## Other

## A cross-national comparison of the relation between behaviour believes and drunk driving

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**Introduction and aims.** The Theory of Planned Behaviour (TPB, Ajzen, 1991) is a psychological model which describes the relation between behaviour believes (i.e., attitudes, norms, perceived behaviour control) and behaviour. This model is widely used in traffic research to predict unsafe traffic behaviour such as drunk driving (Moan & Rise, 2011; Rivis et al., 2011, Chan et al., 2010). In ESRA (E-Survey of Road users' Attitudes) this model was used as inspiration for designing the ESRA2 questionnaire. The current study is based on the results of the second edition of the ESRA survey in 2018. It investigates cross-national differences in self-declared car driving with an alcohol concentration above the legal limit and related behaviour believes.

**Methods.** The study covers the results of 32 countries across 5 continents (Africa, Asia, Europe, North America and Oceania). In each country a representative sample of the national adult population ( $N \ge 1,000$ ) was requested to complete an online survey. The current study was limited to drivers, which meant that they have driven a car in the last 30 days (N=25,459). Linear regression models were used to investigate the association between the behaviour believes and self-declared drunk driving. The models were fitted on the whole sample and the national samples separately.

**Results and Discussion.** From all the car drivers, 13% reported having driven with an alcohol concentration above the legal limit at least once in the last 30 days. This prevalence ranged from 3,9% in Hungary to 24,2% in Belgium. The results of the linear regression model on the whole sample showed that gender, age, accessibility of public transport, attitudes, norms, perceived behaviour control and intention were significantly associated with self-declared drunk driving. These factors helped explaining the variance in drunk driving in the whole sample ( $R^2$ .34). The national models showed similar results, but the effect sizes of the investigated variables as well as the explained variance differed per country. The countries were clustered according to these differences.

**Conclusions.** The results of this study support that behaviour believes have a significant effect on selfdeclared drunk driving. They can help to explain the prevalence of drunk driving. This conclusion is valid not only for the whole sample but also for the national samples of 32 countries from Africa, Asia, Europe, North America and Oceania.

Key-words. alcohol; attitudes; beliefs; theory of planned behaviour; international survey

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