

# Traffic psychology

Department of psychology, Philosophical Faculty, Palacký University in Olomouc

## 1. General information

Palacký 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 Palacký 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 Palacký University, Olomouc, focuses its research and teaching activities. These activities can be divided into three domains:

- instruction in undergraduate and graduate study programmes
- basic and applied research and experimental development
- 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

- Road users' behaviour in traffic and the possibility of influencing this behaviour
- Risky groups in traffic
- Vulnerable road users, especially pedestrians
- Speed and speed management
- Driving under the influence of alcohol and other drugs, including Alcoholock
- Public transport, especially trams
- Older drivers' cognitive deficits and the possibility of rehabilitation

### The development of methodologies and assessment tools

- Methodology to assess mental fitness to drive (traffic psychology assessment)
- 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)
- Development of an explanatory dictionary of traffic psychology

### The development and evaluation of training and rehabilitation courses

- Development of a common EU curriculum in postgraduate education in traffic psychology
- Development, implementation, and evaluation of rehabilitation programmes for drivers
- 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 Palacký 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.

### PSYCHOPSHYSLAB (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 Šrámková – junior researcher, PhD student  
Petr Zámečník, M.A. – junior researcher, PhD student  
Darina Havlíčková, M.A. – junior researcher, PhD student

## Affiliations with professional associations

- ICADTS The International Council on Alcohol, Drugs and Traffic Safety
- TPI Traffic Psychology International
- DGVP 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

Department of Psychology, Philosophical Faculty  
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Dr. Matúš Šucha, PhD  
Křížkovského 10, 771 40 Olomouc  
Web: [www.trafficpsychology.cz](http://www.trafficpsychology.cz)  
Email: [matus.sucha@upol.cz](mailto:matus.sucha@upol.cz)  
Tel: +420 585 633 502