

Traffic Safety Culture: the role of culture-based approaches in driver education

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Abstract

The long-term safety performance trends in many countries have been showing very similar gradients for many years. However, there are persistent differences between countries that are hard to explain. For example, Austria has a much higher fatality rate per million inhabitants than Switzerland (50 compared to 28 on average in 2014-2018). This gap has been consistent for decades and can be only partially explained by differences in mileage and other factors such as road network length.

The concept of Traffic Safety Culture (TSC) has been introduced recently as a possible approach to explain such differences. TSC can be defined as the values and beliefs shared among groups of road users and stakeholders that influence their decisions to behave or act in ways that affect traffic safety (Otto et al., 2016). It has been identified as an important factor of road safety work as it helps understand the typical patterns of risk perception and risk taking that prevail in different national, regional or local traffic systems. A strong safety culture strengthens safety relevant attitudes and behaviour and can be a tool for making road safety measures more effective. The concept of TSC offers an additional perspective in road safety, from integrating cultural aspects into road safety strategies to designing culture-based intervention measures.

In the context of driver education, TSC can be a valuable approach in two ways. On the one hand, it can help understand cultural differences both between countries and within a country, thereby raising awareness for behaviour that is determined by cultural factors. This can be helpful when dealing with citizens from different social, cultural or religious backgrounds in driver education or when confronted with driving culture in another country. On the other hand, cultural factors are crucial when addressing levels 4 (goals for life and skills for living) and 5 (social environment) of the GDE matrix (Goals for Driver Education).

In the international project 'TraSaCu', which received funding from the EU's Horizon 2020 RISE programme and was coordinated by KFV, the cultural approach in road safety was analysed comprehensively. The project was finalized in 2018; the results include a theoretical model of TSC, a comparison of national safety cultures and an evaluation of traffic safety relevant attitudes of road users. In addition, a stakeholder guide to integrate TSC in road safety strategies was developed, providing hands-on advice on how to deal with measuring, transforming and institutionalising TSC. All results are available on www.trasacu.eu.

In the paper, selected results from the TraSaCu project will be presented, with a focus on their relevance for driver education. In addition, results from a project comparing Switzerland and Austria will be included.

To provide a better understanding of cultural differences, two examples will be presented: (1) the comparison of three very different safety cultures – those of Albania, Austria and the State Virginia (US) – carried out in the TraSaCu project, and (2) a comprehensive comparison of Swiss and Austrian safety cultures, aiming at explaining the persistent gap in accident numbers between the two countries. A detailed analysis of accident statistics showed that the difference is mainly due to fatalities among car occupants and on rural roads, suggesting that speed on rural roads plays an important role in explaining the road safety gap. This is confirmed by the fact that in Austria speed limits are higher and enforcement is less strict. Data from the ESRA survey (Holoher, S., & Holte, H., 2019) shows that Austria's institutionalized tolerance towards speeding is reflected in drivers' attitudes, thus showing a coherent picture of Austria's weak safety culture in regard to speeding.

What can be shown by the example of Austria and Switzerland is that TSC is partly determined by institutional and political factors (traffic rules, enforcement, curricula, commitment of organisations to safety) and represented in individual beliefs that are based on cultural values. Driver education and the institutions involved can potentially play a key role in influencing safety culture, both on an institutional and on an individual level. Integrating culture-based approaches in driver education is therefore a promising way to improve traffic safety. The TraSaCu stakeholder guide includes suggestions for the design of culture-based road safety interventions that can be applied in driver education. To give just one example, this means to address perceived norms (what drivers think that others typically do and what they think is expected of them), which are crucial in determining behaviour: if drivers believe that most others drive above the speed limit, they are much more likely to do so themselves. Misperceptions about social norms should therefore be corrected and safety-related behavioural norms should be strengthened. It is also important to consider the culture of institutions (e.g. driving schools) and the behaviour of role models (e.g. driving instructors) and to reflect on whether they themselves prioritize safety over competing values.

References

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Presenter's CV

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Studied law at the University of Vienna completing his Master's degree in 1996, afterwards proceeding with his Doctorate at the University of Salzburg. Appointed Head of Legal Department at KFV in 1999 and Head of the department Traffic & Mobility in 2005. From 2010 onwards, head of the department Legislation & Norms at KFV. Certified driver examiner for all categories. Involved in numerous ministerial committees and traffic safety advisory boards. Author of many textbooks, articles and columns (on a national and international level).