

How does driving self-efficacy and safety attitudes change during standard driving training?

Does it last?

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The standard driving training mainly addresses the transferring of theoretical knowledge of traffic rules, training of practical vehicle control skills, instruction of safety features and attitudes. Still, there is a little of knowledge how trainees perceive the training process, how they react to instruction content, and how the perceptions gained during learning process last after they finish driving training. Together with formal requirements tested during driving exam some psychological features as driving self-efficacy (belief of being able to drive a vehicle well) and attitudes towards road safety might serve as indirect indicators of driving education.

The aims of this presentation are: to introduce the changes of driving self-efficacy and road safety attitudes that occur during the standard driving training in Lithuania; to evaluate the one-year effect of the changes; to evaluate, how driving self-efficacy and road safety attitudes and their changes contribute to later self-reported risky driving.

175 novice drivers participated in a three-wave longitudinal study. They were approached at driving schools in some regions in Lithuania in the beginning of driving training and just after finishing it and asked to fill in the questionnaire. To assess the risky driving during the first year after licensing participants were interviewed by phone one year after the end of driving training. There was no additional intervention other than typical driving training. To determine the attitudes of novice drivers towards risky driving the Attitudes towards Risky Driving questionnaire was used (Iversen, Rundmo, 2004). The study participants' beliefs and expectations about the level of their skills to control the vehicle were assessed by using Adelaide Driving Self-Efficacy Scale (ADSES) (George, Clark, Flinders, 2007). Self-reported risky driving behaviour of novice drivers was measured by Driver Behaviour Questionnaire (Reason et al., 1990). Several other psychological characteristics were evaluated during the study as well, but they will not be addressed during presentation as they are out of scope for the question intended to be answered here.

Results revealed that general scale of road safety attitudes changed in risk-unfavourable direction during the training period. In the period of the first year of independent driving these attitudes returned to the initial level for men. Female novice drivers reported the same safety attitudes at the end of driving training and one year after it. Driving self-efficacy became higher from the

beginning to the end of the driving training and in one-year follow-up for both men and women. Risky attitudes towards traffic safety before training and one year after the training could predict later self-reported risky driving (errors and violations), but only self-reported errors could be explained by risky attitudes right after the training. Lower driving self-efficacy at any time of measurement was a significant predictor of self-reported driving errors during the first year of the independent driving. Gender, place of residence, driving fear, and tendency of social desirability were controlled in the analysis.

Results of this study suggested that important psychological changes occurred with the trainees during the typical driving training, even without special interventions. The belief to be able to take a control over the vehicle increased during the training and in the first year of driving, which probably reflected the growing manoeuvring skills of novice drivers. Risky attitudes were decreasing during the training and a year after for women. They decreased during driving training for men as well, but later increased during independent driving and reached the initial level. Psychologists and driving educators should look for the means how to maintain the reached effect for safety attitudes during the most dangerous year of independent driving.

In the contrary with other research the significant driving self-efficacy could not predict intentional violations, only self-reported driving errors. Thus, results question the opinion that novice drivers risk more when they believe having good driving skills. Risk-favourable attitudes towards behaviour on the road predicted both driving errors and intentional violations. This suggests that future risk drivers can be recognised prior starting to drive, therefore, could potentially be intervened during the training.

About presenting author

Laura Šeibokaitė, PhD, serves as an associate professor in Department of Psychology, Vytautas Magnus University, Kaunas, Lithuania. She works as a researcher in the field of traffic and transportation psychology since 2007. The focus of her research is personality of risky drivers, psychological correlates of risky driving of young drivers, prediction of driving style in driving learners, measurement of risky driving behaviour. Since 2007 together with co-authors she published more than 15 scientific articles and one monograph.