Psychological Evaluation of Traffic: Computer-Based Assessment of Fitness to Drive Safety and Mobility in Road Traffic

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Abstract

Considering the large number of car accidents happening in Iran raises concern about the causes of them. Three categories of environment, vehicle and human errors are the main reasons lead to car accident. Human errors by playing the main role, cause 60 percent of car accident directly and contribute in 85 percent of cases. Human error is the result of many different issues in related to personality, human thought, attitude, behavior, and cognitive, sensory and motor abilities which together effect drivers’ performances. Evaluation of these aspects by either paper based or subjective tools is inaccurate, time consuming and very difficult. There are some software packages which are helpful for evaluating these parameters such as Vienna that is being used by more than 2400 traffic centers. These packages assess attention, cognitive ability, reaction and visual performance, sensory-motor factors, and personality characteristics related to driving. All of these packages are based on local culture and regulations. Necessity of redesigning and localizing these kinds of packages, in order to be used in Iran and control the car accident reasons, is an undeniable fact.

Keywords: Iran, Vienna, Cognitive Ability.

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