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Abstract

Title

Unmasking the risk-taking driver: A Discriminant Analysis of high and low risk-taking young drivers

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Topic Field

Young drivers; risk-taking

Background and Research Objectives

Previous findings from the Western Australian Young Driver Cohort Study have demonstrated that risky on-road behaviours and outcomes such as crashes and traffic offences can be partly attributed to driver personality dimensions such as sensation seeking, a trait measure of an individual's disposition to 'risk taking'. The objective of this sub-study was to investigate how 'high' and 'low-moderate' risk-taking drivers of the cohort varied with respect to a range of dimensions relevant to driving and lifestyle. It was anticipated that such differences would have implications for the development of strategies to train, license and manage young drivers.

Methods

A sample of 17 year-old drivers (n=1,796) from urban and rural Western Australia were recruited at the time of licensing to complete a detailed questionnaire covering pre-licence driving experiences and a range of behavioural and psychosocial dimensions relevant to driving. Using scores from one of the psychosocial dimensions -Impulsivity and Sensation Seeking- the sample was subsequently categorised into 'high' (19.5% of drivers) and 'low-moderate' (80.5% of drivers) risk-taking groups. A Discriminant Function Analysis was then undertaken to determine which variables best discriminated between these two groups of drivers.

Results

The analysis yielded one statistically significant function that was found to correctly classify 75% of 'low-moderate' risk-takers and 70.5% of 'high' risk takers. The variables that loaded on the discriminant function indicate that 'high' risk takers can be distinguished from 'low-moderate' risk takers on the basis of illegal driving behaviours prior to licensing, driving style and skill dimensions, expectations of future violational behaviour on the road, health-related lifestyle behaviours, and the level of parental influence on driver behaviour.

Conclusions

Newly licensed drivers with a high predisposition to risk-taking, and a subsequently higher risk of crashing and offending, engage in at-risk behaviour in other areas of their lives. They are also less respectful and tolerant of road rules, other road users, and the opinions of significant others in regards to their driving behaviour. The paper concludes with a discussion of the implications of these findings for driver training and licensing and the development of road safety countermeasures.