MONITORING ROAD SAFETY ATTITUDES & PERFORMANCE
THE ESRA APPROACH

Uta Meesmann
Vias institute; University of Liège
Haachtsesteenweg 1405, 1130 BRUSSELS, Belgium
Phone: + 32 2 244 15 13 E-mail: uta.meesmann@vias.be

GENERAL DESCRIPTION OF THE SPECIAL SESSION

This session will provide insights on the ESRA approach of monitoring road safety attitudes and safety performance, on a global level. It especially addresses researchers and policy makers who are interested in using representative online surveys in road safety monitoring. Furthermore, potential partners will have the chance to ask questions on participation in the ESRA network.

ESRA (E-Survey of Road users’ Attitudes) is a global cross-national initiative in currently 38 countries. The aim of the project is to provide scientific support to road safety policy by generating comparable national data on the current road safety situation. Using a uniform sampling method, an identical questionnaire and uniform programming of the questionnaire, allows for full comparability among the countries.

The objective of this session is to provide an overview on the project: motivation, objectives, methodology, and key results. The different speakers will highlight examples of extracting results on regional, national and thematic level:

(1) Uta Meesmann (ESRA coordinator; Vias institute, Belgium): motivation, objectives, methodology and recent key results on regional level.

(2) Ward Vanlaar (ESRA2 core group partner; TIRF, Canada): comparison of national- and regional results with respect to mobile phone use (Europe, Canada, and USA).

(3) Sangjin Han (ESRA2 core group partner; KOTI, Republic of Korea): comparison of national results of the Republic of Korea with European results (benchmarking).

(4) Gerald Furian (ESRA1_2 core group partner; KfV, Austria): extracting thematic results from ESRA and combining them with external data sources, here exemplified with CARE accident data.

(5) Uta Meesmann (ESRA coordinator; Vias institute, Belgium): brief overview of the structure of the ESRA network and the possibilities to join this initiative (next wave ESRA2 - 2019).

The session will close with a discussion on using representative online survey in monitoring road safety attitudes and performance. Furthermore, potential new partners will have the chance to ask questions on joining this network.
**Background and motivation: Monitoring road safety attitudes and performance**

Trends in road safety performance and the success of policy measures can be monitored using road safety indicators. Important data sources to assess the road safety situation are accident statistics, roadside surveys, and questionnaire surveys. The latter, in particular if they are conducted online, are a relatively inexpensive way to obtain indicators on safety culture and road users’ behaviour, but they rely on self-declared information which might be prone to factors such as social desirability in responses. A main advantage of questionnaire surveys is that they can provide insights into socio-cognitive determinants of behaviour, such as attitudes, perceived social norm, risk perception, or existing habits. Socio-cognitive factors can help to understand the underlying motivations of certain behaviour (e.g. Ajzen, 1991; Rosenstock, 1974; Rogers, 1975; Vanlaar and Yannis, 2006). It is tempting to use such indicators based on questionnaire surveys for benchmarking purposes. However, the results of national surveys are seldom comparable across countries because of differences in the aims, the scope, the methodology, the questions used, or the sample population being surveyed.

Therefore, the European Commission initiated the European project SARTRE (Social Attitudes to Road Traffic Risk in Europe; homepage: www.attitudes-roadsafety.eu/) in 1991. A common questionnaire and study design was developed and face to face interviews were conducted among a representative sample of the national adult population. Four editions of the SARTRE survey were launched (1991, 1996, 2002, 2010). In the first three editions of the SARTRE project, surveys were directed only to car drivers. In the fourth edition, the target group was extended to ‘powered two wheelers’, pedestrians, cyclists and users of public transport (Cestac and Delhomme, 2012). This SARTRE4 survey in 2010, was the last large-scale measurement of social attitudes towards road traffic risk in Europe. Since then, there was a lack of comparable and reliable data on road safety attitudes and behaviour within Europe. Hence, in 2015, the Vias institute (formerly Belgian Road Safety Institute) launched the ESRA initiative (E-Survey of Road users’ Attitudes; homepage: www.esranet.eu).

1. **THE ESRA SURVEY: CROSS NATIONAL INITIATIVE TO MONITOR ROAD USERS’ ATTITUDES AND PERFORMANCE**

Uta Meesmann
Vias institute; University of Liège
Haachtsesteenweg 1405, 1130 Brussels, Belgium

In 2015 the Vias institute (formerly Belgian Road Safety Institute), in cooperation with research institutes and road safety organizations from 17 European countries, launched the ESRA initiative (E-Survey of Road users’ Attitudes; homepage: www.esranet.eu). The initiative apparently meets current needs. Already the first ESRA survey (ESRA1) rapidly grew to a global survey across 38 countries (figure 1) and is expected to grow to over 50 countries across 6 continents in the next edition (ESRA2).
The aim of the project is to provide scientific support to road safety policy by generating comparable national data on the current road safety situation. Using a uniform sampling method, an identical questionnaire and uniform programming of the questionnaire, allows for full comparability among the countries. The first ESRA survey (ESRA1) was conducted online using representative samples (N=1,000) of the national adult populations in 38 countries (online internet access panel).

A common questionnaire was developed and translated into 33 national language versions. The field work was carried out in three waves: (1) June/July 2015, (2) November 2016, (3) July/August 2017. In total, ESRA1 covers almost 40,000 respondents from 38 countries across the world. The themes covered in the survey are, amongst others: ‘the use of different transport modes’, ‘involvement in road crashes’, ‘safety feeling’, ‘concerns about road safety’, ‘self-declared behaviour’, ‘attitudes towards road safety’, ‘acceptability of unsafe traffic behaviour’, ‘enforcement’, and ‘support for policy measures’. For most of these themes the ESRA1 survey investigated the following four topics: speeding, driving under influence, distraction and seat belt use. Moreover, the results can be linked to sociodemographic characteristics of the respondent such as: gender, age or educational level. ESRA1 survey targeted all type of road users, mainly car drivers but also other groups such as motorcyclists, cyclists or pedestrians (e.g. helmet use).

The current intention is to repeat this survey on a triennial basis, retaining a core set of questions in every survey allowing the development of time series of road safety performance indicators. The next edition (ESRA2) will be launched in October 2018. More information can be found on: [www.esranet.eu](http://www.esranet.eu); Meesmann et al., 2018; Torfs et al., 2016).
2. COMPARISON OF SELF-DECLARED MOBILE USE WHILE DRIVING IN CANADA, THE UNITED STATES, AND EUROPE

Ward Vanlaar
Traffic Injury Research Foundation (TIRF)
171 Nepean Street, suite 200, Ottawa, Ontario, K2P 0B4, Canada

Existing literature on distracted driving includes very little research about the differences in self-reported prevalence worldwide. The current research aims to increase the available knowledge by comparing rates of various self-reported distracted driving behaviours from three different regions (Canada, the United States, and Europe). Self-declared mobile use (talking on a hand-held mobile, sending a text message or email), personal acceptability and attitudes towards mobile use while driving were measured as part of the E-Survey of Road users’ Attitudes (ESRA1) conducted in 25 countries during 2015-2016. The descriptive analysis compared rates of drivers’ mobile use behaviours, opinions, and attitudes by region. Two multivariate models predicting self-declared talking on a hand-held phone while driving, and self-declared sending of a text message or email while driving, were also estimated. This presentation will provide an overview of results from this research and place the findings in a broader context of distracted driving in particular and road safety in general, with special attention to differences between regions.

3. CHARACTERISTICS OF ROAD USERS’ SAFETY ATTITUDE IN KOREA: FINDINGS FROM THE ESRA SURVEY

Sangjin Han
KOTI (The Korea Transport Institute)
370 Sicheong-daero, Sejong-si, 339-007, Republic of Korea

While the risky behaviors to traffic and road safety attitude have been advocated as necessary contributors for road safety policies, a few studies have examined the behavioral and attitudinal characteristics of road users in Korea. This paper conducted a questionnaire survey to road users, as the part of E-survey of road users’ attitudes (ESRA-Project), in Korea (N=1000) comparing ESRA 24 countries (N=1000 for each country) to understand the behaviors and attitudinal characteristics of road users. The survey consists of five main parts: (Q1) safe feeling, (Q2) involvement in road crash, (Q3) road user behaviors, (Q4) Social acceptability and (Q5) personal acceptability toward risky behaviors. The survey asked responses about 8 items, which are (I-1) speeding in urban area, (I-2) speeding in freeway, (I-3) driving while drowsy, (I-4) typing text message or email while driving, (I-5) talking on hand-held mobile phone while driving, (I-6) wearing seat belt in front seat, (I-7) wearing seat belt in back seat and (I-8) installing child restraint systems. This paper aims to answer two questions: How do Korean road users perceive the importance of several risky road behaviors comparing road users in ESRA 24 countries? Are there important differences in road safety attitude and behaviors between Korea and ESRA 24 countries? By Discriminant Analysis between two groups, statistically significant differences and discriminant loadings are revealed. Results shows that road users in Korea are more lenient with several risky behaviors, such as (I-8) using child restraint systems, (I-4) typing text message or e-mails while driving and (I-6) not wearing a seatbelt in the front seat of the car. This result should be applied to road safety campaign, promotion and education for safer road in Korea. In addition, Korean road safety observatory system should be improved to tract the risky behaviors for development of road safety policies.
4. SUBJECTIVE VERSUS OBJECTIVE SAFETY: COMBINING ESRA WITH CARE ACCIDENT DATA

Gerald Furian
KFV (Austrian Road Safety Board)
Schleiergasse 18, 1100 Vienna, Austria

Within the E-Survey of Road Users’ Attitudes (ESRA1) the concept of subjective safety and risk perception in road traffic was operationalized by asking respondents about their general perception of issues related to road safety, feeling (un)safe in using different transport modes, estimation of contributing factors to road accidents and perceived risk behaviours of other road users.

Further analyses looked at the association between road fatalities and subjective concern as well as between feeling (un)safe regarding different transport modes and fatality rates. As there was only a small number of self-reported accidents from the ESRA1 survey itself it was decided to use CARE data (Care Database, 2017) as an external source for road fatality rates. For this purpose, CARE data were put in relation to the ESRA1 survey data of the 20 European countries participating in 2015-2016.

In a next step this analysis will be extended to other topics of ESRA1 to further exemplify meaningful combinations of ESRA survey data with CARE accident data. The results bring new insight for stakeholders in the field of road safety, enabling them to set priorities regarding the implementation of and awareness-raising for road safety measures.

5. POTENTIAL FOR GROWTH - NEW COUNTRIES JOINING

Uta Meesmann
Vias institute; University of Liège
Haachtsesteenweg 1405, 1130 Brussels, Belgium

The objective of this presentation is to give a brief overview of the structure of the ESRA network and the possibilities to join this initiative. The next edition, in which countries can join, will be launched in October 2018.

REFERENCES


More information: www.esranet.eu

Contact: Uta.Meesmann@vias.be & Katrien.Torfs@vias.be