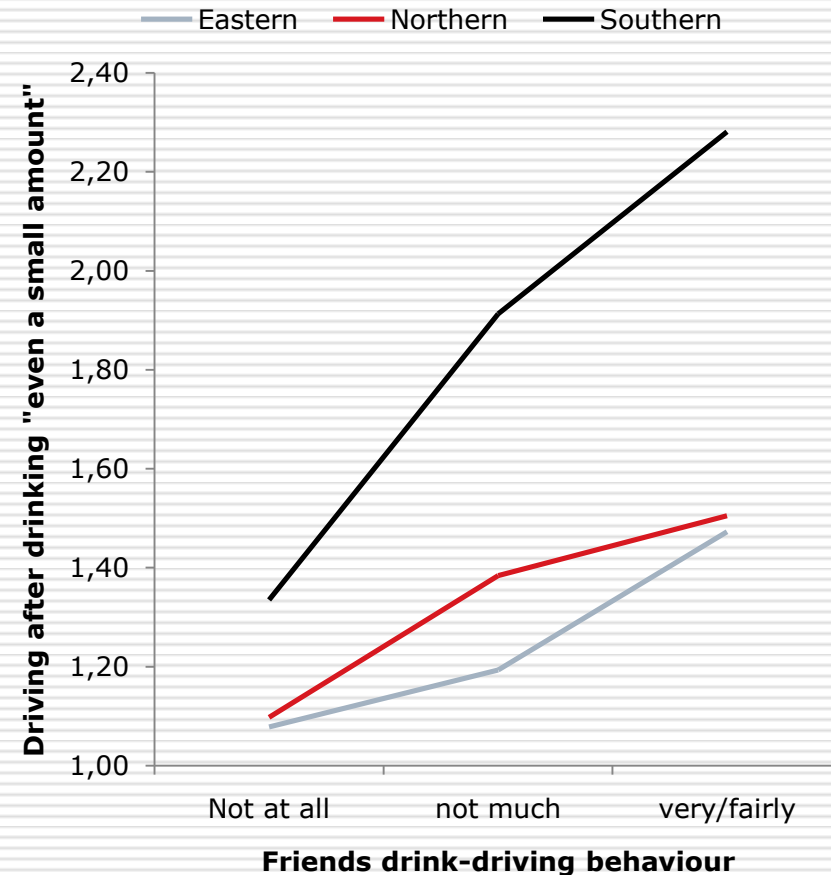
- Drink-driving seems to decrease with age [OR, 1.006].
 - For each additional years there is 0.6% chance to report less drink-driving behaviours.
 - However the relationship is insignificant within the categories of country.
 - The result could be an artefact : in Southern countries the participants were younger ($M_{age} = 37,5$) and drink-drive more than in Northern countries ($M_{age} = 42,2$).

 - Men seem to DWI more frequently than women [OR, 2.4].
 - 3 times more likely to report drink-driving in Northern and Southern countries.
 - Insignificant in Eastern countries.
 - The number of women motorcyclists who reported drink-driving were very small.
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Peer influence.

Results confirm the importance of the social influence.

- A significant relationship between self-reported and friends reported behaviour ($r = .34$).
 - 4.4* times more risk to drink-drive when most friends are describe as drink-drivers.
 - 5.3, 3.1 and 4.3 for Eastern, Northern and Southern countries respectively.
- Individuals tend to adopt the norms of their group and select their friends according to these norms.



* Results retrieved from a multiple ordinal regression.

Figure note : ANOVA of countries differences scores for drink-driving (even a small amount) according to their friends drink-driving behaviour, $F_{(4, 4434)} = 26.37, p < .001, \eta^2 = .03$.

Feeling of control.

Drink-drivers seem confident in their skills.

- Thinking that you can drink and drive if you do it carefully improve the risk to adopt this behaviour [OR, 5.5]¹.
 - 7, 8.3 and 3.6 times for Eastern, Northern and Southern countries respectively.
 - Even if you drink over the legal limit ($r = .34, p < .001$).
- Moreover, drink-driving is correlated with the belief it do not increase the risk of accident ($r = .24, p < .001$).
- Some drink-drivers seem to think they can drive safely if they compensate by a more careful driving...

But the feeling of control
is not the control.

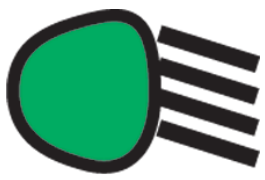


Drink-drivers also reported...
more accidents*

* 32% increase in probability to report an accident for each 1 more accident.

Conclusion.

- ❑ 23% of the motorcyclists declared that they drove after drinking, at least once *during the last month*.
 - ❑ Southern countries reported more frequent drink-driving than Eastern and Northern countries.
 - ❑ Legal measures have a moderate effect on offences and recidivism.
 - ❑ Other variables could be used in prevention campaign :
 - Feeling of control
 - Peer influence
 - ❑ Take into account the regional differences.
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Thanks for your attention