HANDBOOK OF TRAFFIC PSYCHOLOGY – BRYAN E. PORTER

BOOK REVIEW BY VLAD BURTĂVERDE & TEODOR MIHĂILĂ

In recent years traffic psychology has become an important field of applied psychology. Because of the increasing number of research in the area of traffic psychology a series of books on traffic psychology have appeared. One of the most valuable works in this field is the book edited by Porter, entitled Handbook of Traffic Psychology. The book is structured in six parts containing 35 chapters. The first part is about the most important theories, concepts and methods of traffic psychology. The authors present some of the most important traffic psychology definitions and the goal and aim of this field. Besides that, the problem of task difficulty is raised, being discussed the degree of risk acceptance in driving. Further on, the most used assessment methods in traffic psychology are presented. Lajunen & Ozkan (2011) show that driving activity is composed of “driving skills” and “driving style”. “Driving skills” is the result of general cognitive abilities whereas driving style is the result of lifestyle, personality factors and attitudes and beliefs. Crashes are produced due to errors and safety margins. Errors are determined by driving skills and safety margins are derived from driving style. The authors discuss the utility of self-report questionnaires in assessing driving behavior presenting some of the most important psychological instruments for assessing driving behavior (Driving Behavior Inventory, Driving Skill Inventory).

Another section of the first part is about the observation technique as an assessment method of driving behavior. At the end of the first part the utility of driving simulators in assessing driving behavior is discussed with the aim to increase the construct validity of driving behavior.

The second part details key variables in traffic psychology. Here some neurological concepts which are related to driving safety and traffic accidents like dementia, Parkinson disease and Huntington disease are presented. Also, the authors mention the importance of cognition and perception in traffic safety as well as the importance of education, and age. Another issue that is discussed in this part is the importance of visual attention in driving activity. Further the importance of individual differences in driving behavior is presented. Thus, there is a positive relationship between sensation seeking and negative driving outcomes, a positive relationship between anger and negative driving outcome and a negative relationship between emotional stability, agreeableness, conscientiousness on the one hand and negative driving behavior on the other hand. Also presented is the importance of mental health in driving safety and driving behavior, being discussed the negative role of anger, depression, stress and anxiety in driving outcomes. At the end of the second part the differences of traffic culture in countries and the
ergonomics of driving behavior are presented, in this section being showed the most relevant models of driving activity and behavior.

The third part discusses the principal problems of driving behavior. Thus, the negative impact of beltless driving, alcohol-impaired driving, speeding, driver distractions and driver fatigue are presented. Here it is shown that drinking while driving is one of the strongest predictors of driving accidents and that speeding is a traffic violation which is determined by the driving style. To reduce speeding it is necessary that the driving style be changed using psychotherapeutic methods. Also, driver fatigue is a strong predictor of negative driving outcomes and in order to control driving fatigue the driving work schedule should be under observation.

The fourth part is about vulnerable and problem road users. Those categories of difficult drivers are young drivers, older drivers, bicyclists, motorcyclists and professional drivers. Age and gender are strong predictors of negative driving outcomes. Young drivers are frequently involved in traffic accidents. The same goes for male drivers compared to female drivers. Older drivers with chronic disease are also more frequently involved in traffic accidents. Motorcyclists are one of the most problematic drivers because of the sensation seeking trait that is characteristics to them. This category of drivers is more open to risk taking and risk acceptance in traffic, so they are more exposed to traffic accidents.

In the fifth part of the book the principals countermeasures to reduce the risk of negative driving outcome are discussed. Here driver education and training, persuasion, motivational messaging and enforcement are detailed. The last part of the book deals with some interdisciplinary issues like the intersection of road traffic safety and public health, public policy and travel mode choice.

The book “Handbook of Traffic Psychology” is a valuable scientific work that brings together many years of research in traffic psychology, traffic safety, risk management, accident analysis and perception being necessary to every psychologist and researcher interested in traffic psychology.

REFERENCES
