The longitudinal project

Alcohol-free on the road

(Alcohol-vrij op weg)

Evaluation study

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Alcohol-free on the road

- **Aim:** improve knowledge and attitude of young drivers with respect to alcohol and driving.
- **How:** experience driving under influence
- **Start:** 1995

Young Drivers (18/19 – 24 years old): Statistics in the Netherlands

- Young male drivers:
  - ± 25 % all alcohol related accidents
- Alcohol detected in breath, blood (SWOV)
  - Random stops: 2.1%
  - Hospitalized: 17%
  - Young drivers in the Province of Drenthe: 4.2%

Experience driving under influence

- **Aim:** improve knowledge and attitude of young drivers with respect to alcohol and driving.

- **Application:** all young drivers in the South-East of the Province of Drenthe, half a year after getting their driver license, are invited to a day at a closed circuit, in small groups, to experience what it means to drive under the influence of alcohol.

- **Practise:** the program consists of information about alcohol and driving, a driving test plus RT-test on a PC and a questionnaire, first time sober and a second time under the influence (BAC 0.5 – 0.8 ‰ / promille).

Alcohol (and driving performance)

- Sedative
- Disinhibition
- Impairment
  - Quality of the information processing
    - Not or late noticing relevant items
  - Motor control, eye-hand co-ordination
    - Diminished lateral control, or “weaving”
    - Special manoeuvres, e.g. parking
  - Reaction time
    - Late braking, e.g. at car-following or traffic lights

Experience driving under influence





Experience driving under influence

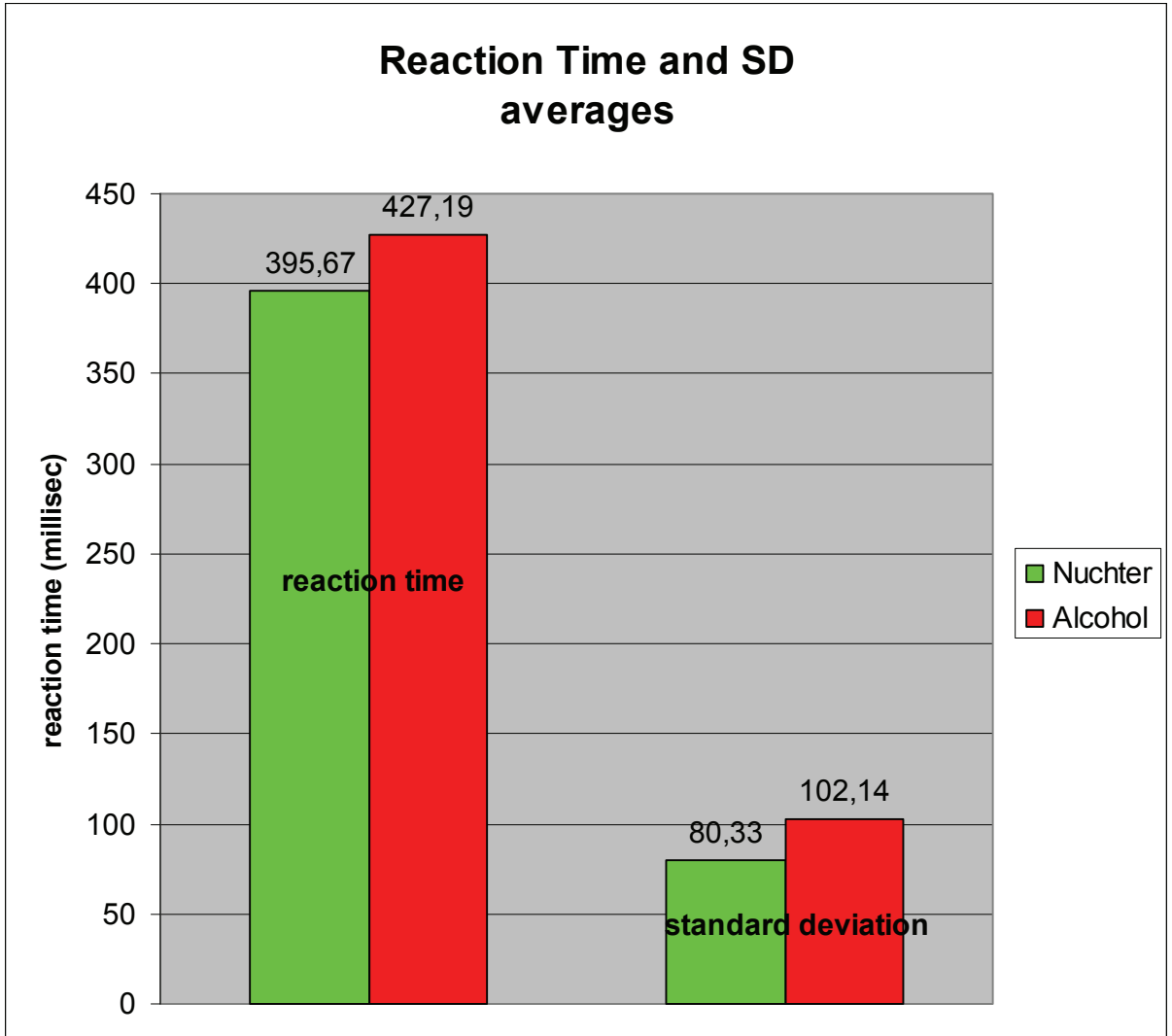




Results of the test (N = ± 1000)

- It is vital that alcohol is affecting performance should be apparent to the participants !!
- Driving test variables show significant differences between sober and alcohol condition. With the exception of one case (i.e. traffic light), the participants do better in the sober condition.
- The computer RT test shows a significant increase in reaction time and standard deviation.

Results
PC Reaction Times sober and alcohol



Results

Judgements (grade between1 and 9) by the driving instructor

Variable	Sober condition	Alcohol condition
General judgement by the instructor	6,55	4,05
Instructor grade for lateral control	6,30	3,72
Number of pylons hit	1,02	1,71
Number of misses traffic light	0,12	0,04

Experience driving under influence

- **Evaluation:** the project runs > 10 years, over 1000 participants, high time for an evaluation on effectivity of this “test day”.

The evaluation study

- To measure effectivity of the alcohol experience test, both attitudes and data about driving under the influence of alcohol of the test participants should be compared to a control group.

- In 2003, a Master thesis questionnaire study on attitudes among 233 of the participants was carried out. This group was checked for presence in police files with respect to driving under influence (random stops, accidents etc.) by the Public Prosecutor.

- In 2005 a control group of 347 young people from a different part of the Province of Drenthe responded to a sollicitation, returned a questionnaire and were checked for presence in the police files similarly.

Results
Comparison of groups

	Experience group 2003	Control group 2005
Number	**233**	**347**
Average age	**22**	**24**
Gender	**Male 62%** **Female 38%**	**Male 41%** **Female 59%**
Percentage car owner	**68%**	**78%**

Results
Opinions about alcohol and driving

Opinion	Experience group 2003	Control group 2005
Not good	**95,86%**	**97,69%**
Mind your own business	**3,31%**	**1,73%**
Good	**0%**	**0,29%**
No opinion	**0,83%**	**0,29%**

Results
Behaviour self-report

	Experience group 2003	Control group 2005
Do you have friends that drive under influence?	**Yes: 59%**	**Yes: 65%**
Do you tell them that this no good ?	**Yes: 89%** **(male: 83 %, female: 95 %)**	**Yes: 72%** **(male: 64 %, female: 79 %)**
Would you ride with a driver under influence ?	**Yes: 9.5%** **(male: 15 %, female: 6 %)**	**Yes: 9.9%** **(male: 16 %, female: 6 %)**

Result
Behaviour self-report

	Experience group 2003	**Control group 2005**
Have you been driving a car under influence after the alcohol experience test day ?	**No: 77,7% Yes: 22,3% (period 1 - 4 year)**	N.A.
How often have you been driving a car in the past year after drinking alcohol ?	N.A.	**0 : 73,7% 1 + : 26,3% (period 1 year)**

Results
Police files

	Experience group 2003	Control group 2005
In the files for driving under the influence of alcohol	**Male: 0,7 %**	**Male: 4,2 %**
In the files for driving under the influence of alcohol	**Female: 0,0 %**	**Female: 0,0 %**

Summary of the results

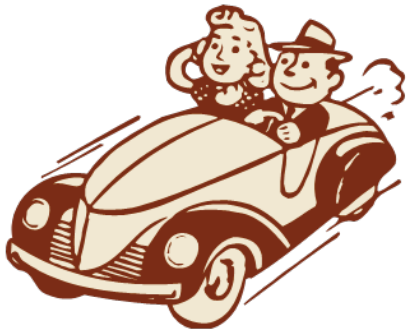
- There is a significant difference in attitude between the control group and the experience group
- The control group drives significantly more under the influence than the experience group
- Young men exhibit more hazardous behaviour than young women
- The total picture confirms that the alcohol experience test has a positive effect on young men who received their driving license recently

Conclusion

The alcohol experience test works well, thanks to the team

The project deserves prolongation and wide distribution

Thanks !!
questions, remarks !?





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