## **ABSTRACT TITLE:**

# Introducing social-moral driving competencies in training and testing: a tool for coaches and examiners

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### ABSTRACT

#### Introduction

In order to counteract the high accident risk of young novice drivers during their first years of solo driving, driver training and testing should concentrate on personal driving style variables, i.e. the way that young people choose to drive. Factors located on the lifestyle level appear to be associated with collision risk: fatigue-related factors, alcohol use, overconfidence, sensation seeking, and boredom. The readiness and ability to take these factors into consideration when driving require higher order skills, among which self-reflection and social and moral competencies.

This is why recently in the Netherlands a social and moral component of driving competence was added to driver training programs. In 2014 these competencies, which are related to drivers' personalities were introduced in a second phase training program for young novice drivers. In 2016 this risk profile approach on driving was introduced in the so called Driver Training Stepwise program, aimed at initial training of drivers. In both programs a socio-moral risk profile is used to address personal risk factors, to stimulate socio-moral reflection on the part of the young novice and learner drivers. In addition, the driver profile enabled adaptation to the individual (learner or novice) drivers' needs. By influencing and discussing the moral choices related to driving, the higher levels of the GDE-matrix are addressed.

Development of higher order skills require a coaching style by driving educators. According to recent insights driver coaching puts the learner in an active role, encourages the learner to accomplish personal goals, and raises awareness and responsibility of the learner regarding his values, attitudes, knowledge, skills and habits. Coaching is expected to stimulate a sustainable learning process, by supporting cognitive and affective self-regulation on the part of the learner.

#### Method

In order to elicit socio-moral reflection on the part of young novice/ learner drivers three online self-assessments for moral reasoning in traffic situations have been developed. The first assessment yields a score for *prosocial driving behaviour*, as demonstrated in 18 traffic situations where there is a conflict of space. The second assessment yields scores for *complying with traffic rules*, more specifically for a) the frequency of traffic violations in specified situations and for b) the moral level of justifications for driving according to the

traffic rules, e.g. preventing fines (level 1) and preventing unsafety for others (level 4). The third assessment yields scores for self-*serving cognitive distortions to justify non-social driving behaviour*.

Driving teachers were trained how:

- to interpret the results of the self-assessments
- to discuss the risk profile with the learners
- to elicit self-reflection by the learners
- to set personal goals on social driving by the learners based on their risk profile

Data of more than 1600 participants enrolled in the second phase training program was collected, and data of more than 100 learner drivers participating in the experiment with the initial driver training program.

## Results

The self-assessments are reliable and seem to be valid, although validation by means of hard data (e.g. real number of traffic offences/ fines) has not yet been done. The results show that for complying with traffic rules young novice drivers enrolled in a second phase program use motives on all levels of moral reasoning. About 7 per cent of the participants use self-serving cognitive distortions. In addition, lower levels of moral reasoning are significantly associated with higher driving speeds, higher engagement in traffic offenses and higher accident involvement.

Results of self-assessments in the initial driver training program indicate that by use of the socio-moral risk profile learner drivers have an enhanced insight into their personal risk factors and are stimulated to reflect on these factors. By using the personal driving profile, the driving coaches can tailor the training to the needs of the learner drivers. See also Figure in Appendix 2.

The self-assessments function as a practical coaching intervention tool for driving educators. The tool helps them to elicit socio-moral reflection by young drivers and to discuss how they can drive in a socially and morally responsible way. By documenting the results of the selfassessments in a learner driver portfolio which every candidate has to hand over to the driving examiner, personality related driving competencies can also be integrated in the driving test.

## **Appendix 1: References**

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Appendix 2: Figure describing use of driving style profile in training and testing

# 1: First driving style profile

Before learner drivers start their driver training they do the three self-assessments (at home on their own computer/ laptop). A feedback report is automatically generated. The driving coach discusses the results of the assessment in one of the first driving lessons. Results of the assessments are documented in a learner driver portfolio.

# 2: Use of driving style profile as part of learner driver progress tests

Learner drivers are assessed on their progress through training after each of the 4 training modules of the Driver Training Stepwise program. Driving coaches use the results of the driving style profile when giving feedback.

# **3:** Second driving style profile

A second driving style profile is made up after module 3 of the training program. The results can be integrated in the Learner Interim Test which is taken by an examiner of the driving test authority CBR when learners have proceeded about three quarters through their training.

# 4: Integration of driving style profile in the final driving test

At the final driving test the examiner can consult the learner driver portfolio that has been built up, including the results of all the learner progress tests and the results of the learner driver profile.