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One page summary

Title: Personality Traits as a Valid Predictor of Risky Driving

Author: Matus Sucha

Organisation: Palacky University in Olomouc, TPI – Traffic Psychology International

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A multifaceted activity, driving requires experience and a number of skills and personality and

motivational prerequisites. While it is the basic skills of controlling the car that are important in

dealing with specific traffic situations (Levels 1 and 2 of the GADGET model), research has shown that

such skills are not enough to ensure safe driving in the long term. These findings are in line with

Näätänen and Summala (1974), who argued that driving is a self-paced task. It is fully up to the driver

(their decisions and behaviour) to choose a driving style and the level of safety it entails (Levels 3 and

4 of the GADGET model). In addition to the driver's performance characteristics, modern research

into traffic psychology (Rothengatter, 1997) points out the role of personality traits and motivational

factors: not only do the driver's capacities (skills) need to be assessed, but also motivational and

personality factors (what they want to do).

The above implies that greater traffic safety requires that road users' behaviour should be assessed,

anticipated, and influenced, i.e. the key is to focus on Levels 3 and 4 of the GADGET matrix. Given

their educational background and work experience, traffic psychologists seem to be competent to

assess and influence road users' behaviour.

The present paper reports the results of a study of a group of 2471 Czech drivers who underwent

psychological assessment of their fitness to drive in 2014. The reason for this procedure was their

driving licence being suspended because of their reaching 12 points in the demerit point system or a

single serious traffic violation (such as DUI and speeding). Another group comprised professional

drivers with no previous problems in the performance of their work. Personality traits (personality

tests - e.g. NEO-PI-R, PSSI, DBQ), personality characteristics (performance tests - e.g. VMT, D2, IST-

2000-R), motivation, attitudes, values, and lifestyle (interview) were assessed. In this paper results

for the NEO PI-R and PSSI are presented. The results of the tests were compared to their driving

history (previous accidents and violations). The results indicate major differences in personality traits

between the risk drivers group (licences suspended) and good drivers group (professional drivers

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with successful driving history). While less significant, differences in performance qualities were also demonstrated, with risky drivers showing better performance (perhaps attributable to the age factor).

In conclusion, driver's personalities and their attitudes, motivation, values, and lifestyles are relevant variables in terms of traffic behaviour. Finally, traffic psychologists are equipped with sufficient expertise to measure these variables and subsequently predict and change risky driving.

References:

Näätänen, R. & Summala, H. (1974) A model for the role of motivational factors in drivers' decision-making. Accident Analysis & Prevention, Vol. 6, 243-261.

Rothengatter, T. (1997) Editorial preface. Applied Psychology, Vol. 46 (3), 221-222.

Author's CV:

Dr. Matúš Šucha's background is psychology, main areas of professional interest include traffic psychology and the human factor in traffic in general. His research activities focus on the holistic approach to traffic research. He is an expert supervisor of the postgraduate training programme in traffic psychology at Palacky University, Olomouc. He was accredited (by the Ministry of Transport of the Czech Republic) as a traffic psychologist in 2012. He has published over 20 professional texts on traffic psychology and human factors in traffic. He is a member of many high-profile international organisations concerned with the issue of traffic safety, including ICADTS — The International Council on Alcohol, Drugs and Traffic Safety, ICTCT — International Co-operation on Theories and Concepts in Traffic Safety, Traffic Psychology International (TPI), Nordic Traffic Safety Academy (NTSA) or DGVP — Deutsche Gesellschaft für Verkehrpsychologie. Recently, he works within the frame of The traffic psychology working group based at Wien (Factum), Olomouc (University of Olomouc) and Brno (Traffic research Centre).