## LIETUVIŲ RIZIKINGAS VAIRAVIMAS: KĄ GALI PAAIŠKINTI PSICHOLOGINIAI VEIKSNIAI

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## MONOGRAFIJOS ANOTACIJA

Lietuvoje viena iš penkių dažniausių suaugusiųjų gyventojų priešlaikinio mirtingumo priežasčių yra mirtys dėl sužeidimų eismo įvykiuose (Nacionalinė sveikatos taryba, 2012). Monografija "Lietuvių rizikingas vairavimas: ką gali paaiškinti psichologiniai veiksniai" nagrinėja rizikingą vairavimą, kuris neretai priklauso nuo psichologinių priežasčių ir žymiai padidina patekimo į eismo įvykį riziką. Knygoje pristatomi autorių atliktų tyrimų duomenys, kurie įrodo, jog rizikingą vairavimą paaiškina įvairūs psichologiniai veiks-



niai: asmenybės bruožai, emocinės būsenos, kognityviniai veiksniai, nuostatos, motyvai ir socialiniai veiksniai. Monografijos paskirtis – psichologinėmis žiniomis prisidėti prie platesnio avaringumo Lietuvoje priežasčių supratimo, integruoti šias žinias, sprendžiant eismo saugumo problemas šalyje.

## Risky driving of lithuanians: How do psychological factors contribute to it Summary

The book presents results of investigations conducted by group of researchers at Vytautas Magnus University, Faculty of Social Sciences, Departments of General and Theoretical Psychology since 2007 until now. The main purpose of the monograph is to analyze how different social and psychological factors are related to risky driving and its consequences for Lithuanian drivers.

The data from different samples of drivers are presented. Participants were drivers learners, young drivers, drivers from general population, and professional drivers. Total sample size of all investigations consisted of 1942 drivers. Risky driving of participants was assessed using Driver Behavior Questionnaire (DBQ, Parker, Reason, Manstead, Stradling, 1995). Factor analysis of the data yielded two self-reported factors of risky driving – errors and intentional violations. Also virtual driving simulator, as well as self-reported crashes and fines for the driving violations were used for the measurement of risky driving. Social and psychological factors (personality traits, values, attitudes towards traffic safety, motivation to drive in a risky manner, illusion of invulnerability, self-efficacy, cognitive performance, emotions, problem behavior, resistance to peer pressure, organizational factors) were assessed with help of self-reported questionnaires (for example, Big Five Inventory, Driving Self Efficacy Scale, Traffic Safety Attitudes Scale, etc.).

General results of the investigations revealed the significant importance of psychological factors in the occurrence and frequency of risky driving behavior. The results let to draw some important conclusions. First of all, more frequent risky driving of Lithuanians is related to negative consequences – fines for violations and traffic accidents. Intentional driving violations lead to more frequent driving errors in most investigated samples; consequently, errors increase the probability of negative consequences. However, intentional violations might mediate the relationship between driving errors and negative consequences of risky driving among young Lithuanian drivers.

Second conclusion – males make less driving errors, but more intentional violations than females. Younger drivers make more intentional violations than older ones. Drivers who drive more frequently make more intentional violations; still they make less driving errors than less frequent drivers. Demographic factors explain twenty five percent of variation of negative driving consequences. This means that young and frequently driving males require special additional attention in the sense of preventive traffic safety efforts.

Third, research results provide the possibility to identify the profile of personality that is prone to drive in a risky manner. Some personality traits are proximal or distal (with the mediation of intentional violations) correlates of driving errors. Higher aggressiveness and impulsiveness, as well as lower conscientiousness and agreeableness of driver are related

to more risky driving. Aggressiveness might be more important trait in the prediction of risky driving than other personality traits, still this assumption has to be tested in longitudinal studies. Other personality traits (risk propensity, neuroticism, extraversion, and openness) are less important in the prediction of risky driving of Lithuanian drivers and provide contradictory relationships in different samples.

Fourth, drivers' attitudes and motivation also contribute significantly to the explanation of risky driving and its consequences. If driver has internal need for risky driving he or she enrolls into driving violations and unintentional errors. Some external needs (like time pressure, economic benefit) help to understand the phenomenon of risky driving; still, internal needs are more important that external. More positive attitude towards risk attitude of young driver is associated with self-reported risky driving and with risky driving in simulator. Nevertheless, risky driving attitudes are not directly related to self-reported traffic accidents and fines. This confirms the earlier research results that driving attitudes mediate the relationship between other psychological factors and risky behavior on the road. It must be mentioned that positive attitude to speeding is one of the most stable and important specific attitude in the explanations of risky driving among Lithuanian drivers. It was also revealed that higher driving self-efficacy might be the risk factor for young females risky driving and its consequences, still driving self-efficacy might be less important in the case of males' risky driving.

Fifth, it might be concluded that better cognitive performance (better concentration of attention and visual scanning) of young male drivers is positively related to risky driving, especially to intentional violations. The importance of cognitive abilities of young women in the context of risky driving is contradictory and needs further investigations. Nevertheless, cognitive abilities might be useful in the development of positive attitudes towards traffic safety and safe behavior.

Sixth, the driver emotions (especially negative) could contribute to the understanding of driving behavior, however, the results and tendencies were sample and context dependent, therefore this psychological issue requires further research.

The results of presented investigations provide the conclusion that drivers with more frequent substance use are more prone to risky driving and more involved in traffic accidents, still, substance use cannot be isolated predictive factor of risky driving behavior. Nevertheless,

drivers prone to substance use are at risk of traffic accidents and injuries, and they need extra attention in intervention programs.

Some interesting tendencies were revealed investigating the interaction between individual and social context factors. The results supported the idea that social issues are very important in the context of risky driving and are still under-investigated. The data in this monograph revealed that resilience to peer pressure is proximal predictor of self-reported risky driving and distal predictor of negative consequences of driving (accidents and fines), especially in young males sample. Organizational factors at the workplace (organizational commitment, work motivation and supportive work – family interaction) predicted safer driving and less frequent negative driving consequences. Safety climate in organization and work motivation predicted traffic accidents and fines among professional drivers, although they were not related to self reported risky driving.

Finally, all investigated groups of psychological factors (personality traits, emotions, cognitive abilities, attitudes, motives and social context) contributed to the explanation of risky driving of Lithuanians, although relationships were complex and sometimes contradictory or ambiguous. Therefore, integrated and interactional analysis of psychological issues is more suitable in order to predict driver's behavior and solve traffic safety problems than analysis of isolated psychological factors.