ACCOMPANIED DRIVING

FROM AGE 17

Practical Feasibility of a New Scheme for Young Novice Drivers in Germany

Dr. Walter Funk

Institute for Empirical Sociology at the Friedrich-Alexander-University Erlangen-Nuremberg (Germany)



Safety 2010 World Conference

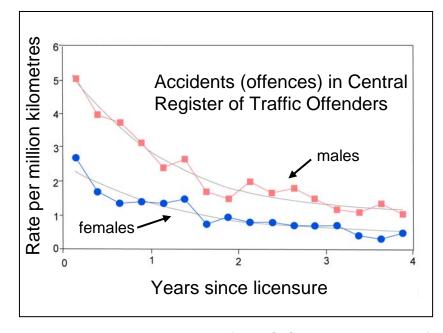
Thursday 23rd September 2010, 10 a.m., Churchill Auditorium, Queen Elizabeth II Conference Centre, London, UK



Highest crash risk of novice drivers

Problem:

- Highest crash risk as a car driver is initially after licensing (in Germany up till now right from age 18 away as "full privileged" driver)
- Substantial decrease of crash risk with increased driving experience (minus 50% during the first 9 months, minus 90% during the first 2.6 years of driving)



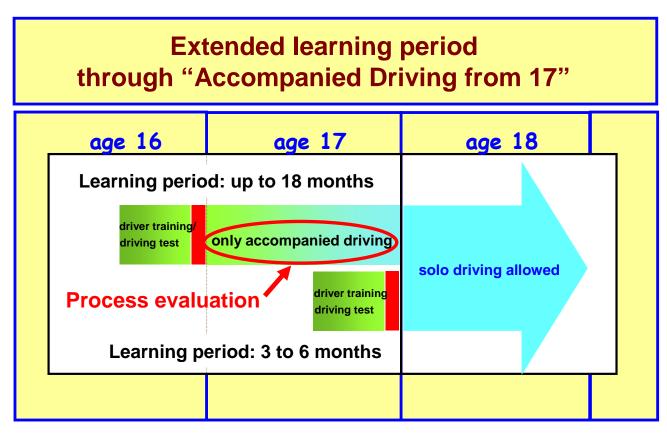
(cf. SCHADE 2001)



Tackling young novice driver risk: Extended learning period through "Accompanied Driving"

Solution:

Extending the relatively short formal driver education in professional "driving schools" by a period in which the novice is only allowed to drive while being accompanied by an experienced driver.



(cf. WILLMES-LENZ 2008: 137)



Pre-conditions to participate in the model

- From the age of 16 ½: Start of the mandatory pre-licence training and education for licences Class B / BE with a professional driving instructor in a so-called "driving school";
- Passing through the professional "driving school" curriculum;
- Successful passing of the theoretical and the practical licensing tests;
 - ← i.e.: Participants in the model pass exactly the same formal training and tests as regular licence acquirers;
- From 17th birthday: Handing over of a certificate, allowing to drive a car in Germany (licences Class B / BE);
 - Only one constraint: Driving is only allowed when accompanied by an experienced adult;
- Age of 18: Replacement of the certificate by regular drivers licence (full driving privileges);

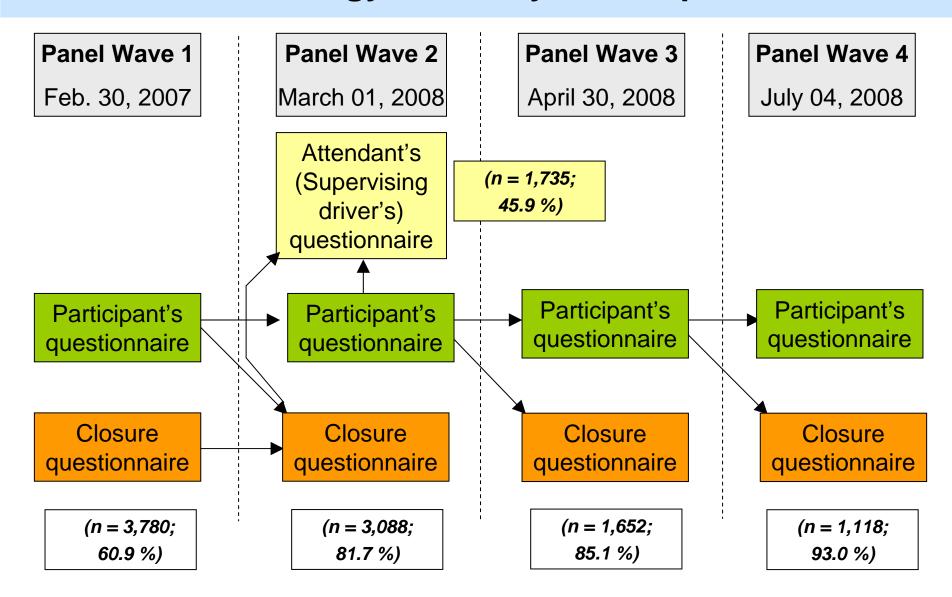


Qualifications of the attendants (supervising drivers)

The attendant (supervising driver):

- must be at least 30 years old,
- must have held a valid driver's licence Class B for at least five years,
- must not have more than three demerit points in Germany's Central Register of Traffic Offenders ("traffic-sinner file") and
- must at the start of the accompanied trip have a BAC lower than 0.05 gm/100 ml, and must not be affected by intoxicants (illegal drugs);

Chronology of surveys in the panel





Young novice drivers and most frequent attendants (supervising drivers)

Novice drivers in the sample of the process evaluation (n = 3,780):

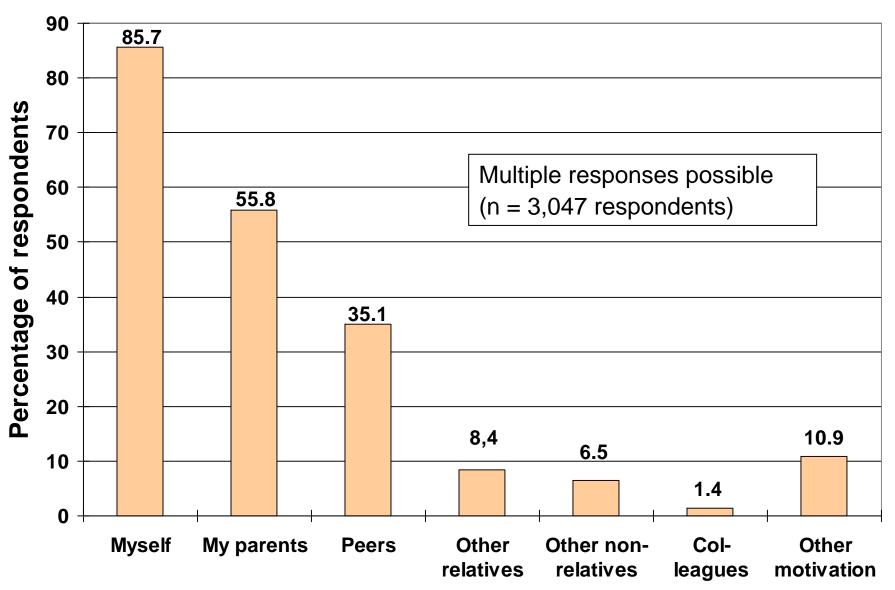
• **sex**: 48.5 % male, 51.5 % female;

• education: 66.8 % pupils, 31.6 % apprentices

Most frequent attendants (supervising drivers) (according to the youth):

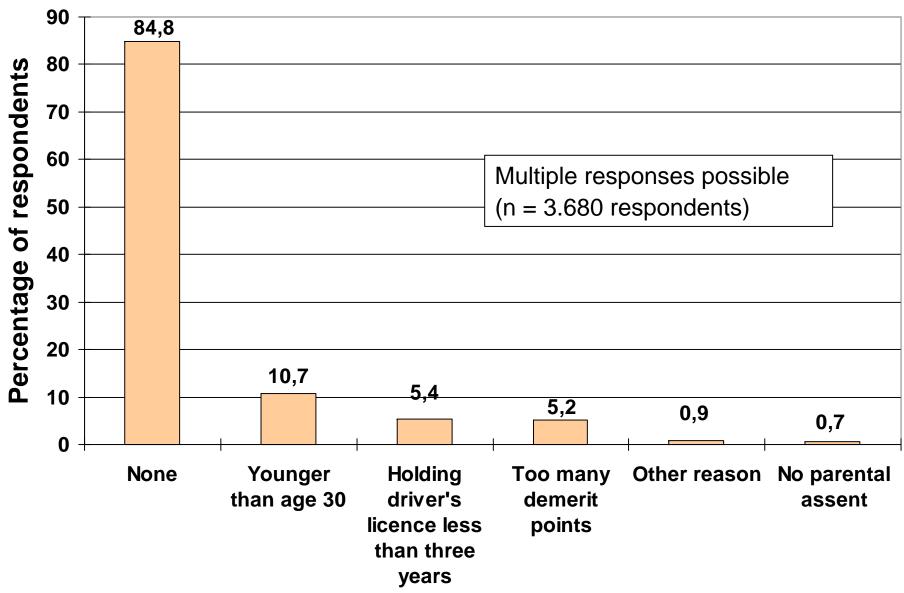
- female,
- 40-49 years old,
- living in the same household with the novice driver;
 - = own mother

Impulse for participating in the accompanied driving model (as stated by the novice driver)





Difficulties in finding an attendant (supervising driver)? (as stated by the novice driver)





Youth: Reasons for delayed driving licence acquisition

- Time management problems (didn't manage it earlier, started driver training later because of lack of time or training lasted longer than planned)
- Financial problems (started driver training later or training lasted longer because of lack of money)
- Change of mind concerning participation in the model (own change of mind or convinced by parents)
- Lack of support (Convincing parents or finding another attendant)
- "Rest category" (other reasons, ignorance about accompanied driving, still got enough time to drive until my 18th birthday)

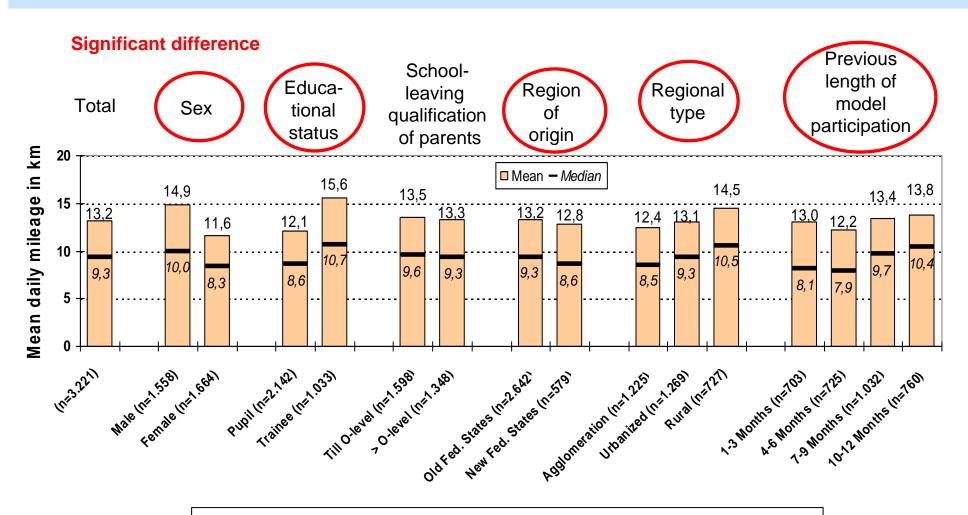
Youth: Reasons for participating in the model

- Wish to drive a car (instrumental motive) [explaining 15.3 % of the variance] (probation time will end sooner; to sit behind the wheel as soon as possible; driving moped without accompaniment; licensure for certain at 18th birthday; more favourable car insurance tariff)
- Safety motive [explaining 13.9 % of the variance] (to drive more safely as solo driver later; to feel safer at the start as novice driver; to show parents that I will later drive safe as solo driver)
- Role model / Temporal equalisation of potential stressors [explaining 10.2 % of the variance] (older siblings / friends already participated; driving test otherwise parallel to much stress in school / vocational training)

Parents: Reasons for participating in the model

- Help and support for their children [explaining 14.6 % of the variance]
 (to help the youth; to let her/him participate in my experience as car driver)
- Practical reasons [explaining 14.6 % of the variance]
 (probation time will end sooner; more favourable car insurance tariff; equalisation of potential stressors in school / vocational training)
- Safety concerns [explaining 14.1 % of the variance] (less worries, when youth drives solo later on; to assure themselves, that youth will drive safe and cautious)
- Popularity motive and role model [→ 11.6 % of the variance]
 (good experiences of relatives and friends; family member
 already participated in the model)

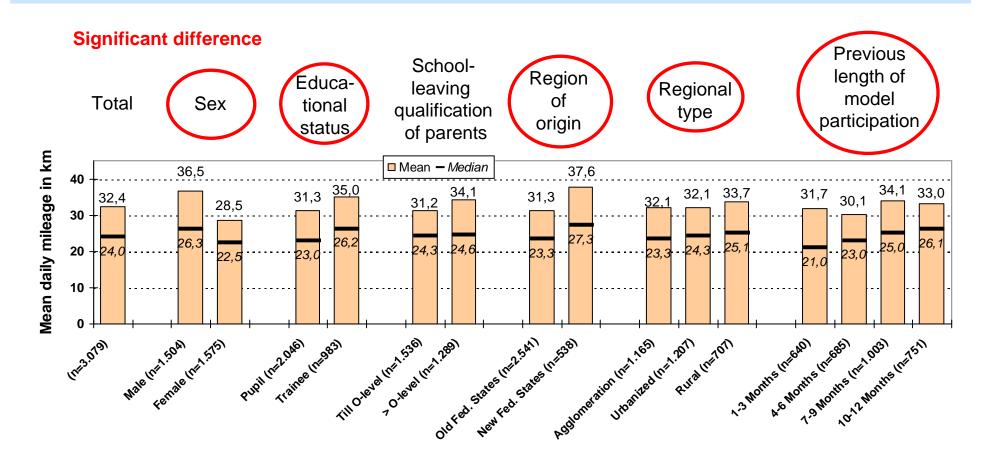
Mean daily mileage of all model participants



All model participants (including immobile ones); Questioned at all four panel waves;



Mean daily mileage of mobile model participants

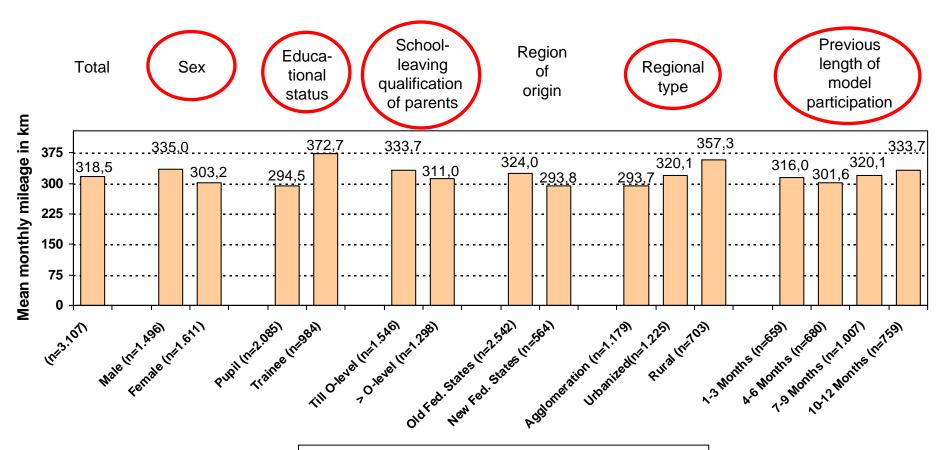


Only actual mobile model participants; Questioned at all four panel waves;



Mean monthly mileage of all model participants

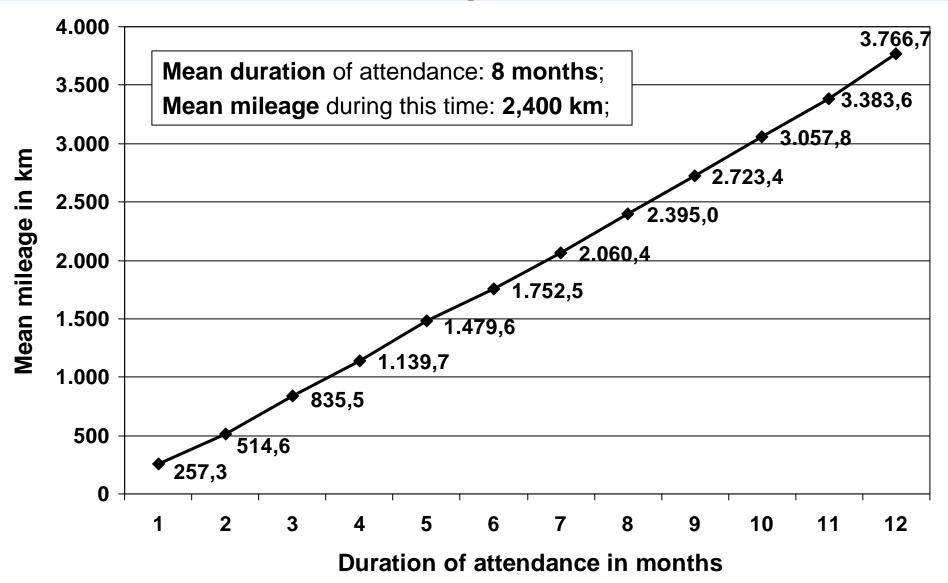
Significant difference



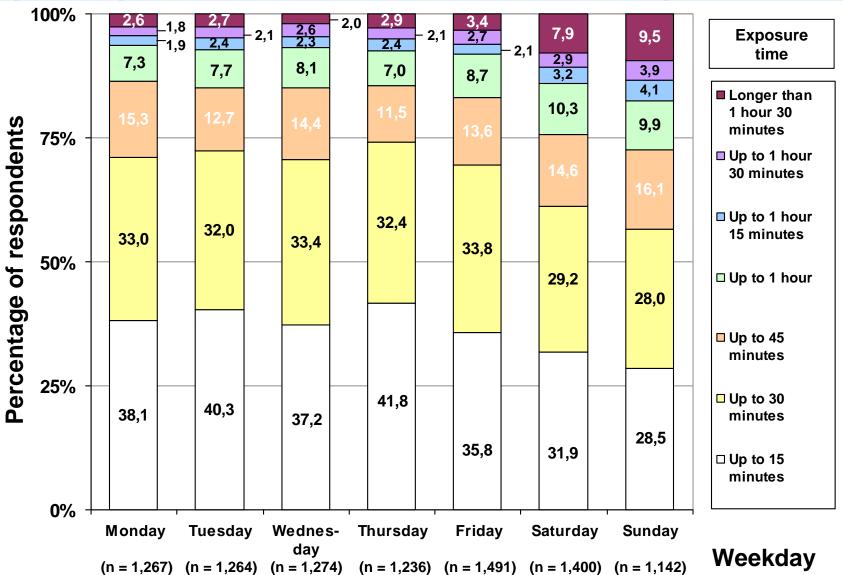
All model participants; Questioned at all four panel waves;



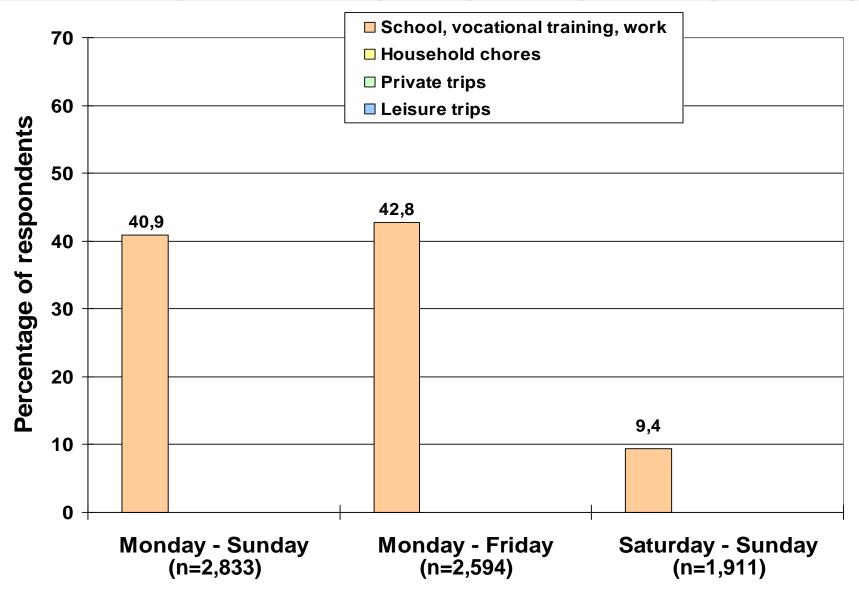
Extrapolation of the mean monthly mileage to the mean total mileage in the model scheme



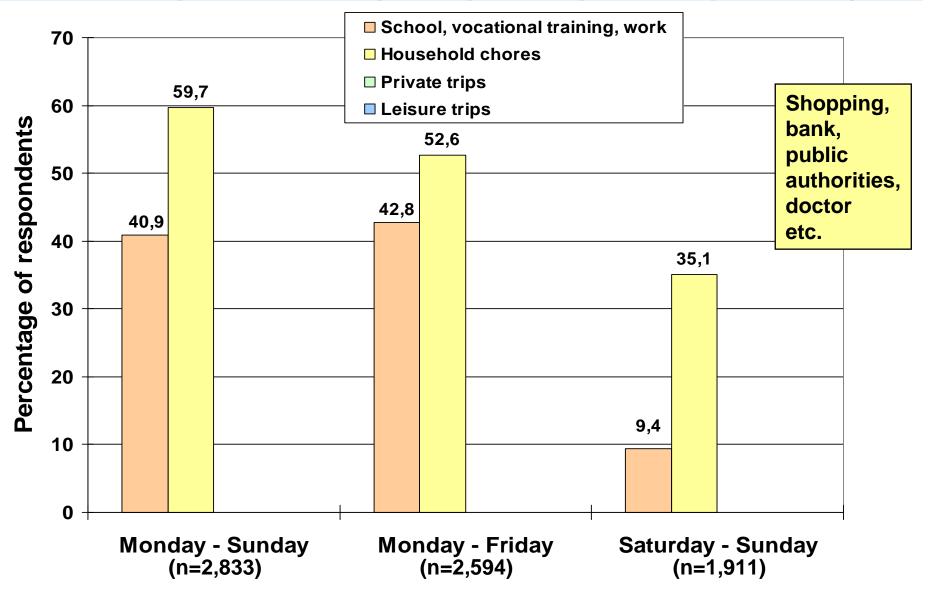
Categories of driving time of the *mobile* model participants – reference week of the 1st panel wave



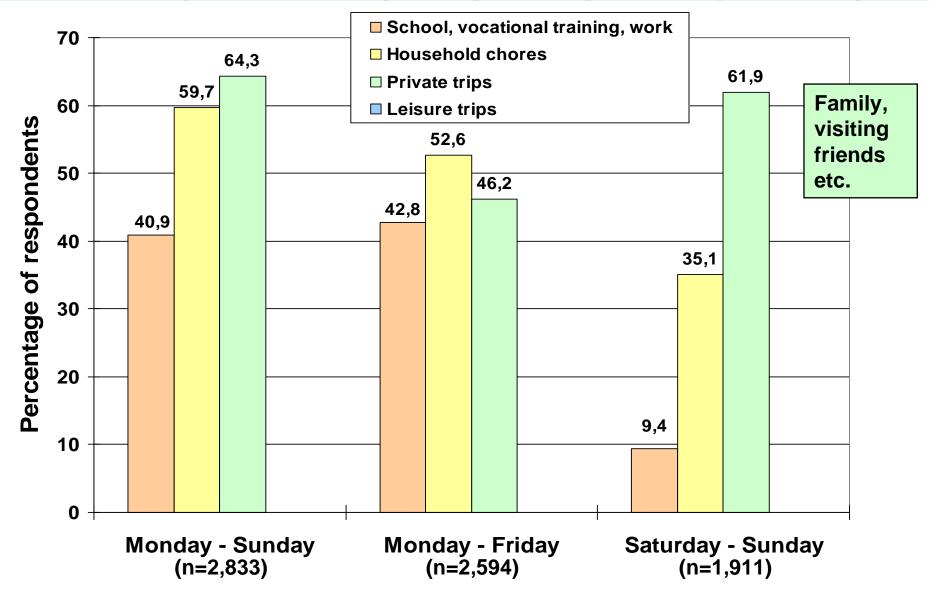




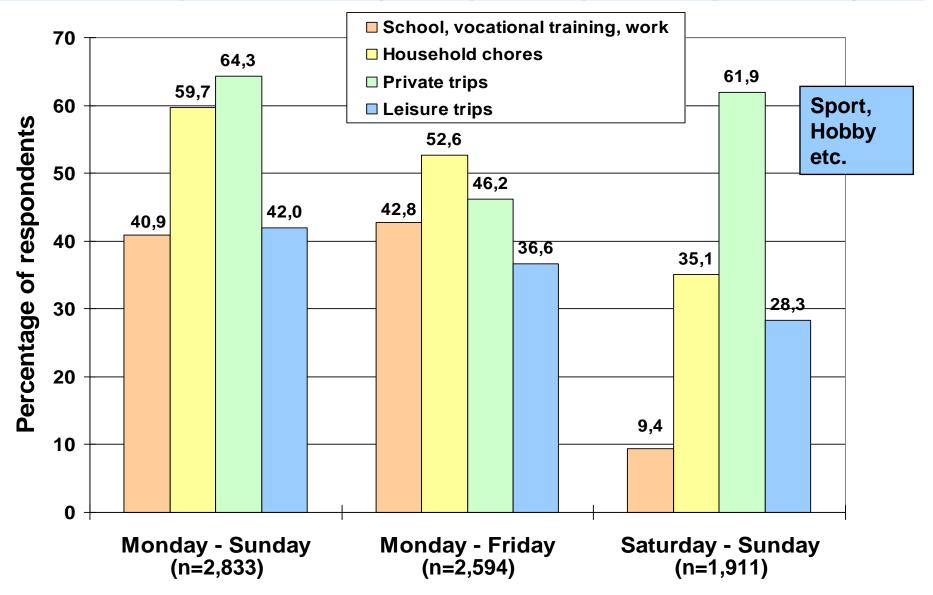






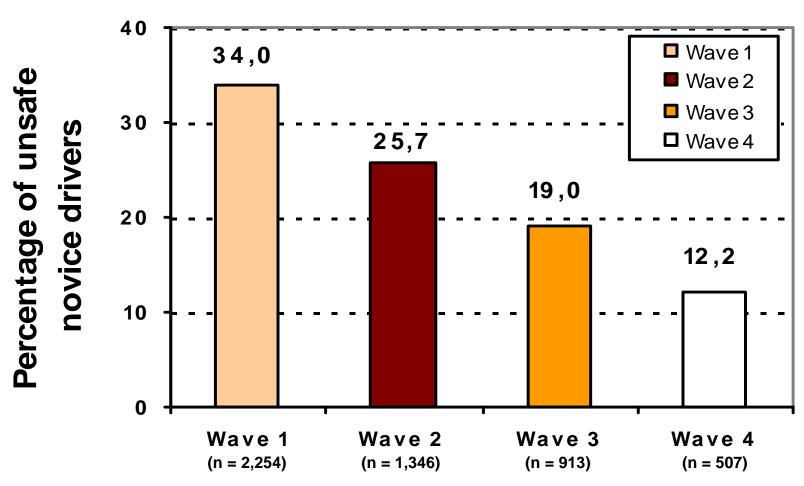








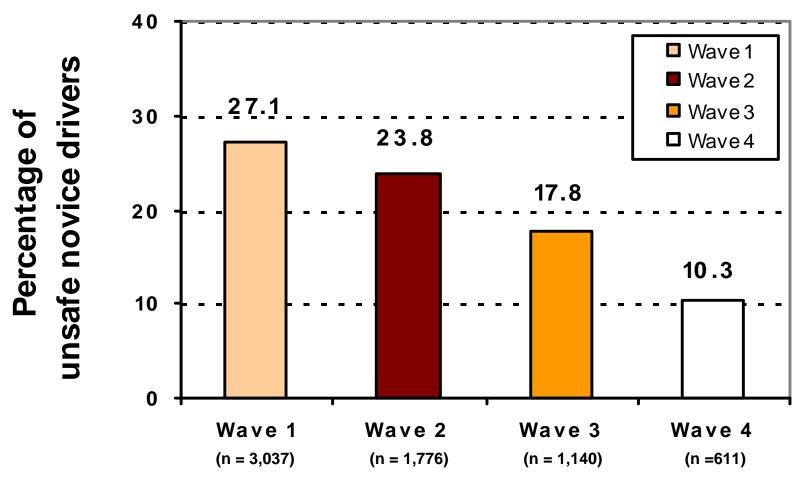
Subjective indicators of building driving experience: During the last four weeks felt unsure ...



...while rapidly responding to unforeseen situations

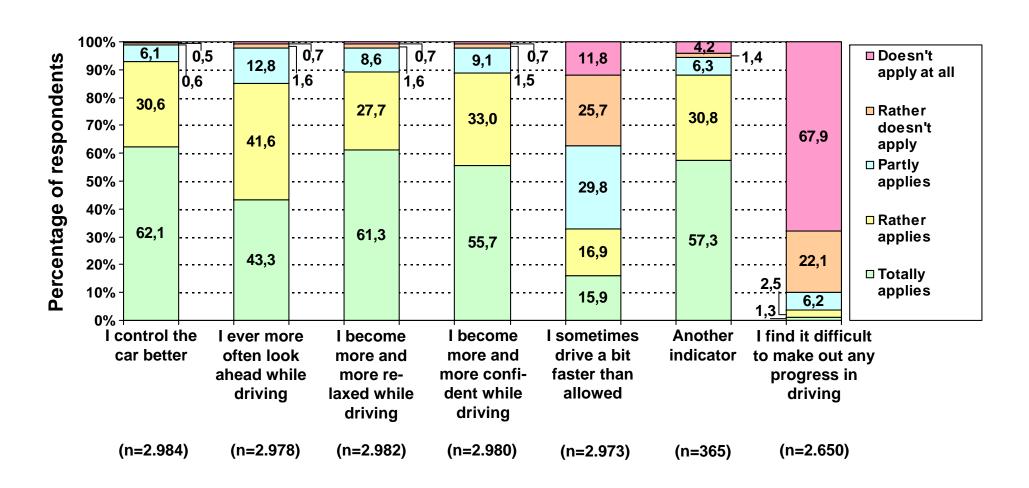


Subjective indicators of building driving experience: During the last four weeks felt unsure ...



...while correctly recognising the intentions of other road users

Subjective indicators of building driving experience – as seen by the youth



All model participants, 2nd panel wave



Summary (1 of 4)

- Impetus for participating in the accompanied driving model scheme:
 - largely from the youth themselves (85.7 %)
 - also by more than half of the parents (55.8 %)
- More than four out of five youth didn't have difficulties in finding an attendant (supervising driver)
- Handing over of the driving test certificate: On average 5.1 months after the 17th birthday
 - main reason for the delay: problems with time management



Summary (2 of 4)

- Reasons of the youth to participate in the model scheme:
 - request to drive a car (instrumental motive);
 - safety concerns; and
 - practical aspects
- Reasons of the parents (attendants) to participate in the model scheme as supervising drivers:
 - offering help and support to their children;
 - safety considerations;
 - making use of the practical aspects of the accompanied (supervised) driving model
 - [reasons all equally prevalent]

Summary (3 of 4)

Mileage in the model:

- Per day: Ø 9.3 km (all), Ø 24.0 km (mobile youth)
- Per week: Ø 65.0 km (all), Ø 71.7 km (mobile youth)
- Per month: Ø 318.5 km
- → Sample: approx. 2,400 km during 8 months;
- → Extrapolation to 12 months duration of attendance (supervised driving): Potential of approx. 3,800 km
- Driving time (exposure duration):
 - Mostly rather short (up to approx. 30 minutes)
 - At weekend increase of longer trips

Destinations:

- Mon Fri: School, vocational training / work, household chores
- Sat Sun: Private trips (Family, visiting friends)



Summary (4 of 4)

Subjective perception of the youth:

Strong indicators for building driving experience

Furthermore (as surveyed on the level of the Federal States (the German "Länder")):

Crash data gathered by the police:

Prevalence of crashes while participating in the model **= very low**

- extremely high safety during implementation of the model scheme
- Federal Motor Transport Authority:

Only few violations of the requirement to be accompanied (supervised)

→ no abuse of the accompanied driving model



Conclusion

The accompanied driving model can be characterized by:

- easy access
 - ← Recommendation:

To encourage youth – interested in obtaining a full privileged driver's licence at age 18 – to start accompanied driving closer to their 17th birthday;

- good practicability
 - **←** Recommendation:

To encourage the participants to drive more, together with an attendant (supervising driver);

safe implementation



Thank you very much for your attention!

For more information and list of cited literature please contact:

Tel.: ++49 - 911 - 23 565 32

walter.h.funk@ifes.uni-erlangen.de

