

PERCEIVED FATIGUE AMONG AGING DRIVERS: AN EXAMINATION OF THE IMPACT OF AGE AND DURATION OF DRIVING TIME ON A SIMULATOR

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Abstract

Aging population is a worldwide phenomenon and in the next forty years, it will increase importantly. Older drivers are more at risk of injuries and deaths than other groups of drivers (e.g., Brorsson, 1989 ; Cotrell & Wild, 1999 ; Gresset & Meyer, 1994 ; Stutts, Wilkins & Vaughn, 2004). Fatigue has been identified as a leading cause of accidents among that group of drivers (Clarke, Ward, Bartle, & Truman, 2010). The aims of this study is to verify if perceived fatigue among two groups of older drivers varies according to their age group and if perceived fatigue increases in a 45 minutes driving experience in a driving simulator. Method: Participants were 30 drivers 55 years and older, who were asked to drive on a monotonous road in a simulator for about 40 to 50 minutes. Monotonous roads are well-known to cause fatigue (Thiffault & Bergeron, 2003). Participants were asked to rate their fatigue four times: before starting to drive, after 15, 30 minutes of driving (excluding the 10 minutes for habituation) and once the driving ended, on a scale varying from 0 (not at all) to 10 (very much fatigued). For further analysis, participants were divided in younger aging drivers (55-65 years old; N=13) and older aging drivers (66-75 years old; N=12). Results show that both groups of drivers perceive themselves as getting more tired with driving time and that there were no significant differences between groups. We will discuss these results in light of the importance of future research in the domain and we will conclude with the limits of the study and suggestions for further research.

Keywords: aging drivers, perceived fatigue, monotonous drive, simulator.