



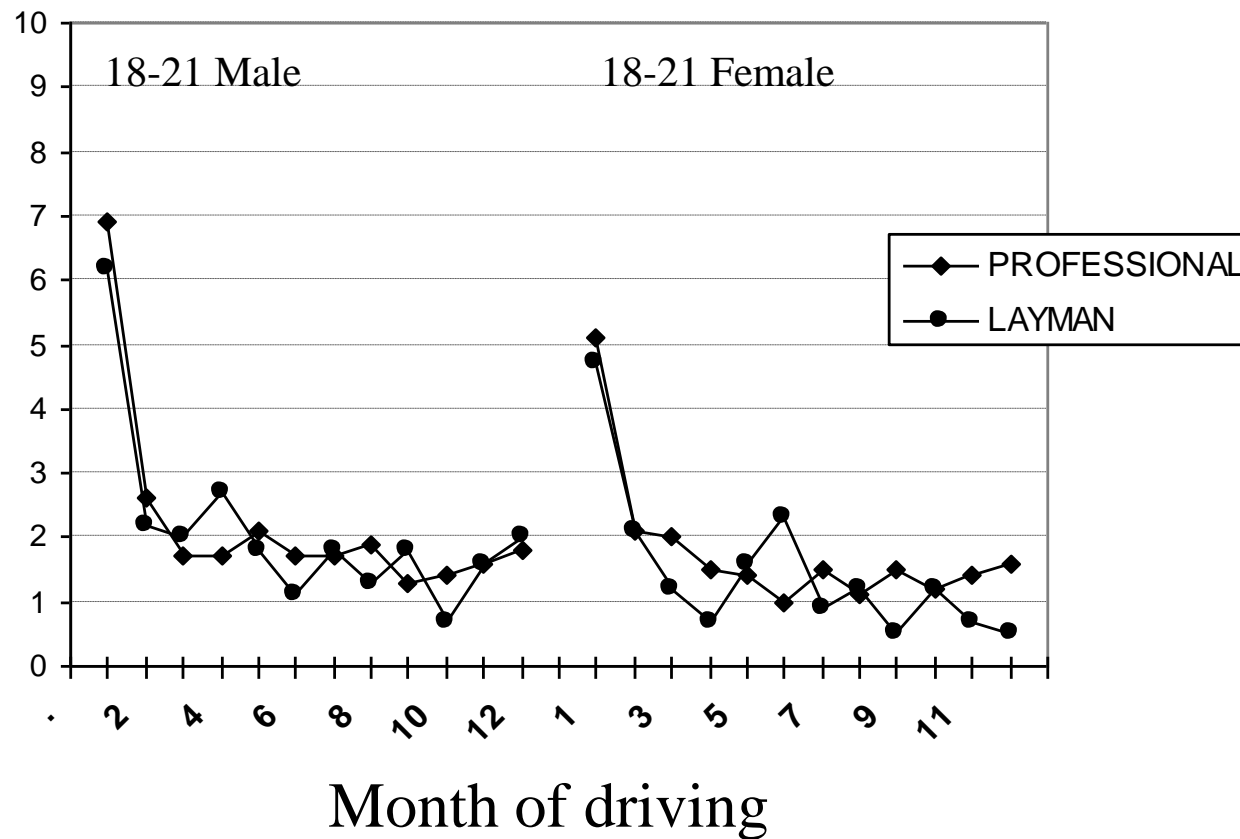
UNIVERSITY OF TURKU

DRIVER TRAINING AND TESTING, CHALLENGES AND CURRENT TRENDS

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Accidents/100 drivers during the first year of driving (Basic-project, Laapotti et al.)





SOME QUESTIONS

- Why youngsters' risk is generally elevated?
- What is learned, how it is learned and where it is learned?
- How learning could be supported?



Hierarchical model of driver behaviour (Keskinen, 1996)



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Vehicle manoeuvring

- Controlling speed, direction and position



Hierarchical model of driver behaviour (Keskinen, 1996)

Mastering traffic situations

- Adapting to the demands of the present situation

Vehicle manoeuvring

- Controlling speed, direction and position



Hierarchical model of driver behaviour (Keskinen, 1996)

Goals and context of driving

- Purpose, environment, social context, company

Mastering traffic situations

- Adapting to the demands of the present situation

Vehicle manoeuvring

- Controlling speed, direction and position



Hierarchical model of driver behaviour (Keskinen, 1996)

Goals for life and skills for living

- Importance of cars and driving for personal development
- Skills for self-control

Goals and context of driving

- Purpose, environment, social context, company

Mastering traffic situations

- Adapting to the demands of the present situation

Vehicle manoeuvring

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GDE-framework

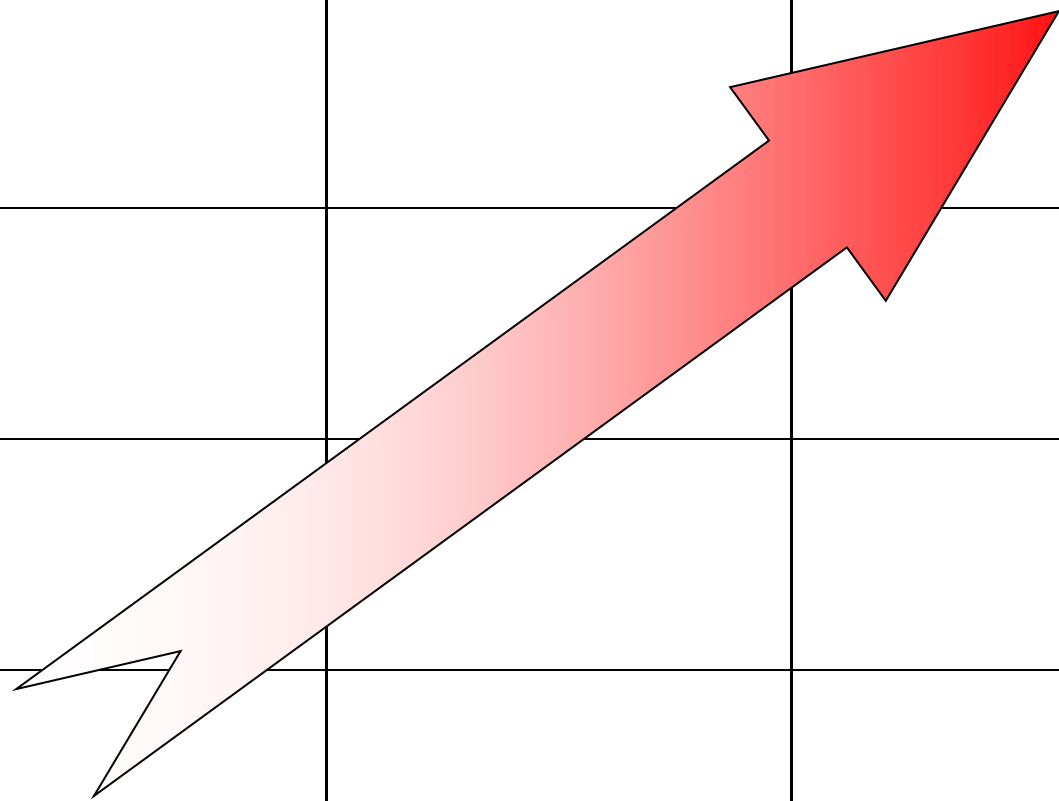
(Hatakka, Keskinen, Glad, Gregersen, Hernetkoski, 2002)

	Knowledge and skill	Risk increasing aspects	Self assessment
Goals for life, skills for living	Lifestyle, age, group norms, motives, self-control, values	Sensation seeking Group norms Complying to peer pressure	Risky tendencies Own preconditions Impulse control
Goals and context of driving	Modal choice Choice of time Trip goals Social pressure	Alcohol, fatigue Purpose of driving Rush hours Competing	Planning skills Typical goals Typical risky motives
Traffic situations	Traffic rules Observation Driving path Communication	Disobeying rules Information overload Unsuitable speed.	Awareness of personal strengths and weaknesses
Vehicle manoeuvring	Control of direction, position Tyre grip Physical laws	Unsuitable speed Insufficient automatism Difficult conditions	Calibration and awareness of car-control skill



Trend in driver training contents

		Essential curriculum		
		Knowledge and skills	Risk-increasing factors	Self-evaluation
Hierarchical levels of behaviour	Goals for life and skills for living (general)			
	Driving goals and context (journey-related)			
	Mastery of traffic situations			
	Vehicle manoeuvring			



2005

Mika Hatakka

(Model by Keskinen and Hatakka, 1997)



BASIC: Recommendations

The aim of the EU–project BASIC was to make recommendations for European driver education for car drivers.

A large evaluation of existing research results was done and some new material was gathered on recent experiments with multiphase training systems.



All the available training measures should be used. There is no single measure, which could be effective enough.

Professional training, Accompanied driving, Phasing the training, Development of the test, Demerit-point systems



An Integrated Driver Education Approach (IDEA) is recommended, where structured professional methods are combined with accompanied practising.

Professional: Basic requirements for driving, tools for learning to learn

Accompanied: More experience, Making driving as an everyday activity



Training should start in a structured way from the lowest levels of the driving hierarchy and then continue to allow drivers to learn these skills automatic with an accompanying person.

Goals and contents of driving and goals and skills for life should be treated on the basis of personal experiences



Integrated approach is especially important for the youngest learner drivers before allowing them independent access to traffic.

The youngest drivers (especially male) have higher accident involvement in the beginning of driver's career than older (and female) novice drivers.



Integrated approach increases the demands for professional instructors and thus, training of traffic instructors should be improved.

Knowledge on motivational and social aspects of driving (not only technical skill)
Skills for dealing with lay-supervisors
Guiding lay-supervisors in efficient teaching



Accompanied driving should include a minimum amount of driving and also a structure and methods to control it.

A problem with lay-instruction is not the quantity but quality.

Lay-instruction could be improved by stricter structure and control

Control could be based on operations of driving schools and examiners



Content of the examination depends partly on where it is situated in the integrated approach.

Early phase – basic requirements for driving

After the whole process – motivational and attitudinal factors included

Role of testing is defined by EU-legislation

Overall, measuring the higher levels for driving hierarchy should be considered in detail



Interventions of professionals after the accompanied driving phase should support risk awareness and self-evaluation, rather than being technically oriented.

The results concerning young novice drivers' accidents do not support the assumption that accidents are mainly based on poor technical skills of the driver



The process of the integrated driver education approach does not necessarily have to exceed two years for example.

However, e.g. restricted driving period (with lower violation threshold) takes time

The idea would be, that the driver continues to think him/herself as a learner also after licensing.

The beginning of drivers' career is the risky period and many habits are laid down.



Professional driver education should be available to persons who do not have the possibility to follow the integrated approach.

Lay-instruction or accompanied driving may not be available

- economic reasons
- availability of a car
- availability of a suitable person.



Giving more structure to the training could effectively reduce unnecessary examinations

The more liberal is the control for driver training, the higher is the failure rate in driver's examination

High failure rates can be considered as a waste of resources



To sum up...

The trend in accompanied driving seems to be improving quality

Extended-Protected learning period

This idea seems to be essential in European current discussion

Lowered alcohol limit for youngsters seems to have positive results (Austria)

Hazard perception test

Positive component of driver training/testing

Improved validity



basic driver training: New models

EU-project, Final report, 2003

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