Safety Culture among Private and Professional Drivers: Norway and Greece

Tor-Olav Nævestad, TØI
Alexandra Laiou, NTUA
Torkel BjørnSkau, TØI
Ross O. Phillips, TØI
George Yannis, NTUA

Λάρισα, 11 Οκτωβρίου 2018
Safety culture in transport

- The concept of safety culture is applied to an increasing range of sectors, including professional and private transport.

- Safety culture explains considerable variation in safety behaviour in various transport forms operated by private and professional drivers.

- Transport safety culture (TSC) is defined as: “shared norms prescribing certain transport safety behaviours, shared expectations regarding the behaviours of others and shared values signifying what’s important (e.g. safety, mobility, respect, politeness)".
Safety culture in transport

- Safety culture is by definition shared, thus, it must be related to social units.

- Safety culture has traditionally been ascribed to organizations, and professional drivers are members of organizations.

- National cultures are also known to influence safety behaviour and risk primarily in private and secondarily in professional transport.
The SafeCulture project

SafeCulture - **Safety culture in private and professional transport: examining its influence on behaviours and implications for interventions**

Aims to compare the safety culture in different transport modes and social contexts between Norway and Greece.

Land transport: Examination of car users, powered two-wheelers, HGV and bus drivers.

Funded by the Norwegian Research Council.

Duration: 36 months (Jan 2016 – Dec 2018)

Partners:
Methodology

**Objective:** to examine
1) safety behaviours related to personal injuries and accidents among private (car) and professional (HGV, bus) drivers in Norway and Greece, and
2) factors influencing these behaviours.

Norway and Greece were selected to be compared as countries with very different road safety performance.

The road fatality rate of Norway is one of the lowest in the EU, while Greece has one of the worst transport safety records of all EU-27 countries.
Respondents recruitment

- Private car drivers (N=596) recruited in three **Norwegian counties**, including Oslo, based on differences in accident risk and attitudes.

- In Greece, private car drivers (N=287) recruited in **Athens** and **Rhodes** based on an assumption that TSC on an island could be different from the capital, as an island is a geographically enclosed area, and as Rhodes has many tourist drivers.

- Two surveys among professional **HGV** and **bus** drivers from companies in Norway (N=216) and in Greece (N=200).
Survey themes (1/2)

- **Demographic** variables: age, experience as a driver, gender, nationality, kms driven in the last two years etc.

  **Private** drivers: education, place of living (e.g. rural, urban), how long they have had their driver’s license, how often they driving frequency, car type etc.

  **Professional** drivers: type of vehicle, work pressure, wage arrangements and management focusing on certain safety behaviours (speeding, seat belt use).
Survey themes (2/2)

- **Safety behaviours:**
  Driver Behaviour Questionnaire (DBQ) questions on which Scandinavian and Southern European drivers - scored significantly different, - were related to accident involvement, and - were appropriate for professional drivers of heavy vehicles.

- **National TSC index:**
  national TSC is measured as descriptive norms, reflecting perceptions of what other drivers in the country do.

- **Safety outcomes:**
  questions on fatigue, safety assessment and newly developed questions.
Results (1/2)

- Greek drivers are more inclined to commit aggressive violations than Norwegian drivers.

- Traffic safety behaviours are more similar among private and professional drivers within the national samples, than among drivers across the national samples.

- This seems to indicate the existence of different national TSC in the two countries.

- National TSC, measured as descriptive norms, is the variable which has the strongest influence on respondents’ safety behaviours.
Results (2/2)

- A potential critique of the method is that behaviour may be influenced through the false consensus bias (i.e. individuals overestimate the prevalence of risky behaviour among their peers to justify their own behavior).

- The different results in Norway and Greece show that what is measured as national TSC reflects the safety behaviours that the different national groups ascribe to other drivers in their country and not just a false consensus bias to justify their own behaviour.

- Aggressive violations, found to be related to national TSC, are also related to accident involvement.
Future research

- How national TSC comes about?
  Maybe through interaction (and sanctions) in traffic, as this seems to be a likely arena to learn about the “normal behaviour” of other drivers.

  Example: drivers in Rhodes differed significantly from the other groups with respect to their safety behaviours and their reported national TSC. This indicates a unique regional TSC in Rhodes.

- Is the higher incidence of aggressive violations and accidents among Greek professional drivers due to work related variables like time pressure, commission pay, framework conditions etc?
Conclusion

- The TSC perspective may facilitate new types of interventions, which could target the identified descriptive norms mechanism.
- There are already successful examples of such interventions.
- Several studies conclude in favour of focusing on descriptive norms in traffic safety interventions.
Safety Culture among Private and Professional Drivers: Norway and Greece

Tor-Olav Nævestad, TØI
Alexandra Laiou, NTUA
Torkel Bjørnskau, TØI
Ross O. Phillips, TØI
George Yannis, NTUA

Lambda, 11-12 October 2018