Traffic psychology
Department of psychology, Philosophical Faculty, Palacký University in Olomouc

1. General information
Palacky University in Olomouc (Universitas Palackiana Olomucensis) is the oldest university in Moravia and the second oldest in the Czech Republic. Nowadays it is a modern educational institution comprising eight faculties that provide instruction to 23,000 students in all fields of study relevant to present-day scientific activities and the needs of practice. The Department of Psychology is one of 22 departments of the Philosophical Faculty. It currently has 450 students enrolled, including 200 in the part-time (combined) study format and 250 in the full-time one. The department provides higher education on three levels: bachelor’s, follow-up master’s, and doctoral academic programmes. The postgraduate studies in the fields of clinical psychology and educational psychology can be completed on an internal or external basis. The study programme in psychology provided at the Philosophical Faculty of Palacky University follows the international standards developed by the European Federation of Psychologists’ Associations (EFPA), specifically the EuroPsy European standard.

2. Traffic psychology
Traffic psychology is one of the areas on which the Department of Psychology at Palacky University, Olomouc, focuses its research and teaching activities. These activities can be divided into three domains:

a) instruction in undergraduate and graduate study programmes
b) basic and applied research and experimental development
c) postgraduate education and training

3. Instruction in undergraduate and graduate study programmes
Undergraduate and graduate studies are provided as part of a master’s programme and involve the following courses:

Traffic psychology 1 – general background
Traffic psychology 2 – selected topics and research
Engineering psychology and ergonomics

Experience in traffic psychology is disseminated through a partner network comprising in particular, the Traffic Research Centre in Brno and the Jan Perner Transport Faculty of the University of Pardubice. Practical training in various workplaces concerned with traffic psychology in the Czech Republic can be arranged on an individual basis.

4. Research and development
Our research activities are focused on human factors in transport and transport safety. Areas of our interest:

Basic and applied research
1. Road users’ behaviour in traffic and the possibility of influencing this behaviour
2. Risky groups in traffic
3. Vulnerable road users, especially pedestrians
4. Speed and speed management
5. Driving under the influence of alcohol and other drugs, including Alcolock
6. Public transport, especially trams
7. Older drivers’ cognitive deficits and the possibility of rehabilitation

The development of methodologies and assessment tools
1. Methodology to assess mental fitness to drive (traffic psychology assessment)
2. Development and localisation of special traffic psychology methods, such as the DBQ (Driving Behaviour Questionnaire) and The Driver’s Angry Thoughts Questionnaire: A Measure of Angry Cognitions When Driving)
3. Development of an explanatory dictionary of traffic psychology

The development and evaluation of training and rehabilitation courses
1. Development of a common EU curriculum in postgraduate education in traffic psychology
2. Development, implementation, and evaluation of rehabilitation programmes for drivers
3. Development of tools for the evaluation of educational and rehabilitation programmes

5. Postgraduate education and training
The Department of Psychology also provides accredited qualification courses, which are part of the life-long learning process. They include the programme entitled Traffic Psychology for Traffic Psychology Practitioners (200 hours), which complies with the requirements of the new Act No. 133/2011 Coll., on the granting of the accreditation for assessment in terms of traffic psychology.

6. Traffic Psychology Laboratory
The traffic psychology laboratory at Palacky University in Olomouc is equipped with the following instruments that make it possible to conduct a range of research projects pertaining to basic and applied research, experimental development, and psychological assessment.

Vienna Test System (VTS)
- Expert system traffic (ETS) encompasses a comprehensive system of methods for both personality and cognitive assessment using external devices.

PSYCHOPHYSLAB (Psychophysiology System)
- makes it possible to use various methods and devices (e.g. an Electroencephalogram (EEG) with a sensor cap, an Electromyogram (EMG), and a device for measuring electrodermal activity (EDA).

VR200-INTRO W (Virtual Reality Introductory System)
- can be used to assess spatial cognition (including the observation and study of spatial behaviour and memory).

EYEFRAMESCENEBI (Eye Frame Mounted Scene, Binocular)
- a precision device which makes it possible to move the examinee’s head in simulated traffic situations and during assessment.

7. Staffing
Prof. Dr. Ralf Risser – mentor (University of Vienna, Lund University)
Dr. Matúš Šucha, PhD – senior researcher
Dr. Lenka Šťámková - junior researcher, PhD student
Petří Zámečník, M.A. – junior researcher, PhD student
Daina Havličková, M.A. – junior researcher, PhD student

Affiliations with professional associations

- ICAOTS The International Council on Alcohol, Drugs and Traffic Safety
- TRP Traffic Psychology International
- DGVIP Die Deutsche Gesellschaft für Verkehrspsychologie e.V.
- Humanist VCE Human Machine Interaction and Human Factors applied to road Intelligent Transport Systems
- ICTCT International Co-operation on Theories and Concepts in Traffic Safety
- CIECA The International Commission for Driver Testing

Contact
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