EFA and the Research Unit of Traffic Psychology of the Sacro Cuore University of Milan have just signed a Memorandum of Understanding to seal an active collaboration for years.

We meet the new director Federica Biassoni.

1) Professor, who is the traffic psychologist? How do you become a traffic psychologist?

The traffic psychologist is an expert whose formation integrates a multidisciplinary approach (deep knowledge of the road context, a complex and potentially hazardous context, and foremost the understanding of how human mind works, specifically cognitive, affective, motivational processes and perception and hazard management) aiming to project and develop researches and interventions to prevent and implement safety in the road context.

In order to become a traffic psychologist, specific psychological knowledge needs to be enhanced with detailed models describing the road users. Thus, a proper knowledge of perceptive models, behavioral models, decision making, agency and psychophysiological latency, acted by human beings as inter-actors between the environment, themselves and mobility processes.

A masterclass in traffic psychology, addressed to psychology graduates, was developed by the Research Unit in order to provide specific competence, taking care of the other figures involved in the road safety field.

A key skill for the traffic psychologist is an inter-disciplinary perspective needed to interact with different professions, with their specific competences, in the road safety environment. An effective knowledge improvement through research and action is possible only by recognizing each profession's specificity and the awareness of needing such integration in different competences.

2) How long has the research unit been open?

The Research Unit in traffic psychology was created in 2007, in the Psychology Department of Catholic University in Milan, under the direction of Prof. Rita Ciceri. Since November 2020, I and my colleague Stefania Balzarotti direct the Unit in cooperation. The unit aims to do research, to provide academic education and on the field traininf, to divulgate, creating a network of excellence with other realities, national and international, operating within the road safety context.

3) In what areas of expertise do you work?

Among the areas of competence, we can find:

a) Research: the Unit is interested in the comprehension of cognitive and perceptive processes in the driving behavior, focusing on risk and hazard perception (visual exploration, latency and reaction time, pedestrian detection). Furthermore, another

relevant area of interest is the influence affected by emotions on driving behaviors (e.g., driving anger).

- b) Fitness to drive assessment: following years of research aimed to find good practices, methodologies and tools for the assessment of the psychological fitness to drive, since 2015 the Research Unit has set up the Service for assessment, empowerment and diagnosis of psychological driving requirements (S.V.E.G. Psi). Such service provides assessment activities related to the driving requirements qualification, according to the current legislation. Many different road users access our service, such as elderly drivers, drivers with neuropsychological disease, substances abuse, psychiatric diagnoses, young drivers with cognitive deficits.
- c) The Research Unit also deals with training on safety and sustainability issues in many contexts such as schools (all grades), driving schools (e.g., "train the trainer": training courses for beginners driving instructors), companies and road safety operators. Another elective area of activity for the Unit is the evaluation of Interventions' effectiveness for the road users' safety trainings. In both training and effectiveness assessment, we use different methodologies and tools, from more traditional ones to the most innovative, such as software and app.
- d) Consulting services regarding the development of training tools (e.g., simulation), vehicles and infrastructures. Consulting takes place starting from the knowledge developed on the functioning of the so called "human factor", which integrates expert professional competences in the design field.

Consulting on the design of new technologies: automatic vehicles are a good example of how it is necessary to know and consider the cognitive, emotional and motivational functioning of the human factor, in order to effectively predict the consequences of human-vehicle interaction, in terms of acceptance, use and risk perception.

e) Investigating the reasons underlying the use of different means of transportation on choice behavior in the field of mobility and consultancy regarding communication strategies to foster change towards a greater sustainability.

4) EFA and the Research Unit have already collaborated for some time (i.e. Simusafe.eu). Why sign a Memorandum of Understanding?

The collaboration with EFA accompanies Unit activities from the beginning, in different forms and occasions, such as designing and implementing training projects for driving school operators, divulgation (through specifically organized events) on methodologies and tools on safety trainings, characterized by mutual enrichment and an ever-prolific dialogue. Recently, together with 14 other realities from numerous European countries, we took part in the Simusafe project, founded within the Framework Programme for Research Horizon 2020. A challenging experience, which allowed to confirm the richness of the dialogue between our two realities. The research on shared interests has thus spontaneously led to the signing of a memorandum of understanding, aimed at orienting subsequent strategies on future objectives. Speaking about future strategies, is worth mentioning ETRAC, European

advisory council, for research in road transport sector. The joint participation in some working groups has reinforced the knowledge of the respective areas of competence and the awareness of the need to combine the theoretical and research background and the operational and strategic vocation with the dual objective of reading and interpreting the changes in the most effective way in progress in the panorama of mobility - primarily with the advent of autonomous vehicles - and to prepare the most appropriate responses in the field of training for users of the mobility system. Participation in the newly formed association within the CCAM partnership represents a new challenge but above all a precious opportunity to capitalize on the collaboration built in recent years and develop new branches of the same.