The Potential of Driver Education to Reduce Traffic Crashes Involving Young Drivers

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Abstract
Traffic fatalities and injuries among young drivers as a result of road crashes constitute a serious public health problem. The ultimate goal of traffic safety work in Sweden has been formulated in Vision Zero, which includes an image of a future in which no one will be killed or seriously injured in traffic crashes. Therefore, it is unacceptable that young learner and novice drivers are involved in road crashes that result in fatalities or severe injuries. Driver education is an important tool to increase the probability that young drivers actually take their share of the responsibility for Vision Zero by obeying traffic rules and driving as safely as possible.

The general aim of the work underlying this thesis was to determine the potential of driver education to reduce road traffic crashes involving young drivers, particularly in Sweden. Paper I examined the relationship between the way in which the education is carried out and the outcome of the driving test. Paper II explored whether there are any gender-related differences regarding driving practicing, the outcome of the license tests, and involvement in crashes during the first year of licensure. Paper III evaluated the reform that made it possible for learner drivers to start practicing from 16 years of age in terms of its effects on crashes involving young novice drivers. In paper IV, the focus was on investigating crashes during practice and comparing the results with the corresponding situation for novice drivers during their first two years of licensure. Paper V assessed an insight-based educational approach aimed at inducing young drivers to make better use of vehicle-related safety equipment.

The findings of two of the studies (papers III and IV) showed that, in Sweden, taking advantage of the possibility to start practicing behind the wheel from the age of 16 years had a beneficial effect seen as reduced crash involvement among those young drivers. In paper V, it was revealed that using an insight-based educational approach can have a positive influence on learner drivers’ knowledge of and attitudes towards the use of car safety equipment (e.g., safety belts). In paper I, it was found that it is difficult to explain why 18–24-year-olds pass or fail the driving test on the basis of background variables and information concerning how they had practiced driving. Paper II showed that, for females, training pursued in a more structured manner did not seem to be beneficial for the outcome of the license tests, and that males aged 18–24 were involved in 1.9 more injury crashes per 1,000 drivers than females during their first year of licensed driving. Suggestions are given that can be used to develop the Swedish licensing system in a way that will increase the potential of driver education to reduce traffic crashes among young drivers. These ideas comprise aspects such as the following: persuading the youngest learner driver population to start practicing as early and as much as possible; the learning period should be better organized, which includes improved agreement between the goals of the national curriculum, the content/process of driver education, and the design of the license tests; professional instruction of learners in both the theory and the practice of driving should be a more prominent component of driver education; and parts of the Swedish licensing system should be made mandatory to help solve the problems of young drivers and to fulfill the goals of the national curriculum.


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