



Effective advanced rider training

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Institute for Road Safety, SWOV

- Independent research institute
- Based in the Hague, the Netherlands
- Founded in 1962
- Around 50 employees



SWOV's mission and scope

- Contribute to road safety with knowledge from scientific research
- Integrated approach:
 - Multi-disciplinary
 - Covering all aspects of road safety



Presentation outline

- (Advanced) rider training – what do we know?
- ‘Risk’ training
 - Content
 - Research questions & Method
 - Results
- Successful elements of training
- Implications for road safety

(Advanced) rider and driver training

- No research
- Bad research



The Cochrane Collaboration

Working together to provide the best evidence for health care

- Cochrane review (2010)
 - 23 studies: pre- and post-licence
 - More than half at least 20 years old
 - 3 studies of this century
- Most studies suffered from serious methodological weaknesses
- Unable to draw conclusions about effectiveness of training on crashes, injuries and offence rates

(Advanced) rider and driver training

- No research
- Bad research
- No (positive) effect of the training
 - Training skills → overconfidence
 - more risk taking

Advanced rider training 'Risk'



Research questions

1. What is the effect on **observed** riding behaviour?
 2. What is the effect on **self reported** riding behaviour?
 3. What is the effect on hazard perception?
- Also long-term (1 to 1.5 years after training)

Research design

Pre-test	'Risk' training		Short term post-test (6 months)	Long term post-test (1 tot 1.5 yrs)
275 participants	'Risk' - group	158	137	77
	Control group	117	85	34



Questionnaire



Hazard perception test



On-road ride

Results – observed riding behaviour



- Trained riders score better on 'safe riding'
 - No difference in 'fluent' and 'skilful' riding

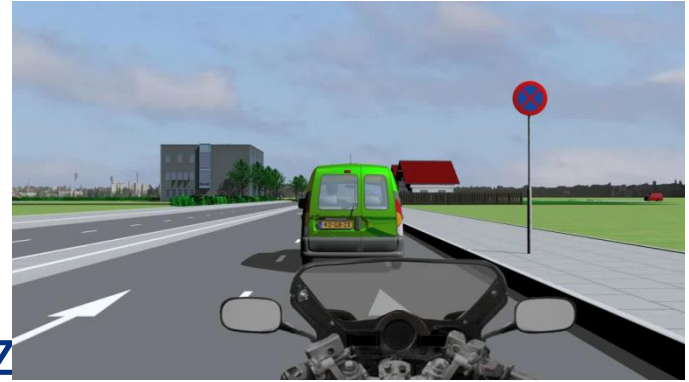
Results – self reported riding behaviour



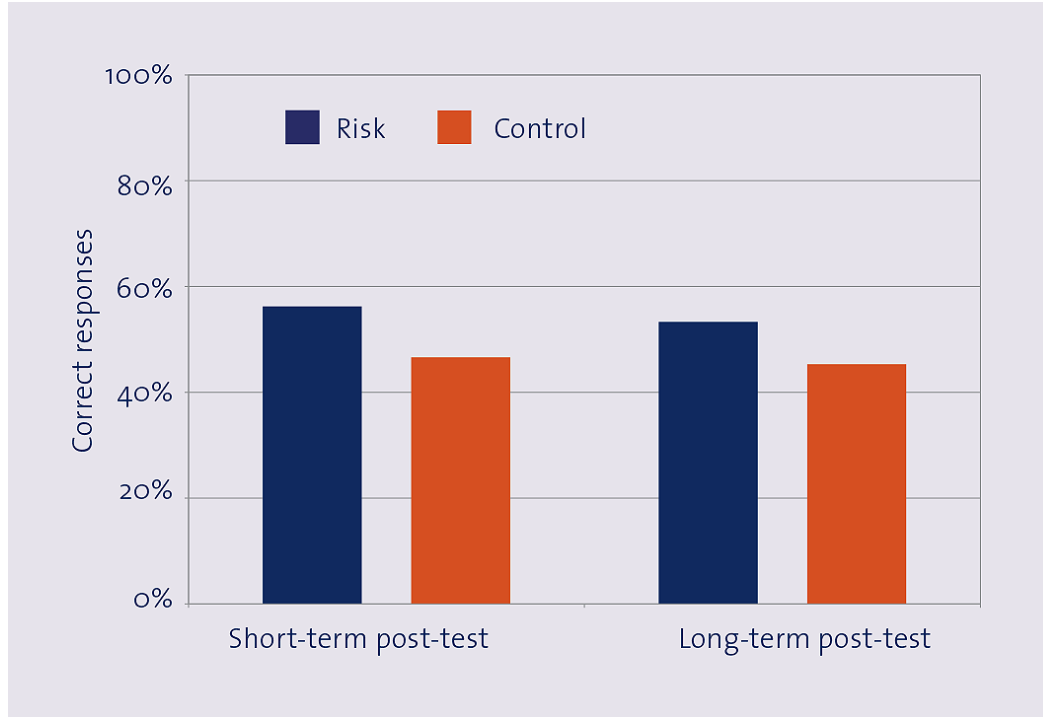
- No difference between trained group and control group
 - Participants do not report higher grades for their riding skills after training

Hazard perception test

- Willem Vlakveld (2011)
- Developed for car drivers
- 10 animated films
 - recognize traffic situations that could develop into a hazard



Results - Hazard perception test



- Trained riders score better on hazard perception
 - But: only significant in short term test

Conclusions - Effect 'Risk' training

- Improvement on **observed** safe riding
- No difference in groups in **self reported** riding behaviour
- Better performance on hazard perception test (only short-term)
- Safe riding improvement is still visible after 1 to 1.5 years!!!

Why is the 'Risk' training effective?

- No overestimation
 - Practice **NOT** on closed off track
 - Watching own videorecordings



Why is the 'Risk' training effective?

- Small groups of participants
 - But large enough for meaningful discussions



Why is the 'Risk' training effective?

- Quality of the trainers
 - Training and monitoring!



Implications for road safety?

- As sceptic scientist > positive about outcome evaluation
- However...
 - Relevance for crashes?
 - Who attends an advanced training voluntary?
 - Mandatory? Commitment of participants is crucial for effect
- Quality guaranteed?
 - Content
 - Instructors

