



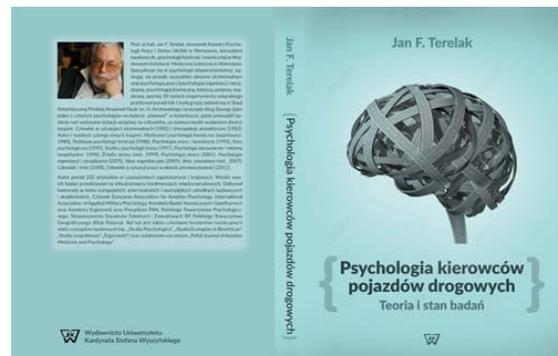
## BOOK REVIEW: PSYCHOLOGY OF DRIVERS. THEORY AND REVIEW OF RESEARCH

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In the end of December 2015, a monograph entitled *Psychology of drivers. Theory and review of research* written by Prof. Jan Felicjan Terelak PhD was published by the Publishing House of the Cardinal Wyszyński University in Warsaw. The book was reviewed by Prof. Augustyn Bańka PhD (SWPS) and Prof. Adam Biela PhD (KUL). The author of the monograph aimed at presenting current theories explaining the behavior of drivers in different road situations together with an overview of the results of contemporary empirical studies from the field of transportation psychology. A broadly defined road safety served as a foundation for the analysis. The author underscores that road safety can be attributed not only to drivers but also to other people responsible for the road safety system such as transportation psychologists, engineers, physicians, ergonomists, different officials responsible for road infrastructure, driving instructors and people who select potential drivers. The monograph is an enormous review of the world



literature in the field of transportation psychology, and especially of its part, namely, driver psychology. There are over 800 references, most of which are empirical studies published in the Polish and international journals over the last ten years.

The monograph has two parts. Part I, divided into four chapters, deals with problems in the field of driver psychology. In chapter 1, the author describes and analyzes the concepts used in the area

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of transportation psychology. The author discusses technocentric, anthropocentric, ergonomic, and holistic models with respect to their physiological (sensorimotor) and psychological (cognitive processes) mechanisms that influence driver behavior. The models are critically analyzed as regards their advantages and disadvantages as well as potential practical implications in some areas. Chapter 2 deals with psychological characteristics of drivers in road situations. The author describes different models of driver behavior analysis from the perspective of the operator (the following models – perceptual, anticipatory, decision, personality, neuropsychological, health, consciousness) and with respect to the vehicle type (cars, trucks, buses, coaches, special vehicles, motorbikes, motorcycles, cycles). Due to such a design, the analysis is more complete as it encompasses both individual traits of the drivers and characteristics of the vehicle and tasks that are associated with operating it. In chapter 3, driving efficacy is discussed with regard to its biological and personality determinants. The author refers to a number of international studies and statistical data that indicate the relationship between particular variables and functioning of drivers of different vehicles. Chapter 4 describes distractors as situational determinants of driver efficiency, such as auditory, visual, motor and stressful distractors (influence of negative emotions, work overload, fatigue).

Part II reviews empirical studies on the determinants of work safety in drivers. The author gathered a significant body of literature on the subject matter, which is presented in four chapters (starting from chapter 5). Chapter 5 deals with road accidents and road disasters as well as situations that precede them. First, theories of road accidents are discussed together with their potential applications. Then, the research on human error in road disasters is described, which is followed by an analysis of the relationship between fatigue and paroxysmal sleepiness during driving and other chronobiological causes of road accidents. The chapter ends with a review of the research on objective circumstances of road accidents (seasons of the year, days of the week, time of the day, place of the accident, weather conditions). Chapter 6 de-

scribes the conditions of being a good driver and different criteria for evaluation of drivers (i.a. those put forward by Polish and Swedish researchers) as well as various psychometric tools. The author indicates also some methodological problems associated with the selection of professional drivers and presents, step by step, ways of recruitment and selection. Chapter 7 describes ergonomics as a science that could support road safety. The author reviews a number of studies on the relationship between an ergonomic design of the vehicle with particular cognitive mechanisms, which is associated with the risk of road accidents. In chapter 8, psychological aspects of training drivers with the use of road vehicle simulators is discussed. The author describes the training of the operating activities of the driver, which encompasses the forming of proper habits under test conditions (simulators) and on the road. Moreover, a comparative description of training models used in different countries is provided. The chapter ends with a presentation of an integrated model of safe and effective driver behavior and underscores the importance of transportation psychologists within the system of road safety.

The work of Prof. Jan F. Terelak PhD summarizes studies in the area of transportation psychology that have been performed so far. In addition to psychological research, the author refers to studies from different fields such as psychophysiology, medicine, and ergonomics. Moreover, he discusses appropriate legal regulations. Apart from a review of the main research avenues in the contemporary field of driver psychology, the author presents also a “map” of scientific centers in the world that are active in the area of transportation psychology. The author discusses the limitations of the studies performed so far and puts forward his own suggestions as to future research. Therefore, his monograph can indicate potential new avenues of research and be helpful in establishing international collaborations. In conclusion, the monograph constitutes a significant contribution to the literature on the subject matter in both theoretical and practical aspects. Moreover, it can be helpful for designing and developing road safety systems.