

Performance in a driving simulator and intention to take risk on the road among learner and experienced young drivers

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Abstract

The main objective of this study of young drivers was to analyse the differences between learner and experienced drivers in terms of their behaviour and performance in a driving simulator, as well as self-reported measures related to the intention to take (or accept) risks in real traffic. Speed, collision frequency and the monetary gain (or loss) associated with behaviour and performance in the simulator (i.e. distance travelled, number and type of infractions and collisions) were analysed for two groups of drivers: 64 young, male, learner drivers (mean age: 16,8 years) and 48 young, male, licensed and experienced drivers (mean age: 21,7 years). These two groups also answered a driving risk questionnaire designed to measure “intention”, “attitude”, “subjective norm” and “perception”. The results show that experienced, young drivers have fewer collisions in the simulator despite their higher speeds. Their monetary gain is also higher. However, the measure of intention indicates that these young, experienced drivers have a greater likelihood of adopting risky behaviours in traffic. These results are interpreted in light of Summala's (1987) suggestion that young drivers acquire basic vehicle handling skills relatively quickly which may result in overconfident driving behaviour during a life stage when the motivation to take risks is relatively high.

Introduction

Many factors have been proposed to explain the overrepresentation of young drivers among the victims of road accidents in industrialised countries: e.g., immaturity, lack of driving experience, problem behaviours, life style and associated driving exposure. These factors appear to be interrelated in a complex manner to risk taking (or acceptance) and risk perception. For example, inexperienced drivers are usually young and young persons may take (and/or accept) more risk because they seek sensations more than older persons (Zuckerman, 1979); risk acceptance is seen as one of the determinants of exposure (Wilde, 1994); more exposure brings more experience (Brown, 1982); and experience increases the ability to perceive potential hazards (Summala, 1987). In fact, many models of driver behaviour suggest that the overrepresentation of young drivers in traffic collisions results from the complex

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