

## **Abstract Title**

A Proposed Approach To Support Safe Driving Training

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## **Abstract**

Becoming a driving instructor a driving teacher requires generally a trainer licence. However, there is no unique way to get the licence as various licensing systems exist in the world. For instance, in some countries there are both theory and practical compulsory training, in others the only requirement is to simply own a driving license for a number of years. Cieca research project RUE suggests that *“to increase safety on roads, a system of formal and structured education is needed to address all-important aspects of driving to avoid accidents. For this reason, a client-centred approach is considered and recommended for an effective driver education process”*. In Europe the reference framework for driver education and training is based on Goals for Driver Education (GDE) matrix, that recognizes the importance of how our personality, thoughts and feelings affect our driving behavior.

In Italy, the licensing system for trainers changed recently. Starting from 2011 there is a compulsory training based on legal, technical and psychological contents. A Driving Instructor candidate must follow a compulsory course of 80 hours of theory and 40 hours of training on different vehicles. A Driving School Teacher candidate should follow a compulsory course of 140 hours of theory. Both of them have to pass a final exam consisting of written tests and an oral interview. The Driving Instructor must also make a practical exam.

New instructors can teach soon after getting their licence, however it takes a while to become an experienced trainer and in an initial stage a good solution remains to adopt a structured training approach.

To this end, our study proposed a training framework to help a driver teacher or a driver instructor to better identify and understand the trainees needs especially with reference to safe driving, thus tailoring the driving training according to their specific needs.

A questionnaire was developed and submitted to a sample of hundreds of drivers, to classify drivers according to their prevailing attitudes and driving behaviour characteristics. The study identified seven driving profiles by clustering drivers based on four different driving styles: reckless, aggressive, anxious and careless driving behaviours. Three profiles were mostly characterised by a single (risky) driving behaviour (e.g. reckless, aggressive and anxious). While the other four profiles were mostly a combination of two risky driving styles. Careless driving was usually found in combination with other behaviours. The profiles showed a significant association with accident involvement (i.e. some clusters show a significantly higher level of accident involvement than others).

Based on the training needs highlighted for each driving profile a targeted training both practical and theoretical was defined. Answers to the questionnaire can be used to classify new drivers in one of the above clusters. A non-parametric discriminant analysis can be the statistical tool to attribute drivers to one of the seven individuated profiles, requiring different safe driving trainings.

The proposed evaluation model aims to achieve a higher level of competence and self-evaluation of their own behaviour, as shown in the higher levels of the GDE matrix.

## **Challenges**

Well-educated Driving Teachers and Instructors know that when two people speak and you do not understand, often the problem is the person speaking. Let's try to learn more about our partners, will be more useful for everyone.

The challenge is to create a tool that can supplement the initial training course to be followed in each country per the system in place, to become driving instructors and teachers better educated. The evaluation model should also be applied in the periodic training of teachers and instructors for the development or integration of specific skills.

Faced with an increasing need for collaboration between instructors and examiners, the opportunity to have a reference tool in the responsible driver training can only be of assistance to road safety.