How indicative is a self-reported driving behaviour profile of police registered traffic law offences?

Although most motorised countries have experienced massive improvements in road safety over the last decades, human behaviour and differences in accident risk across sub-groups of drivers remains a key issue in the area of road safety. The identification of risk groups requires the identification of reliable predictors of safe or unsafe driving behaviour. Given this background, the aim of this study was to test whether driver sub-groups identified based on self-reported driving behaviour and skill differed in registered traffic law offences and accidents, and whether group membership was predictive of having traffic law offences. Sub-groups of drivers were identified based on the Driver Behaviour Questionnaire (DBQ) and the Driver Skill Inventory (DSI), while traffic offences and accidents were register-based (Statistics Denmark). The participants (N = 3683) were aged 18–84 years and randomly selected from the Danish Driving License Register. Results show that the driver sub-groups differed significantly in registered traffic offences but not in registered accidents. In a logistic regression analysis, the sub-group “Violating unsafe drivers” was found predictive of having a traffic offence, even when socio-demographic variables and exposure were controlled for. The most important predictive factor, however, was having a criminal record for non-traffic offences, while gender, living without a partner, and being self-employed also had a significant effect. The study confirms the use of the DBQ and DSI as suitable instruments for predicting traffic offences while also confirming previous results on accumulation of problematic behaviours across life contexts. The finding that driver sub-groups did not differ in registered accidents supports the recent research activities in finding and modelling surrogate safety measures.

General information
Publication status: Published
Organisations: Department of Management Engineering, Technology and Innovation Management, Transport DTU, Transport Modelling, University of Queensland
Contributors: Martinussen, L. M., Møller, M., Prato, C. G., Haustein, S.
Pages: 1-5
Publication date: 2017
Peer-reviewed: Yes

Publication information
Journal: Accident Analysis & Prevention
Volume: 99
ISSN (Print): 0001-4575
Ratings:
BFI (2017): BFI-level 2
Scopus rating (2017): CiteScore 2.94 SJR 1.462 SNIP 1.956
Web of Science (2017): Impact factor 2.584
Web of Science (2017): Indexed yes
Original language: English
Electronic versions:
DOIs:
10.1016/j.aap.2016.10.031
Source: FindIt
Source ID: 2348854081
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review