



Driver training - present and future prospects

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Most road crashes are caused by human factors, although this is not enough unless we also try to understand why. Human factors can be divided into three different groups: error, lapses and violations. For instance, errors a failure to see an oncoming vehicle or misjudgments of its speed. Lapses, placing the foot on the accelerator instead of the brake. Violations, overtaking another vehicle when the visibility is poor. Although all the different factors contribute to road crashes, the impact of violations are greater. Methods used to alter behaviours would be very different. For instance, a driver who commits errors might need further training, enhancing his/her ability to make better judgments. A driver who commits lapses is generally a novice driver who has not established the right routines for driving and would need more driving practice. Violations nonetheless are different from errors and lapses, since they are deliberate and can be understood in terms of social and motivational factors, such as the persons' attitudes and norms. To reduce the number of violations the focus therefore needs to be on the motivation behind unsafe driving practices. It is those which need to be challenged and changed. The overall aim of this presentation is to provide a broad understanding of current practice of driver training and how to target social and motivational factors.

Studies off the effect of driver training on crash risk sometimes fail to find a positive relationship. This in turn has been used as an argument against too much focus on driver training. However, there are different reasons for the lack of effect, some of them are more about the methods used, others about the quality of driver training. One important conclusion is that driver education evaluated focuses too much on so called "lower order skills", i.e., how to handle the vehicles rather than "higher order skills". Both these skills are included in the GDE framework" (Goals for Driver Education), although the emphasis is that teaching needs to include much more than just teaching driving skills. This means that risk increasing aspects and self- assessment shall be included.

In order to improve driver training some essential actions are needed to ensure that "higher order skills" are included in the teaching. Based on previous studies, both in Sweden and elsewhere, it can be concluded that driver training focuses too much on time and cost, rather than quality. The recommendation is therefore that there is a need for a more fundamental change of driver training, which reflect on the consequences of their own decisions and behaviours. Prerequisites for this include:

- Educational methods which are pupil centred, which means that students have an active role in the search for knowledge and is based on students' individual circumstances. Below are some specific examples:

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- *Problem-based learning* – stimulates the student to formulate the problems that can lead to road crashes or dangerous behaviour in traffic and develop solutions.
- *Investigative education* – tasks that the learner drivers solves alone or in groups.
- *Group Dynamic exercises* – based on a topic that engages students. Material from authentic road crashes can also be used.
- *Evaluation exercises* – by considering different situations that can pose dilemmas this will give them an opportunity to reflect on the consequences of the behaviour and their own attitudes.
- *Insight and self-awareness activities* – teach students to anticipate and avoid getting into dangerous situations by their own experience under safe conditions.
- *Feedback* – when driving on the road the students are encouraged to comment on their own driving. In addition to this, students can who watch themselves on a film.

Conclusion

The main conclusion is that a great deal of work is required in order to reduce the number of road crashes and that education and training are important elements to achieve this aim. However, a great deal of work is also required to ensure that what is being implemented is of a high quality, more is not always better.