



ESRA

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E-Survey of Road users' Attitudes



Enforcement and traffic violations

ESRA2 Thematic report Nr. 6 (updated version)



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List of Abbreviations

Country codes

AT	Austria	IT	Italy
AU	Australia	JP	Japan
BE	Belgium	KE	Kenya
BJ	Benin	KR	Republic of Korea
BG	Bulgaria	LU	Luxembourg
CA	Canada	LB	Lebanon
CI	Ivory Coast	MA	Morocco
CH	Switzerland	MY	Malaysia
CM	Cameroon	NG	Nigeria
CO	Colombia	NL	Netherlands
CZ	Czech Republic	NO	Norway
DE	Germany	PL	Poland
DK	Denmark	PT	Portugal
EG	Egypt	RS	Serbia
EL	Greece	SE	Sweden
ES	Spain	SI	Slovenia
FI	Finland	TH	Thailand
FR	France	TN	Tunisia
GH	Ghana	UG	Uganda
HU	Hungary	UK	United Kingdom
IS	Iceland	US	United States
IE	Ireland	VN	Vietnam
IL	Israel	ZA	South Africa
IN	India	ZM	Zambia

Other abbreviations

DUI	Driving under the influence
DUID	Driving under the influence of drugs
ESRA	E-Survey of Road Users' Attitudes
EU	European Union
ICW	Individual country weight used in ESRA2

Executive summary

Objective and methodology

ESRA (E-Survey of Road users' Attitudes) is a joint initiative of road safety institutes, research centres, public services, and private sponsors from all over the world. The aim is to collect and analyse comparable data on road safety performance, in particular road safety culture and behaviour of road users. The ESRA data are used as a basis for a large set of road safety indicators. These provide scientific evidence for policy making at national and international levels.

Vias institute in Brussels (Belgium) initiated and coordinates ESRA, in cooperation with eleven core group partners (BASt (Germany), BFU (Switzerland), CTL (Italy), IATSS (Japan), IFSTTAR (France), ITS (Poland), KfV (Austria), NTUA (Greece), PRP (Portugal), SWOV (the Netherlands), TIRF (Canada)). At the heart of ESRA is a jointly developed questionnaire survey, which is translated into national language versions. The themes covered include self-declared behaviour, attitudes and opinions on unsafe traffic behaviour, enforcement experiences and support for policy measures. The survey addresses different road safety topics (e.g., driving under the influence of alcohol, drugs and medicines, speeding, distraction) and targets car occupants, motorcycle and moped drivers, cyclists and pedestrians.

The present report is based on the second edition of this global survey, which was conducted in two waves: a first wave in 2018 (ESRA2_2018) involving 32 countries and a second wave in 2019 (ESRA2_2019), ending in 2020, including 16 additional countries. In total this survey collected data from more than 45,000 road users across 48 countries. An overview of the ESRA initiative and the project results is available on: www.esranet.eu.

This thematic ESRA report on traffic enforcement describes the involvement in traffic violations by different road user groups, the experience with traffic checks, the perceived likelihood of enforcement checks on alcohol and drugs, and the opinions on strictness of enforcement and sanctions. It includes comparisons amongst the 48 participating countries as well as results in relation to age and gender. Changes over time - between ESRA1 and ESRA2 - were looked at for self-reported experience with alcohol and drug checks and for involvement in drinking and driving, speeding and reading text or emailing while driving. More advanced analysis was undertaken to understand the variables that are associated with driving under the influence of alcohol and driving under the influence of drugs.

Key results

Below we provide a summary of main results without pretence at complete coverage of results. The summary is mostly limited to results at world-wide regional level. The complete results per question, continent and country are reported in Chapter 3 and the Appendices 4 to 9.

Prevalence of the risky self-declared traffic behaviour

In all four regions, the most frequently reported traffic violations are talking on hands-free phone and speeding inside urban areas, speeding on main roads outside urban areas and speeding on motorways with between 40% and 70% of road users admitting to these traffic violations.

Driving after drinking alcohol is being reported by one in five drivers in Europe, America and Africa and by one in six drivers in Asia-Oceania.

The use of a smartphone while driving for calling, reading email or texting has become common behaviour in many countries. The most distracting variant of phone use while driving is reading a text message/email or checking social media which requires that sight is averted from the roadway. In African countries, the percentages for this risky behaviour range between 22% and 52%. In Europe, this behaviour is somewhat less frequent with percentages varying mostly between 15% and 41%, with the exception of drivers from Iceland reporting it just over 53%.

The unsafe transport of children is frequent in Asia-Oceania and Africa (> 40%), and less frequent in Europe and America (< 15%).

The age differences in risky behaviour were nearly all significant in all four regions with younger drivers reporting to engage more in risky driving behaviour than older drivers with effect sizes mostly varying between small to medium.

In three regions - Europe, America and Africa - for nearly all risky behaviours males reported to engage more frequently in the behaviour than females; most often the gender differences were quite small.

Reported traffic violations by other road user groups

Moped riders and motorcyclists:

In all four regions, nearly half of all moped riders and motorcyclists report to drive faster than the speed limits on roads outside of built-up areas.

Riding without a helmet - which is not a violation in many ESRA2 countries - is reported by nearly a half of riders in Africa and Asia-Oceania, by two in five riders in America and by one in four riders in Europe.

Younger moped riders and motorcycle riders report more frequently to engage in each of the four risky behaviours (drinking and riding, speeding outside built-up areas, riding without helmet and reading text/email or checking social media during riding). Nearly all effect sizes are medium to large.

Cyclists:

In all four regions, cycling after having drunk perhaps too much alcohol is reported by one in six cyclists.

Cyclists in Asia-Oceania and Africa more frequently report to read a text message or check social media while cycling (about one in three), to cycle wearing headphones (two in five to about half), and to cycle on road next to the cycle lane (slightly over half) than cyclists in Europe and America.

Younger cyclists reported more frequent risky cycling behaviour than older cyclists in three regions - Europe, Asia-Oceania and America - with effect sizes mostly between medium to large.

Pedestrians:

The behaviours that may increase risk for pedestrians - phone use, headphone use, red light running, crossing road at other place than pedestrian crossing - are frequently reported by pedestrians in all four regions (percentages mostly ranging between 40% and 75%).

In all four regions, younger pedestrians report more frequently to engage in risky pedestrian behaviour (listening to music, reading text/checking social media, red light running, crossing nearby pedestrian crossing) than older pedestrians, with effect sizes mostly ranging from medium to large.

Drivers' experience of being checked for alcohol or drugs in traffic

In all four regions, being checked in traffic for alcohol occurs more frequently than being checked for drugs, with the highest percentages of alcohol checks being reported in Asia-Oceania (33%) and the lowest in America (5%), and Europe (18%) and Africa (17%) falling in between.

For checks on drugged driving the highest percentages are being reported in Asia-Oceania and Africa (12% and 10%), and low percentages in Europe (4%) and America (2%).

In all four regions, male drivers tend to report more experience with being checked for using alcohol or drugs than female drivers, but statistical effect sizes were consistently small.

In all four regions, younger drivers tended to report more experience with being checked than older drivers, with effect sizes ranging from small to medium.

Perceived likelihood of being checked

In all four regions, the reported likelihood of being checked is most frequent for speeding violations (percentages ranging between 30% and 46%) and for seat belt violations (percentages ranging between 25% and 46%).

Drivers in African countries report most often that they consider it likely to be checked in traffic (percentages ranging between 24% and 46%) and drivers in America report this likelihood least often (percentages ranging between 10% and 30%).

In all four regions, male drivers tend to report a higher likelihood of being checked for traffic violations than female drivers, but statistical effect sizes are consistently small.

In all four regions, younger drivers tended to report higher likelihood of being checked than older drivers, with effect sizes ranging from small to medium.

Opinions on strictness of enforcement

Worldwide, in nearly all surveyed countries, there is a majority support among road users (> 60%) for a stricter approach to drinking and driving in the sense of stricter penalties and more traffic checks.

In nearly all surveyed countries there is a clear majority support for stricter approach to phone use while driving/riding (percentages ranging between 65% and 95%).

On the questions on strictness of sanctions and enforcement, female road users tend to report a somewhat stronger preference for stricter sanctions and more enforcement than male road users, but the statistical effect sizes are small.

Older road users were more in favour of stricter sanctions for drinking and driving, speeding and use of hand-held mobile phone than younger road users with effect sizes ranging from small to medium. In Africa, no age differences were found for almost all questions.

Changes over time

Answers on violation behaviour of car drivers were compared between ESRA1 and ESRA2. The operational definition of car drivers slightly changed between ESRA1 and ESRA2. In view of this it cannot be excluded that the differences reported below may be partly due to slightly differing samples of ESRA1 and ESRA2.

Concerning drinking and driving, it seems that this risky behaviour has been reduced over time; the EU average has decreased from 31% to 22% and in a number of countries such as Denmark, Finland, France, Germany, the Netherlands, Italy, Spain and the United Kingdom substantial reductions in self-declared drinking and driving have occurred.

Concerning speeding outside built-up areas, it seems that this may have increased somewhat over time.

Reading a text or email while driving seems to have slightly reduced overall, with large reductions in some countries (Italy, Finland, Greece, Netherlands, Sweden). However, these data should not be taken at face value since there is evidence that at least for one of these countries (the Netherlands) the ESRA2 reports of less email reading and/or texting seems not be supported by actual observations of phone use in traffic.

Variables associated with driving under influence of alcohol or drugs

The odds of engaging in driving when one may have been drinking more than the legal alcohol limit in the past thirty days significantly *increase* when people are getting older, when they find this behaviour to be more socially and personally acceptable, when they have beliefs that their friends would drive with alcohol, that one can safely drink and drive for short trips, when they trust their own ability to drive with alcohol, when they often drive after drinking alcohol, when they find penalties too severe, when they perceive a higher likelihood of alcohol checks in traffic and when they have actually been checked for drinking and driving.

On the other hand, the odds of engaging in drinking and driving in the past thirty days significantly are significantly lower when riders are female, when they believe that alcohol is a more frequent cause of accidents, when they believe more that alcohol rules are insufficiently checked and when they are more supportive of interlock measures for alcohol offenders and zero tolerance policy for drinking and driving.

The odds of engaging in driving under the influence of drugs are lower for older drivers, for female drivers (versus male) and for drivers who perceive driving under influence as frequent accident cause (versus those who perceive this less so). The odds of engaging in driving under the influence of drugs were increased when drugged driving is more socially and personally acceptable, and when the perceived likelihood of a drug check is higher and there is more experience with drug enforcement.

The positive relationship between odds of engaging in driving under the influence of alcohol or drugs and higher perceived likelihood of a control and being checked for driving under the influence (DUI) can be explained by various processes. It can be assumed that, first, drivers who use drugs do so at times and near locations where police may focus enforcement efforts, that, second, these drivers are more motivated to look for and notice police checks, and third, that these drivers may show driving behaviour that alerts the police to their vehicle.

Key recommendations

Drinking and driving and speeding should remain the top priorities for traffic enforcement on the four continents.

The enforcement of seat belt use and safe transport of children is especially important in African and Asia-Oceanic countries.

A new challenge for traffic enforcement worldwide is the frequent use of (hand-held) smartphones by drivers, cyclists and pedestrians.

New legislation on distraction in traffic and on drugs in traffic, or the possible revision of current legislation should take into account traffic policing practices in order to facilitate as much as possible traffic enforcement operations in these areas.

In some particular countries driving under the influence of drugs is a widespread and rising problem that needs focused attention in terms of health prevention, communication and traffic enforcement.

The fairly high reported violation rates of road users other than drivers - moped riders, motorcyclists, cyclists and pedestrians - indicates that these groups should not be ignored in road infrastructure (planning), traffic education, or in traffic enforcement planning. Being both vulnerable and engaging in risky behaviour may make motorcyclists, moped riders and cyclists, ideal target groups for special road safety campaigns or enforcement actions. Even though pedestrians are likely not a high-risk group they should not be completely ignored when thinking about campaigns and enforcement.

Closing remark

The ESRA initiative has demonstrated the feasibility and the added value of joint data collection on road safety performance by partner organizations all over the world. The intention is to repeat this initiative on a triennial basis, retaining a core set of questions in every wave. In this way, ESRA produces consistent and comparable road safety performance indicators that can serve as an input for national road safety policies and for international monitoring systems on road safety performance.

1 Introduction

Countries that have successfully reduced road traffic risk have embraced a 'systems approach' to road safety (Peden et al., 2004; SWOV, 2018). A systems approach looks at the traffic system as a whole and at the interaction between road, vehicle, and road user in order to identify where there is potential for intervention (Peden et al., 2004; SWOV, 2018).

Within a safe systems approach, traffic law enforcement is one of the instruments to secure or improve traffic law compliance. In the literature the concepts of 'traffic law enforcement' and 'police enforcement' are often used interchangeably (European Commission, 2018). However, the concepts differ in width. Traffic law enforcement is wider and covers the entire enforcement chain, from detection of a violation through to the penalty. Police enforcement refers to the actual work of detecting a traffic law violation, apprehending the offender, and securing the evidence needed for his prosecution. Police enforcement can only be effective if it operates in a supportive environment of laws, regulations, and a sensitive penal system. Consequently, the effectiveness of police enforcement cannot be seen in isolation from how the police collaborates with the other parties in the traffic law enforcement chain.

Traffic law enforcement influences driving behaviour through two processes: general deterrence and specific deterrence (Zaal, 1994; Mäkinen et al., 2003). General deterrence can be defined as the impact of the threat of legal punishment on the public at large. Specific deterrence can be seen as the impact of the actual legal punishment on those who are apprehended. Thus, general deterrence results from the public's perception that traffic laws are enforced and that there is a risk of detection and punishment when traffic laws are violated. Specific deterrence results from the actual experience of detection, prosecution, and punishment of offenders.

Traffic enforcement should be targeted at violations that are associated with increased crash risk. There is good evidence that the crash risk is increased by violations such as speeding (e.g., OECD, 2018), drinking and driving (Peck et al., 2009), drug use and driving (Hels et al., 2011), red light violations (Goldenbeld & Schagen, 2017) and hand-held smartphone use while driving (Dingus et al., 2016).

The effectiveness of enforcement is better if police controls are accompanied by sufficient publicity; takes place regularly over a long period; are unpredictable and difficult to avoid; combine highly visible and less visible activities; focus on traffic offences that have a direct, proven relationship with collisions or their severity (e.g. speeding, drink and drug driving, failure to wear a seat belt, red-light running, mobile phone use) (Mäkinen et al., 2003; ETSC, 2016). According to recent reviews of speed cameras, speed camera programmes will reduce total crashes by 19%, injury crashes by 18% and severe/fatal crashes by 21% (Steinbach et al, 2016, p.45), speed cameras that implement average speed control will reduce total crashes by 30% (Høye, 2015), and red-light cameras will reduce total crashes at red light camera equipped intersections by 12% (Goldenbeld et al., 2019). For a number of violations such as driving under the influence of alcohol or drugs, use of smartphone for texting while driving, aggressive driving, enforcement cannot be done with automatic cameras and enforcement needs to take the form of manual (man-based) traffic checks. There is evidence that enforcement of drinking and driving may reduce total crashes by 14% (Erke et al., 2009).

Studies on the effects of police enforcement operations on drugs and driving and smartphone use are almost non-existent. Indeed, there are studies on effects of Driving under the Influence (DUI) laws and cell phone laws (including enforcement), but there is to our knowledge no evaluation of the effectiveness of policing operations. Thus, mostly laws (including (unknown) enforcement levels) are evaluated rather than police operations. In USA, Lacey et al. (2010) attempted to investigate the effectiveness of drug per se laws but they were unable to draw conclusions due to the paucity of objective data and the inability of databases to distinguish between DUI-drug-arrests and DUI-alcohol arrests and convictions (Lacey et al., 2010). GAO research (2015) found that in three of seven selected states there appeared to be a lack of knowledge among law enforcement about drug impairment in drivers. There are studies on effects of DUI laws and cell phone laws. There is evidence in the United States that implementing an explicit ban on hand-held phone calls in traffic may result in a decrease of 10% of the number of road fatalities, and a texting prohibition to a 3% decrease (Rocco & Sampaio, 2016). Less is known about the actual enforcement levels that are needed to support these safety effects. In the USA enforcement of cell phone usage seems sparse (Rudisill et al., 2018). Based on interviews with police officers, Rudisill et al. (2018) identified several barriers for effective enforcement

of cell phone laws. Clearer and encompassing cell phone legislation could help police enforcement. Besides police enforcement a more general cultural change and technological advancements implemented by cell phone manufacturers are probably part of the solution (Rudisill et al., 2018).

In recent years, there has been some concern in European countries that a cutdown/decrease in traffic enforcement may be related to a decrease in road safety performance (ETSC, 2016b). Police organization in various countries seem to have shifted priorities from traffic enforcement to other problem areas such as terrorism prevention, cybercrime, youth gangs etc. Although there can be good arguments for some shift in policing priorities, it is relevant to point out that reducing traffic enforcement seems to have a downside. Studies outside the European Union have shown that, indeed, strongly reducing the level of traffic enforcement (over a longer time period) may go together with an increase in violation behaviour and traffic crashes. In Canada, Blais & Gagné (2010) found that a 21-month period of sharply reduced police enforcement (61% reduction of stopping offenders in traffic) was associated with an increase in injury crashes (+4%) and damage only crashes (+7%). In the USA, the evidence shows that stopping red light camera programs (for political and/or financial reasons) was associated with both an increase in red light running and an increase in serious intersection crashes (Ko et al., 2017; Hu & Cicchino, 2017). Again, in the USA, researchers found evidence that long term structural cutbacks on the number of highway patrol officers were statistically associated with more crashes on highways (Rezapour et al., 2018).

This report addresses the following research questions on enforcement-related issues:

- What is the prevalence of the risky self-declared violation behaviour among drivers, pedestrians, motorcyclists and cyclists, and how does this differ per region, country, gender and age?
- What proportion of drivers are being checked by the police and how does this differ per region, country, gender and age?
- How do road users rate the likelihood of being checked and how does this differ per region, country, gender and age?
- What do road users think about strictness of enforcement, and how does this differ per region, country, gender and age?

The report is organised as follows. The methodology is further explained in Chapter 2. The results are presented in Chapter 3. The results on self-declared violation behaviour (question 1), on self-reported experience with enforcement checks on alcohol and drugs (question 2), on the perceived likelihood of being checked for alcohol and drugs (question 3), on opinions on strictness of sanctions are reported in Section 3.1 of Chapter 3. Advanced analyses results are presented in Section 3.2. Section 3.3 closes Chapter 3 with pointing out some limitations of the data. In Chapter 4, a summary of findings and a further discussion of some of the results is presented. In various appendices the questionnaire itself and further results are presented (Appendix 1: ESRA2 questionnaire; Appendix 2: ESRA weights; Appendix 3: Sample sizes; Appendix 4 to 9: Statistical significance tests).

2 Methodology

ESRA (E-Survey of Road users' Attitudes) is a joint initiative of road safety institutes, research centres, public services, and private sponsors from all over the world. The aim is to collect and analyse comparable data on road safety performance, in particular road safety culture and behaviour of road users. The ESRA data are used as a basis for a large set of road safety indicators. These provide scientific evidence for policy making at national and international levels.

ESRA data are collected through online panel surveys, using a representative sample of the national adult populations in each participating country (at least N = 1,000 per country). A few exceptions exist. In some countries sample sizes of at least 1,000 respondents were not feasible, therefore smaller sample sizes were used.

At the heart of this survey is a jointly developed questionnaire, which is translated into 61 national language versions in ESRA2. The themes covered include self-declared behaviour, attitudes and opinions on unsafe traffic behaviour, enforcement experiences and support for policy measures. The survey addresses different road safety topics (e.g., driving under the influence of alcohol, drugs and medicines, speeding, distraction) and targets car occupants, motorcycle and moped drivers, cyclists and pedestrians. The present report is based on the second edition of this global survey, which was conducted in two waves: a first wave in 2018 (ESRA2_2018) involving 32 countries and a second wave in 2019 (ESRA2_2019), ending in 2020, including 16 additional countries. In total this survey collected data from more than 45,000 road users across 48 countries.

The participating countries in the first wave of ESRA2 (ESRA2_2018) were:

- Europe: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal, Serbia, Slovenia, Spain, Sweden, Switzerland, United Kingdom;
- America: Canada, USA;
- Asia and Oceania: Australia, India, Israel, Japan, Republic of Korea;
- Africa: Egypt, Kenya, Morocco, Nigeria, South Africa.

For the second wave, the participating countries in ESRA2 (ESRA2_2019) were:

- Europe: Bulgaria, Iceland, Luxembourg, Norway;
- America: Colombia;
- Asia and Oceania: Lebanon, Malaysia, Thailand, Vietnam;
- Africa: Benin, Cameroon, Ghana, Ivory Coast, Tunisia, Uganda, Zambia.

Vias institute in Brussels (Belgium) initiated and coordinates ESRA, in cooperation with eleven core group partners (BAST (Germany), BFU (Switzerland), CTL (Italy), IATSS (Japan), IFSTTAR (France), ITS (Poland), KFV (Austria), NTUA (Greece), PRP (Portugal), SWOV (the Netherlands), TIRF (Canada)). The common results of the ESRA2 survey are published in a Main Report, a dedicated report on the African continent, a Methodology Report and 15 Thematic Reports (Table 1). Furthermore, 66 country fact sheets, including different language versions, have been produced in which national key results are compared to a regional mean (benchmark). Scientific articles, national reports and many conference presentations are currently in progress. All common ESRA2 reports have been peer-reviewed within the consortium, following a pre-defined quality control procedure. An overview of the results and news on the ESRA initiative is available on: www.esranet.eu.

Table 1: ESRA2 Thematic Reports

Driving under influence of alcohol and drugs	Seat belt and child restraint systems	Pedestrians	Senior road users
Speeding	Enforcement and traffic violations	Cyclists	Gender issues
Fatigue	Subjective safety and risk perception	Moped drivers and motorcyclists	Support for policy measures
Distraction (mobile phone use)	Vehicle automation	Young road users	

The present report summarizes the ESRA2 results with respect to traffic enforcement, i.e. the self-declared violation behaviours that are targeted by enforcement, the experiences with and beliefs about enforcement and the opinions on strictness of enforcement and sanctions. An overview of the data collection method and the sample per country can be found in the ESRA2 methodology report (Meesmann, Torfs, Wardenier & Van den Berghe, 2021).

Note that a weighting of the data was applied in the descriptive analyses. This weighting took into account small corrections with respect to national representativeness of the sample based on gender and six age groups: 18-24y, 25-34y, 35-44y, 45-54y, 55-64y, 65y+ (UNdata, 2019). For the regional means, the weighting also took into account the relative size of the population of each country within the total set of countries from this region. SPSS 25.0 was used for all analyses. Due to rounding and slight differences in computations between the different statistical software used, there might be very small differences in some of the figures between graphs and tables included.

Significance testing

Chi-Square tests of independence were used to test the statistical association of each binary variable (self-declared behaviour, acceptability, perception accident cause) with region, gender and age group.

Further column proportions tests, i.e. pairwise comparisons between pairs of groups (region, gender, age groups), were performed to test for differences between specific regions, or age groups. Significant differences are indicated in the cross-tabulation table with APA-style formatting using subscript letters and are calculated at the 0.01 significance level.

Effect size measure were expressed as Cramer's V. Cramer's V indicates the strength of the association between each binary variable (self-declared behaviour, acceptability, ...) and region, gender and age group. The values of Cramer's V can be interpreted as follows (Cohen, 1988)

df=1 (small=.10, medium=.30, large=.50)

df=2 (small=.07, medium=.21, large=.35)

df=3 (small=.06, medium=.17, large=.29)

df=4 (small=.05, medium=.15, large=.25)

df=5 (small=.05, medium=.13, large=.22)

For example, the table A4.1 in Appendix 4 indicates the following:

- there is a significant age difference in the prevalence of driving after drinking alcohol (Chi-Square= 62.72, df= 5; p = .000);
- the associated *Cramer's V* (= 0.059) indicates the effect or difference is quite small;
- the subscript letters *a* and *b* indicate that the rate of self-declared driving after drinking alcohol is not significantly different among age groups 18-24, 25-34 and 35-44 (*all subscripts a*), and is not different among age groups 45-54, 55-64 and 65+ (*all subscripts b*), but it is different between these two age groupings (i.e. there is a statistical difference between on the one hand those aged 18-24, 25-34 or 35-44 *versus* on the other hand those aged 45-54, 55-64 or 65+).

3 Results

3.1 Descriptive analyses

This section presents the descriptive statistics on questions about enforcement-related subjects. The ESRA2 questions on enforcement-related issues concern the following:

self-declared risky behaviour of drivers (Section 3.1.1),
moped and motorcycle riders (Section 3.1.2),
cyclists (Section 3.1.3),
pedestrians (Section 3.1.4),
experiences of being checked in traffic (Section 3.1.5),
likelihood of being checked by the police (Section 3.1.6.) and
opinions on stricter enforcement (Section 3.1.7).

In each ESRA country about 1,000 road users (with a few exceptions) participated in the survey, among which about 800 car drivers (precise sample sizes are presented in Appendix 3). Please note that in the African countries a lower percentage of people has access to and use the internet (in Kenya and Zambia less than 20%). Within the African countries the numbers of 65+ respondents who answered the ESRA2 survey were quite low (with the exception of South Africa), so that the answers of this particular age group in African countries cannot be considered to be representative.

For each topic, the results are presented in a similar way: first the basic results per region, then the results are further broken down by country. Statistical tests of differences between gender and age groups have been performed and are reported in Appendices 4 to 9. Besides statistical significance also the effect sizes of the tested differences are reported in Appendices 4 to 9. Nearly all effect sizes range from "small" to "medium".

3.1.1 Self-declared risky behaviour of drivers

This section presents results on self-declared risky driving behaviour in the past thirty days and self-declared risky behaviour in the past twelve months.

Risky behaviour during past thirty days

Figure 1 presents the results on self-declared risky driving behaviour of drivers in the past thirty days. In broad lines the results show the following:

The unsafe transport of children in vehicles (no seat belt, no otherwise adequate protection) is three to four times more frequent in Asia-Oceania and Africa (43-47%) than in America (11-12%) and Europe (13-15%).

In America, Asia-Oceania and Africa, driving faster than the speed limits occurs most frequently on motorways/freeways and least frequently on roads within built-up areas, with the highest percentages of limit offending being reported in America (ranging between 57% and 70%) and somewhat lower in Asia-Oceania and Africa (ranging between 42% and 49%). In Europe, driving faster than the speed limits occurs most frequently outside built-up areas (but not on motorways/freeways) and least frequently on roads within built-up areas (ranging between 56% and 68%).

Driving after taking medication that may influence driving ability occurs more frequently in Asia-Oceania (26%) and Africa (20%) than in Europe or America (both 15%).

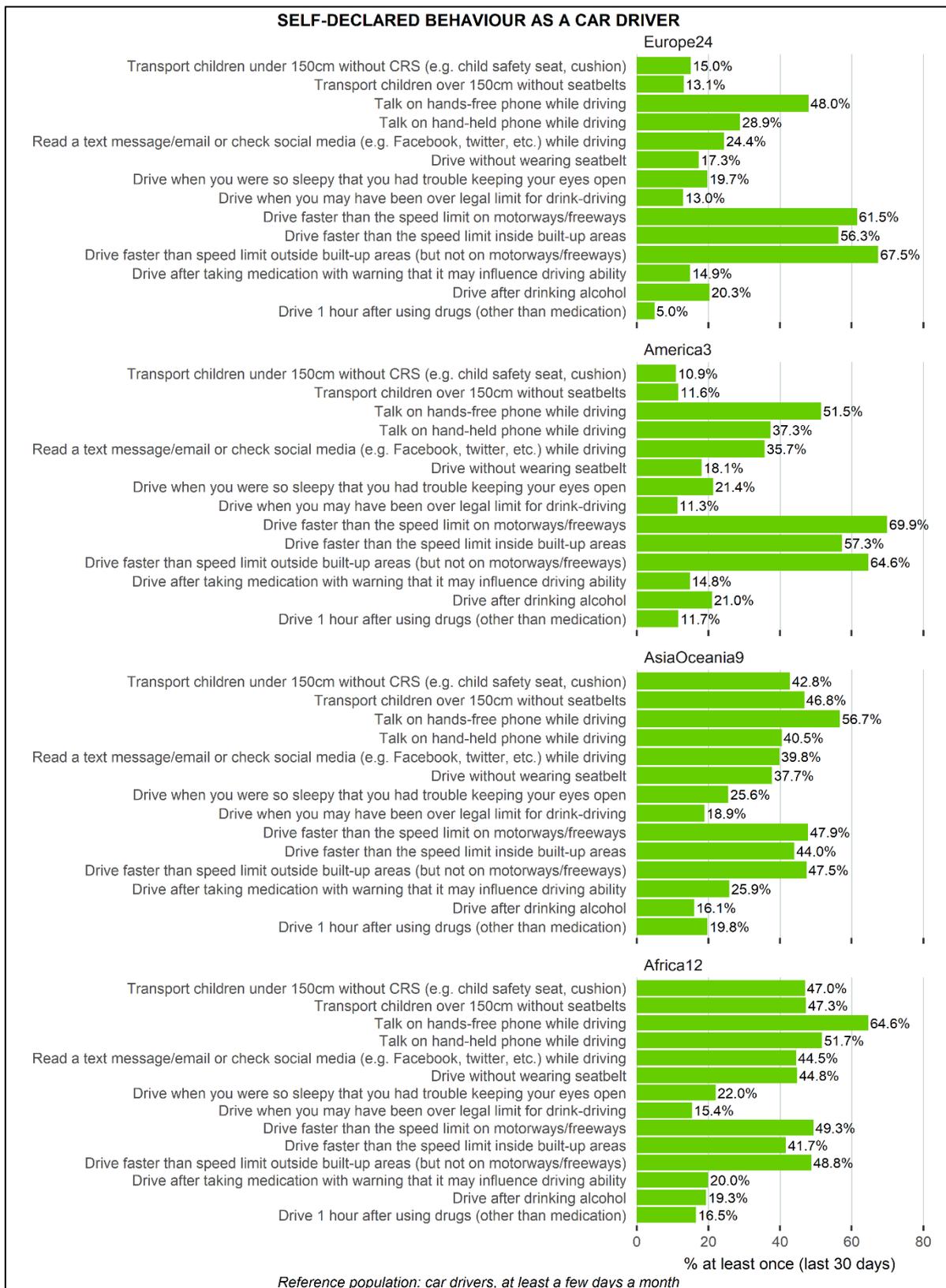


Figure 1: Self-declared risky driving behaviour by region (% of car drivers that did it at least once in the past 30 days).

In all four regions, talking on hands-free phone while driving is more common than talking on a hand-held phone. The percentages for hands-free talking on the phone, respectively hand-held talking on the

phone while driving is highest for drivers in the African region (65%, resp. 52%), and lowest for drivers in Europe (48%, resp. 29%), with drivers in America and Asia-Oceania in between.

Reading a text message/email or checking social media while driving is very frequent in Africa, Asia-Oceania and America (45%, 40% and 36% respectively), and far less though still substantial in Europe (24%).

Concerning driving under the influence of alcohol, roughly about one in five drivers in Europe, America and Africa has reported to have done this in the past 30 days. In Asia-Oceania, self-reported drinking and driving is somewhat lower with one in six (16%) drivers reporting this behaviour.

Driving without wearing a seat belt is most frequent in Africa (45%), less frequent in Asia-Oceania (38%), and least frequent, though still a substantial number, in America and Europe (18% and 17% respectively).

Gender and age differences

Appendix 4 presents results of statistical significance testing of gender and age differences in self-declared risky driving behaviour. Concerning gender differences, we summarise these results as follows:

In three regions (Europe, America and Africa), for nearly all risky behaviours males reported to engage more frequently in the behaviour than females;

Most often the gender differences were quite small ($df=1$, Cramers' $V < 0.10$);

The largest gender differences (Cramer's $V > 0.15$, medium size effects) were found for Europe and concerned male drivers reporting to drive more frequently after drinking alcohol (Cramer's $V = 0.172$) and to drive more frequently over the speed limit on motorways/freeways (Cramer's $V = 0.156$);

Asia-Oceania contrasted with the other regions in the sense that there were many non-significant gender differences for risky behaviour (drinking and driving, drugged driving, not wearing seat belt, unsafely transporting children, talk on hand-held phone while driving, read text message/email or check social media while driving, fatigued driving);

The age differences in risky behaviours were nearly all significant in all four regions with younger drivers reporting to engage more in risky driving behaviour than older drivers with Cramer's V effect mostly varying between 0.06 to 0.15 (small to medium). A number of large age effects (Cramers' $V = 0.22$) was found:

In America, young drivers tended to report least frequently to transport children over 150 cm without letting them wear a seat belt (Cramers' $V = 0.265$);

In Europe and America, younger drivers tend to report talking on a hand-held smartphone much more frequently than older drivers (Cramers' $V = 0.211$);

In America, younger drivers tended to report talking on a hands-free mobile phone while driving more frequently than older drivers (Cramer's $V = 0.209$);

In Europe and America, younger drivers tended to report more frequently to read text message/email or check social media while driving (Cramers' $V = 0.317, 0.322$ respectively);

In America, younger drivers tended to report fatigued driving more frequently than older drivers (Cramers' $V = 0.213$).

Country differences

In Figure 2, the results on self-declared driving under influence of alcohol in the past 30 days are further broken down by region and country.

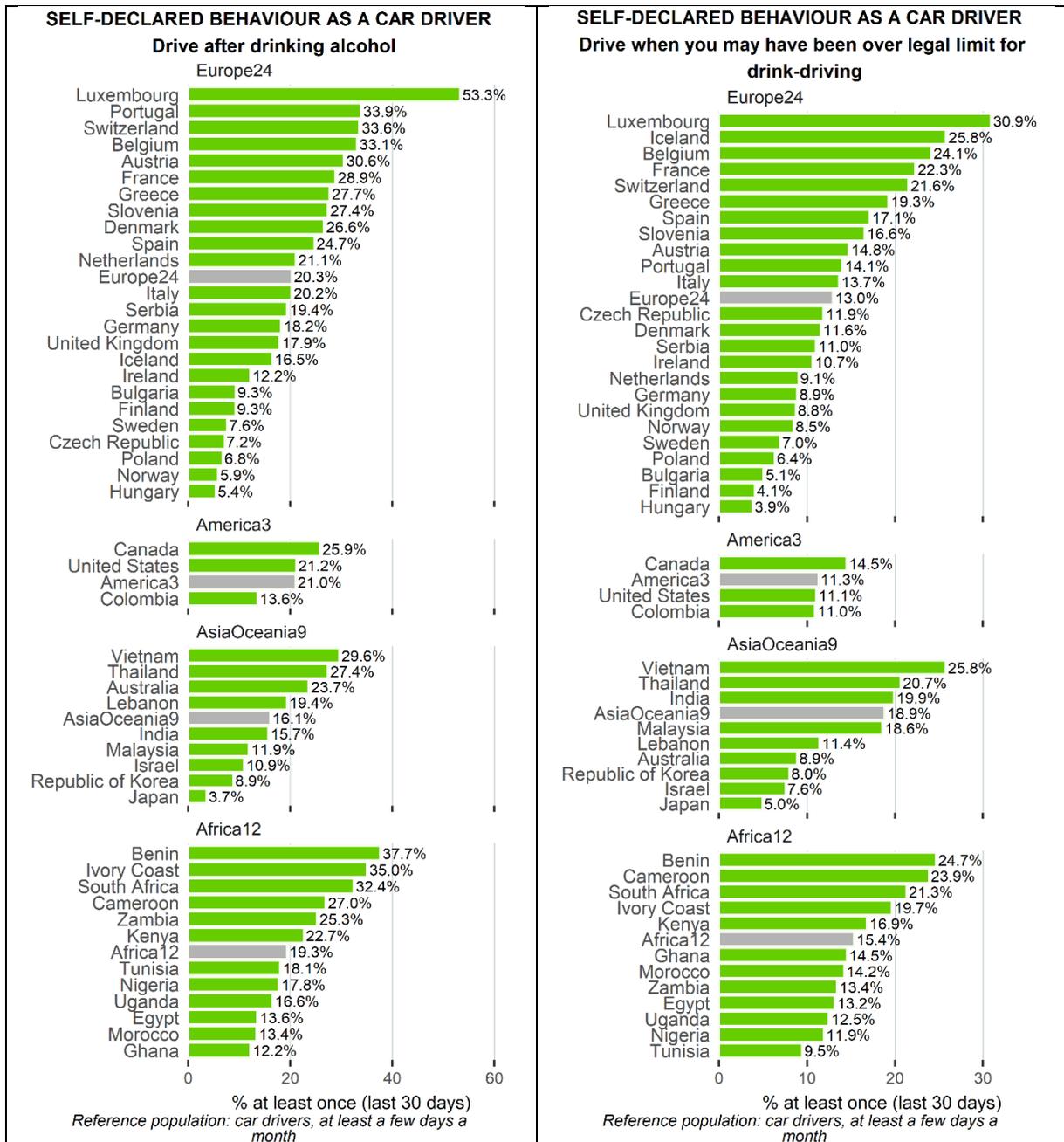


Figure 2: Self-declared driving under influence of alcohol by region and country (% of car drivers that did it at least once in the past 30 days).

In Europe, drivers from Luxembourg tend to report most frequently to engage in driving after drinking alcohol (53%) and driving when they may have been over legal limit for drink-driving (31%), whereas Hungarian drivers tend to report to engage in these behaviours least frequently (5% and 4% respectively).

In Asia-Oceania, drivers from Vietnam and Thailand report most frequently to engage in drinking and driving (21-30%), whereas drivers from Japan, Israel and Republic of Korea tend to report it least frequently (4-11%).

In America, drivers from Canada have the highest self-declared rates of drinking and driving (26% and 15%) and Colombian drivers tend to report the lowest rates (14% and 11%).

In Africa, drivers from Benin report most frequently to engage in drinking and driving (38% and 25%).

Figure 3 presents results on self-declared driving under influence of drugs in the past 30 days for region and countries.

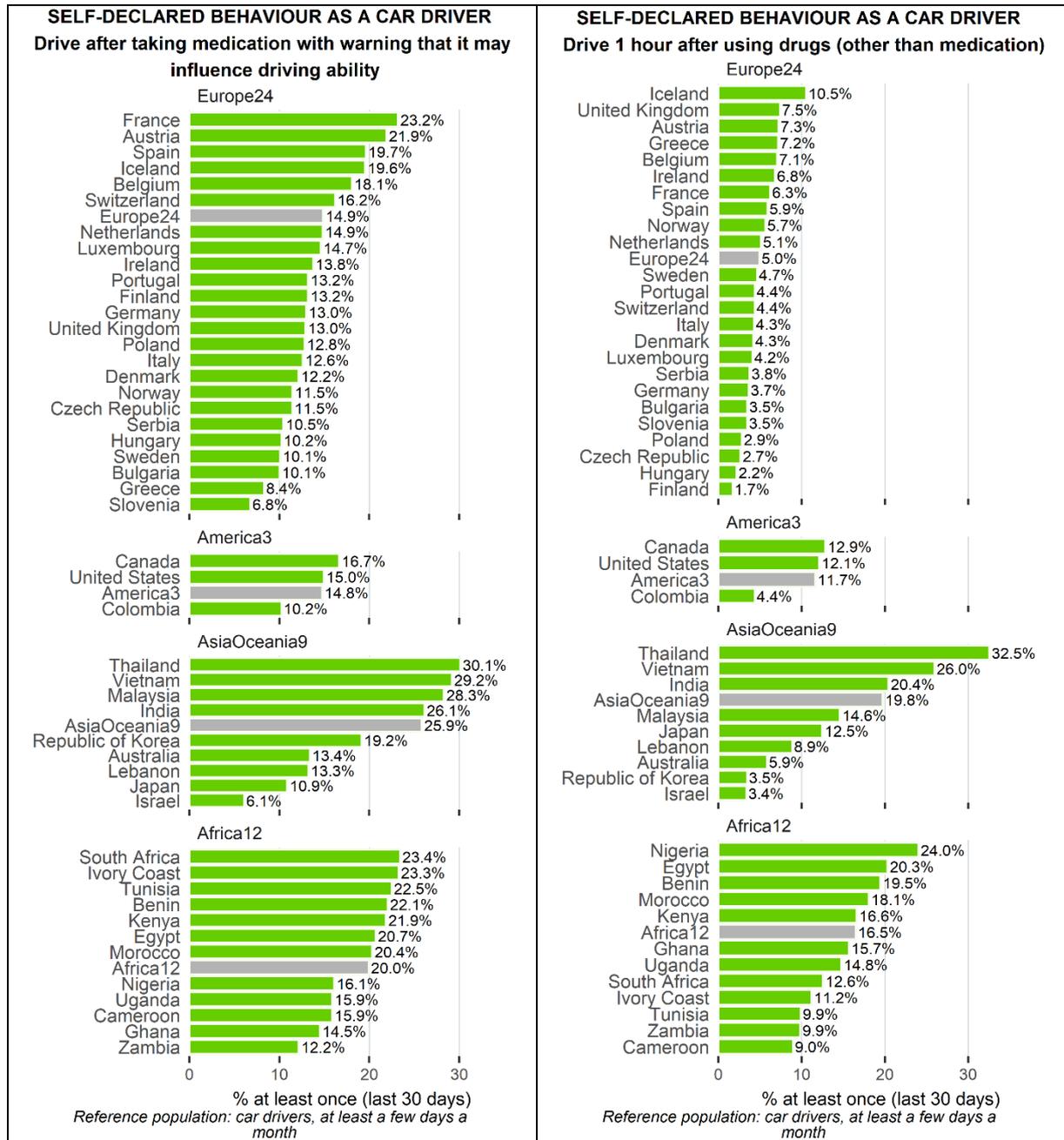


Figure 3: Self-declared driving under influence of drugs by region and country (% of car drivers that did it at least once in the past 30 days).

In Europe, the percentages for self-declared driving after taking medication that may influence driving ability are about 5 to 10 percentage points higher than for self-declared driving 1 hour after using drugs (other than medication). French (23%) and Austrian (22%) drivers tend to report most frequently to engage in driving after taking medication that may influence driving ability, whereas drivers from Slovenia (7%) and Greece (8%) tend to report it least frequently.

Drivers from Iceland, United Kingdom, Austria, Greece and Belgium have the highest self-declared rates of driving 1 hour after using drugs other than medication (7-11%), whereas drivers from Finland, Hungary, Czech Republic and Poland tend to report this behaviour least frequently (under 3%).

In America, Canadian drivers have the highest self-declared rates of driving after medication that may influence driving ability (17%) and driving 1 hour after using drugs other than medication (13%).

In Asia-Oceania, Thailand and Vietnam drivers report most frequently to engage in driving under influence of drugs/medication (26-33%), which are the highest rates for all four regions.

In all African countries, the self-declared rates of driving after taking medication that may influence driving ability and driving 1 hour after using drugs other than medication vary between 9% and 24%.

The self-declared prevalence of speeding on different roadways in the past 30 days is presented in Figure 4.

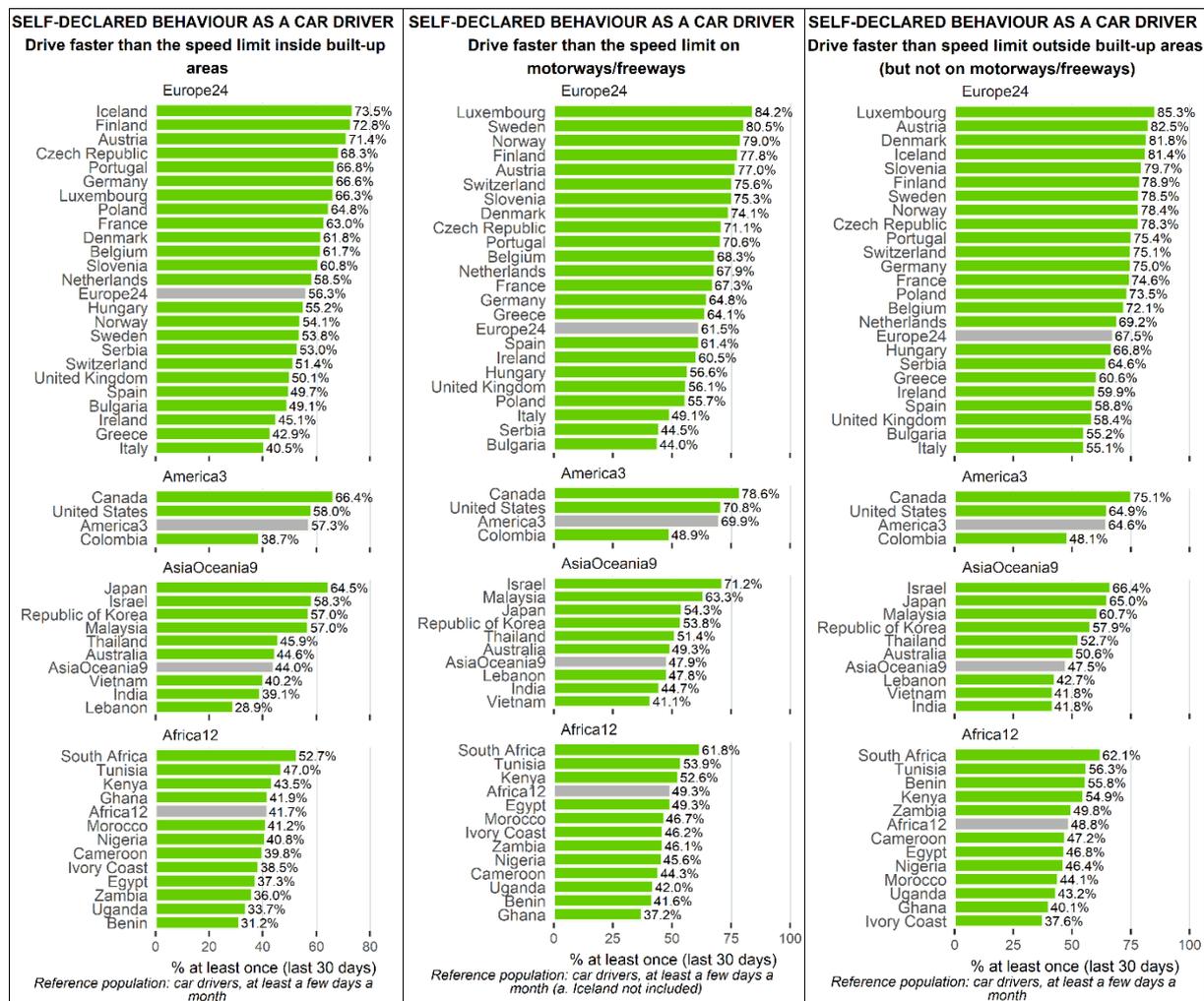


Figure 4: Self-declared speeding behaviour by region and country (% of car drivers that did it at least once in the past 30 days).

In general, nearly half to three quarters of drivers in countries worldwide report to have driven faster than the speed limit on different road types.

Within Europe, Finland and Austria have high proportion of drivers (>70%) who report to be speeding on three road types (within built up areas, on motorways/freeways, and outside built-up areas but not on motorways/freeways). Somewhat surprisingly, Italy seems to have the most (or nearly the most) speed limit abiding drivers on all three roadways.

Within Africa, speeding on different road types seems to be most prevalent in South Africa.

In America, speeding drivers on different roadways are more frequent in Canada (66-79%) than in Colombia (39-50%).

In Asia-Oceania, the proportion of speeding drivers on motorways/freeways and outside build-up areas is highest in Israel (58-71%), and lowest in Vietnam (41-42%). Speeding inside build-up areas is most frequent for drivers from Japan (65%) and least frequent for Lebanese drivers (29%).

Figure 5 presents the answers to questions on the use of seat belts as a driver and the safe transport of small (< 150 cm) and larger (> 150 cm) children in the past 30 days.

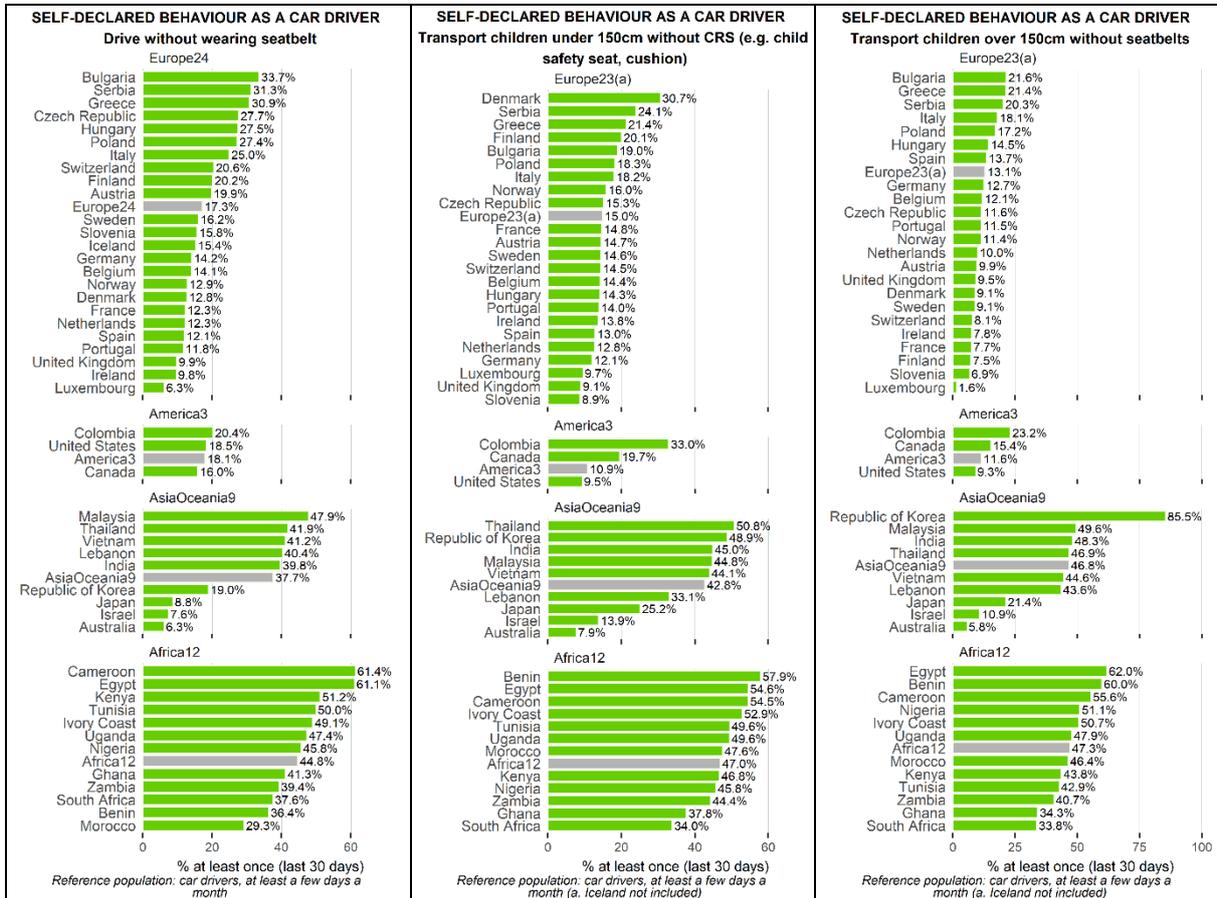


Figure 5: Risky driving behaviour related to use of safety devices (% of car drivers that did it at least once in the past 30 days).

In African countries, substantial groups of drivers (35-62%) report unsafe behaviour for these three indicators.

Within Europe, substantial groups of drivers from Bulgaria, Greece and Serbia, tend to report engaging in all three unsafe behaviours (19-34%). Danish drivers report most frequently to transport children under 150 cm without CRS (31%).

In Asia-Oceania, drivers from Australia, Israel and Japan tend to report least frequently to engage in unsafe behaviour for these three indicators (6-25%).

In America, Colombian drivers report most frequently unsafe behaviour for these three indicators (20-33%).

Figure 6 presents the result on the use of smartphone while driving in the past 30 days.

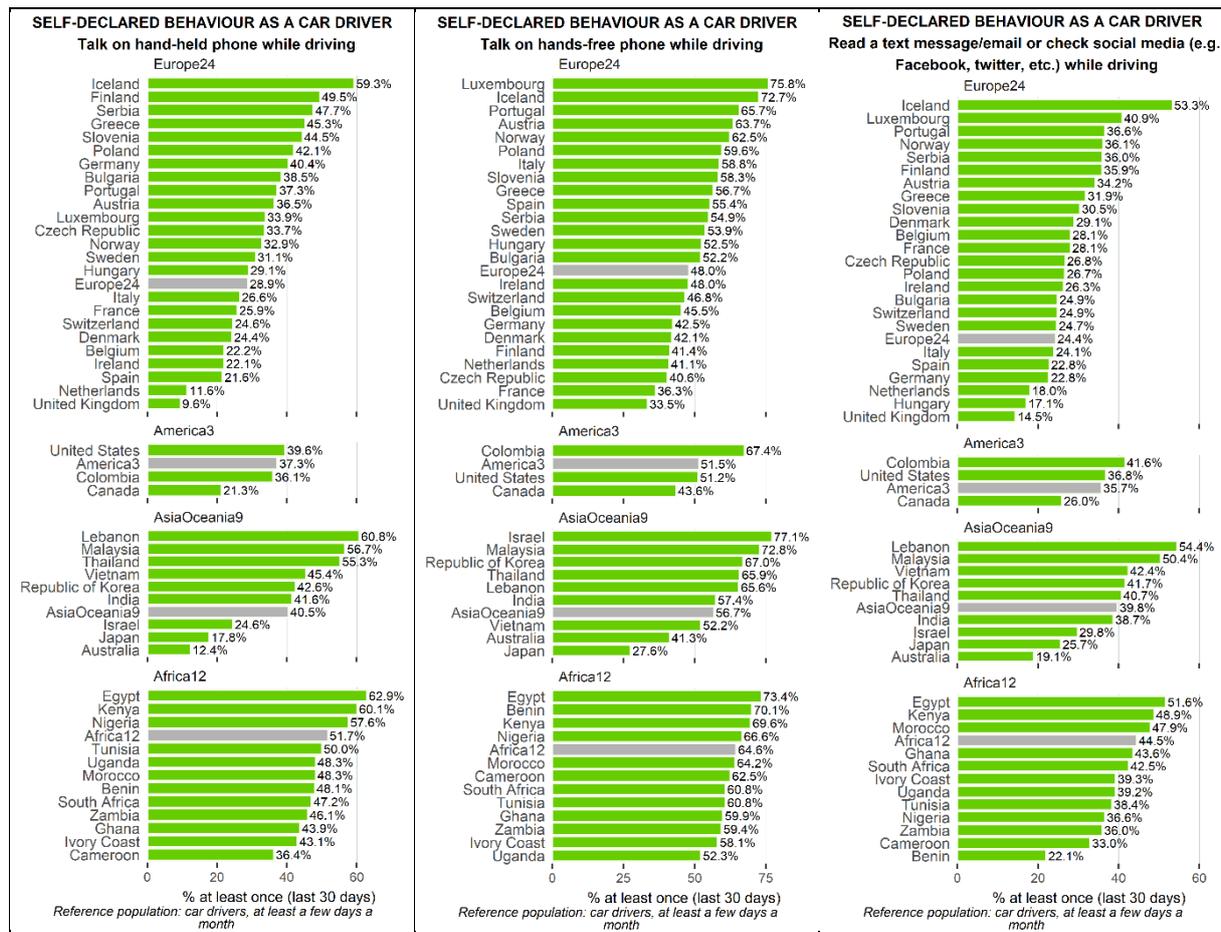


Figure 6: Risky driving behaviour related to use of smartphone (% of car drivers that did it at least once in the past 30 days).

Talking on hands-free phone while driving has become quite common in countries on all four regions with percentages ranging mostly between 40% and 75%.

Talking on a hand-held phone while driving occurs somewhat less frequently with most countries having percentages between 20% and 60%. The lowest percentages are reported by British (10%) and Dutch (12%) drivers from Europe and by Australian (12%) drivers from Asia-Oceania.

Reading an email or texting a message while driving often requires that sight is actually averted from the roadway. This distracting variant of phone use is reported less frequently than 2 other unsafe driving behaviours in most countries of all four regions (20-50%).

Two countries in Asia-Oceania - Australia and Japan - show relatively low percentages for all three indicators of smartphone use. Japan which is well-known for its strong work ethos still somehow manages to keep this risky behaviour at a low level.

Risky behaviour during past 12 months

The ESRA2 questionnaire contained three questions on violations in the past 12 months. Figure 7 presents the results for these questions.

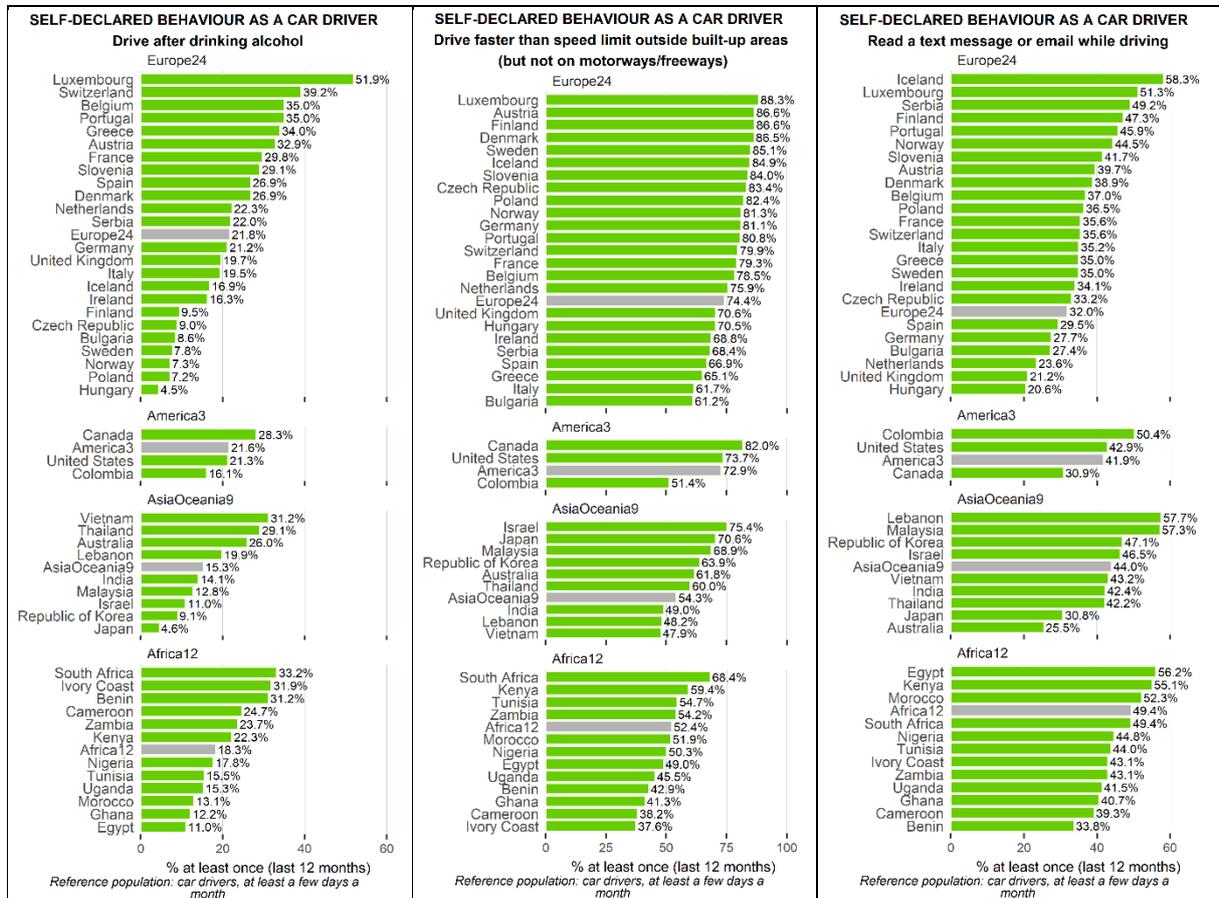


Figure 7: Self-declared risky driving behaviour in the past 12 months by region and country (% of car drivers that did it at least once in the past 12 months).

The highest and the lowest rates of driving after drinking alcohol are reported by European drivers in Luxembourg (52%) and Hungary (5%).

In African countries, the lowest number of drivers (38-68%) report to drive faster than speed limit outside built-up areas (but not on motorways/freeways). The highest percentages for this unsafe behaviour are reported by European drivers (61-88%).

In all four regions, the highest rates for reading a text message or email while driving vary between 55% and 58%. The lowest rates are reported by European drivers in Hungary and United Kingdom (21%).

3.1.2 Self-declared risky behaviour of moped driver or motorcyclist

Figure 8 presents the result on self-declared risky driving behaviour of moped riders and motorcyclists.

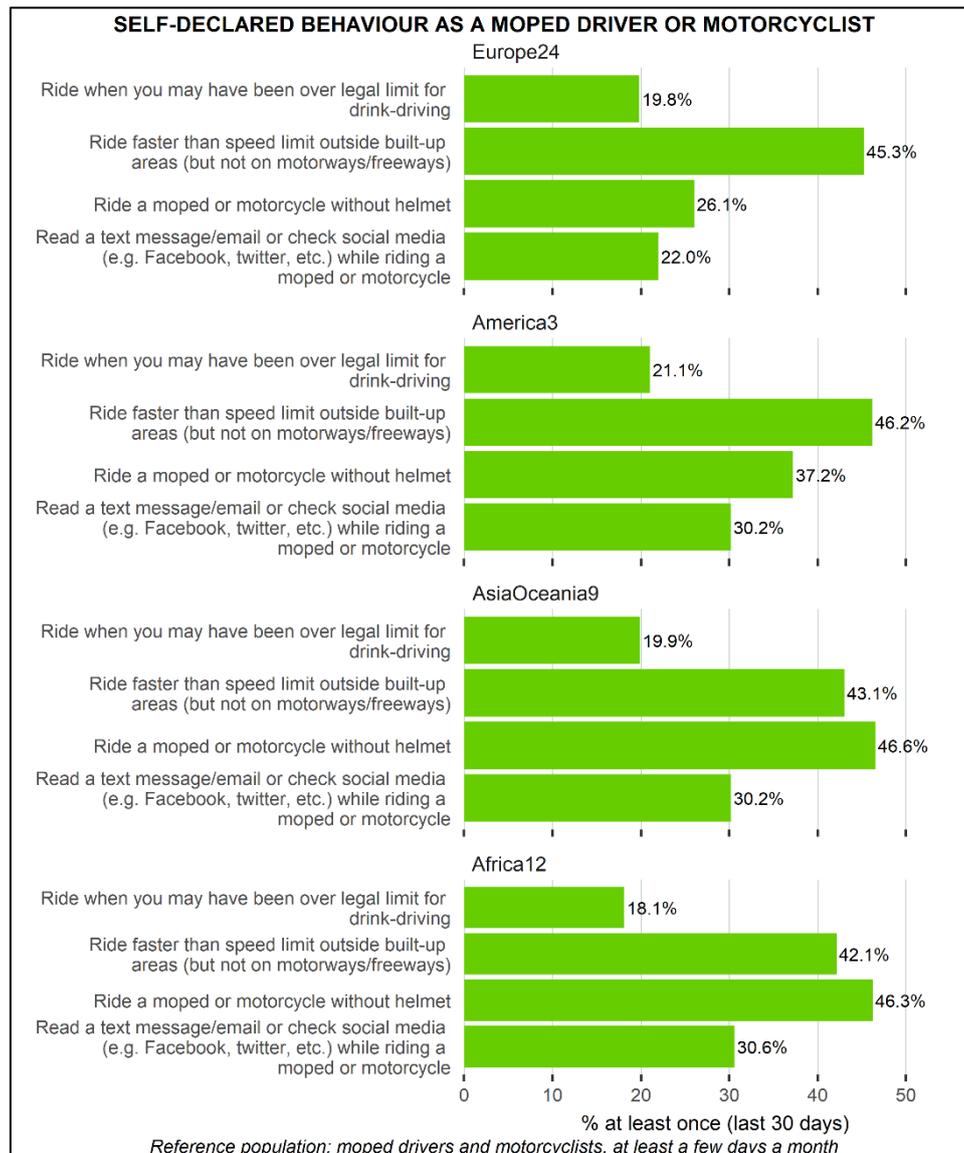


Figure 8: Self-declared risky driving behaviour of moped drivers and motorcyclists by region (% of moped drivers and motorcyclists that did it at least once in the past 30 days).

In all four regions, nearly half of all moped riders and motorcyclists (42-46%) report to drive faster than the speed limits on roads outside of built-up areas (but not on motorways/freeways).

Riding without a helmet is reported by nearly a half of riders in Africa and Asia-Oceania (46-47%), by two in five riders in America (37%) and by one in four riders in Europe (26%).

In each region, about one in five riders (18-21%) reports to have ridden with perhaps an illegal amount of alcohol.

Reading a text message or checking social media while riding a moped or motorcycle occurs frequently, with percentages ranging from 22% in Europe to 31% in Africa.

Country differences

The figures on risky driving behaviour of moped and motorcycle riders are further broken down per region and country in Figures 9 and 10.

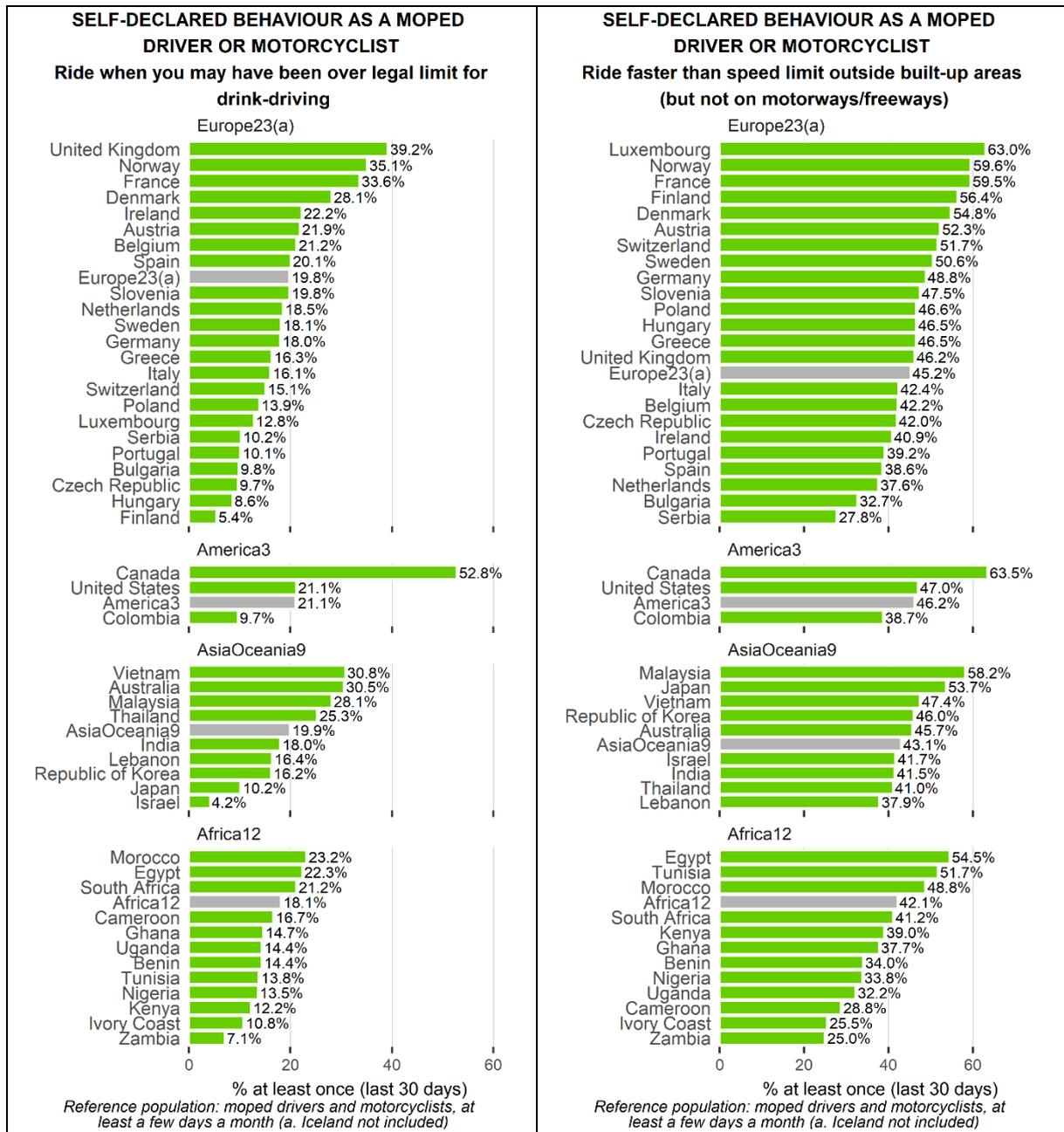


Figure 9: Self-declared risky driving behaviour – DUI and speeding – of moped drivers and motorcyclists by region and country (% of moped drivers and motorcyclists that did it at least once in the past 30 days).

The rate of self-reported riding a moped or motorcycle while being perhaps over the legal limit for drink-driving seems to be quite high in Canada (53%), the United Kingdom (39%), Norway (35%) and France (34%).

Riding faster than the speed limit outside built-up areas is very common in all countries with highest rates being reported in Canada (64%), Luxembourg (63%), Norway (60%), France (60%), Malaysia (58%) and lowest rates in Zambia (25%), Ivory Coast (26%), Serbia (28%), Cameroon (29%) and Uganda (32%).

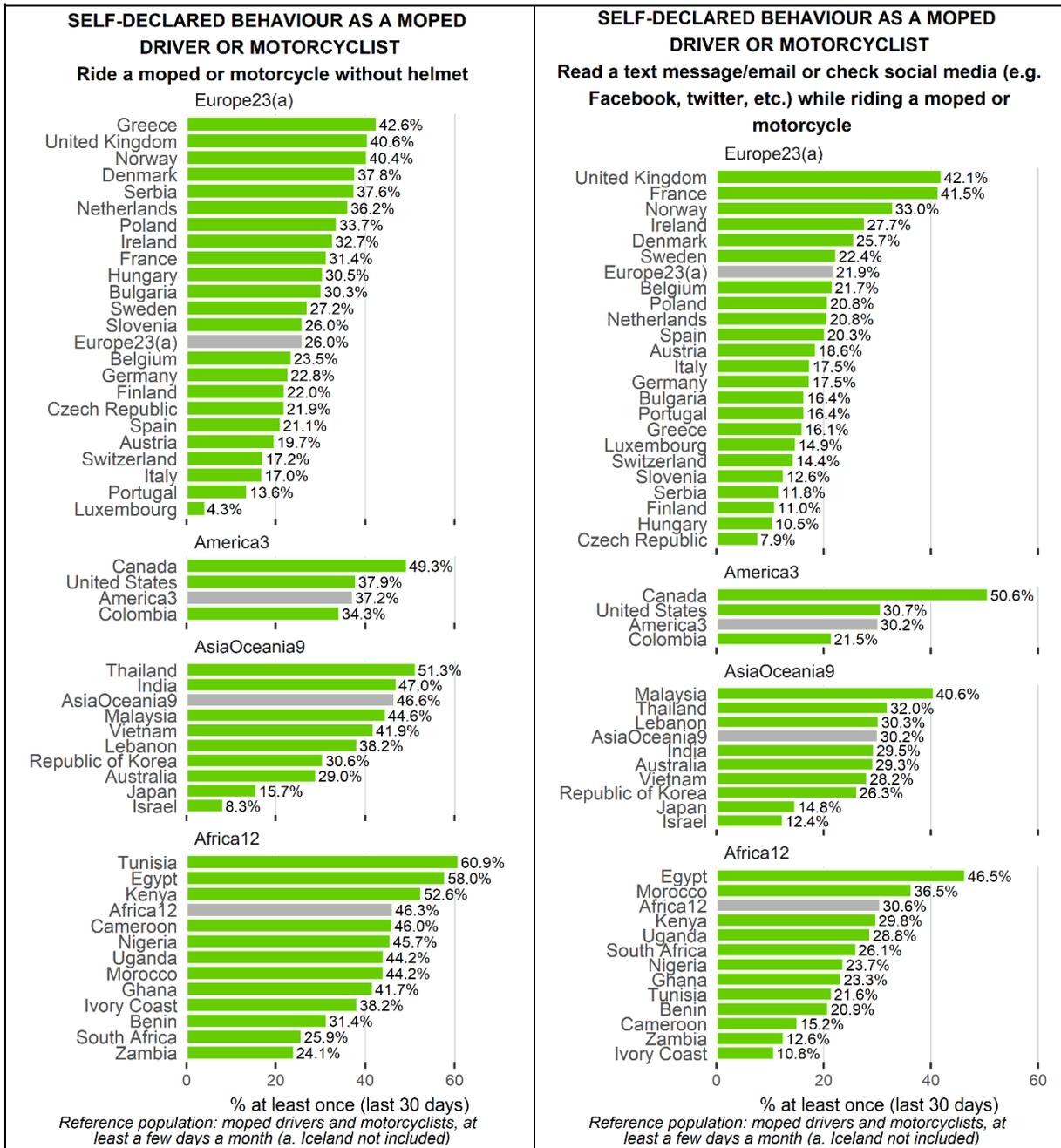


Figure 10: Self-declared risky driving behaviour – not wearing helmet and use of smartphone – of moped drivers and motorcyclists by region and country (% of moped drivers and motorcyclists that did it at least once in the past 30 days).

Riding a moped or motorcycle without helmet is most common in several African countries (percentages ranging from 53% to 61% for Kenya, Egypt and Tunisia), and also common in Thailand (51%), Canada (49%) and India (47%). It is to be kept in mind that in some countries there are no helmet wearing laws or some light mopeds are exempt.

The use of smartphone for reading text messages or checking social media while riding is most frequent in Canada (51%), Egypt (47%), United Kingdom (42%) and France (42%). The lowest rates of smartphone use while riding is reported in Czech Republic (8%), Hungary (11%), Ivory Coast (11%) and Finland (11%).

Gender and age differences

The statistical tests of gender and age differences in risky driving behaviour of moped and motorcycle riders are reported in Appendix 5. Concerning gender differences the main findings are:

Male moped and motorcycle riders in Europe, Asia-Oceania and Africa tend to engage more frequently in speeding outside built-up areas (but not on motorways/freeways) than female riders.

In all four regions, male riders tend to engage more frequently in riding without a helmet than female riders.

Male riders in Europe, America and Africa reported to engage more frequently in drinking and driving than female riders.

In Africa, male riders reported more frequently to engage in reading text/email or checking social media while riding than female drivers, whereas in Asia-Oceania the reverse was found, with female riders engaging more in this behaviour than male riders.

In America, no statistically significant gender differences were found for self-reported rates of drinking and driving, speeding, riding without a helmet and reading text/mail or checking social media while riding.

Nearly all effect sizes were small (Cramer's $V < 0.1$). The largest effect size (Cramers' $V = 0.184$) was found for the finding that in Europe male riders (52%) engaged more frequently in speeding outside built-up areas than female riders (32%) according to self-report.

Concerning age differences, the statistical tests indicate that younger moped riders and motorcycle riders report more frequently to engage in each of the four risky behaviours (drinking and riding, speeding outside built-up areas (but not on motorways/freeways), riding without helmet and reading text/email or checking social media during riding). Nearly all effect sizes are medium to large (Cramer's V between 0.1 and 0.28).

3.1.3 Self-declared risky behaviour of cyclists

The risky driving behaviours of cyclists are presented in Figure 11.

In all four regions, cycling after having drunk perhaps too much alcohol is reported by one in six cyclists (15% to 19%).

Cyclists in Asia-Oceania and Africa more frequently report to read a text message or check social media while cycling (31% and 30%), to cycle wearing headphones (43% and 48%), and to cycle on the road next to cycle lane (57% and 51%) than cyclists in Europe and America.

Cycling without helmet is a common cyclist behaviour in all four regions, with highest percentages being reported in Europe and Asia-Oceania (69% and 70%), and lower percentages in America and Africa (51% and 58%).

Gender and age differences

The statistical tests for gender and age differences in cyclists' risky behaviours are presented in Appendix 6. Concerning gender differences in cyclists' risky behaviour the main findings can be summarised as follows:

The largest effect sizes were found for gender differences in cyclists in Europe, with male cyclists reporting more frequently to cycle after having drunk too much alcohol, to cycle while reading a text or checking social media, to cycle while listening to music through headphones and to cycle on road next to cycle path; the effect sizes were small.

In America, male and female cyclists did not significantly differ in self-reported rates of cycling without helmet, cycling while listening to music through headphones, cycling while reading email or checking social media, and cycle while riding on road next to cycle path.

Concerning cycling after having perhaps drunk too much alcohol, in Europe and America male riders reported more frequently to engage in this behaviour than female cyclists, whereas the reverse trend was found in Asia-Oceania; in Africa, male and female riders report this risky behaviour equally.

In Europe, Asia-Oceania and America, no significant gender differences were found for cycling without helmet, but in Africa male cyclists reported more frequently to cycle without helmet than female cyclists.

The results concerning age differences were fairly consistent with younger cyclists reporting more frequent risky cycling behaviour than older cyclists in Europe, Asia-Oceania and America (exceptions being a non-significant age difference for cycling without helmet in Asia-Oceania and America and for cycling while listening to music in Asia-Oceania). Most effect sizes were medium to large.

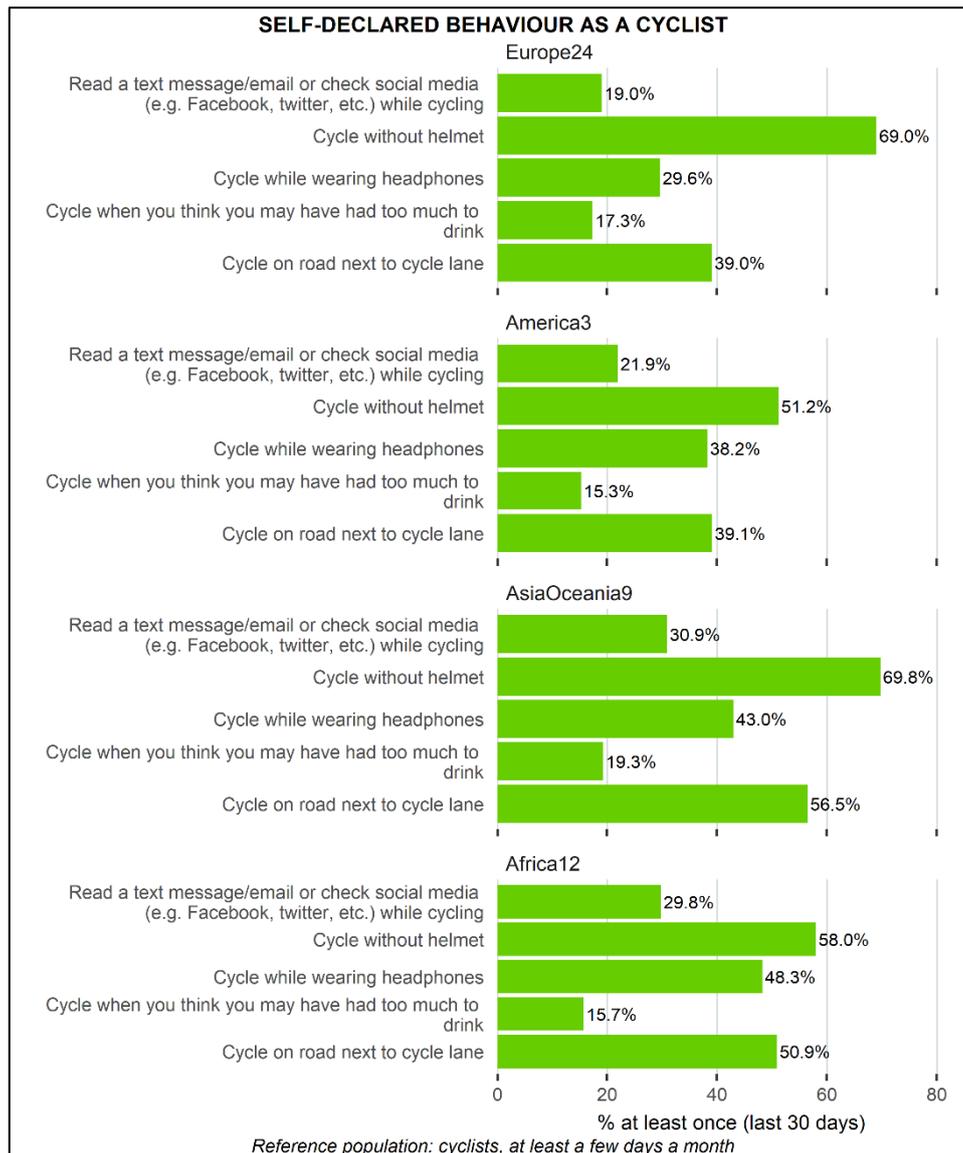


Figure 11: Self-declared risky driving behaviour of cyclists (% of cyclists that did it at least once in the past 30 days).

3.1.4 Self-declared risky behaviour of pedestrians

Figure 12 presents results on self-declared risky behaviour of pedestrians.

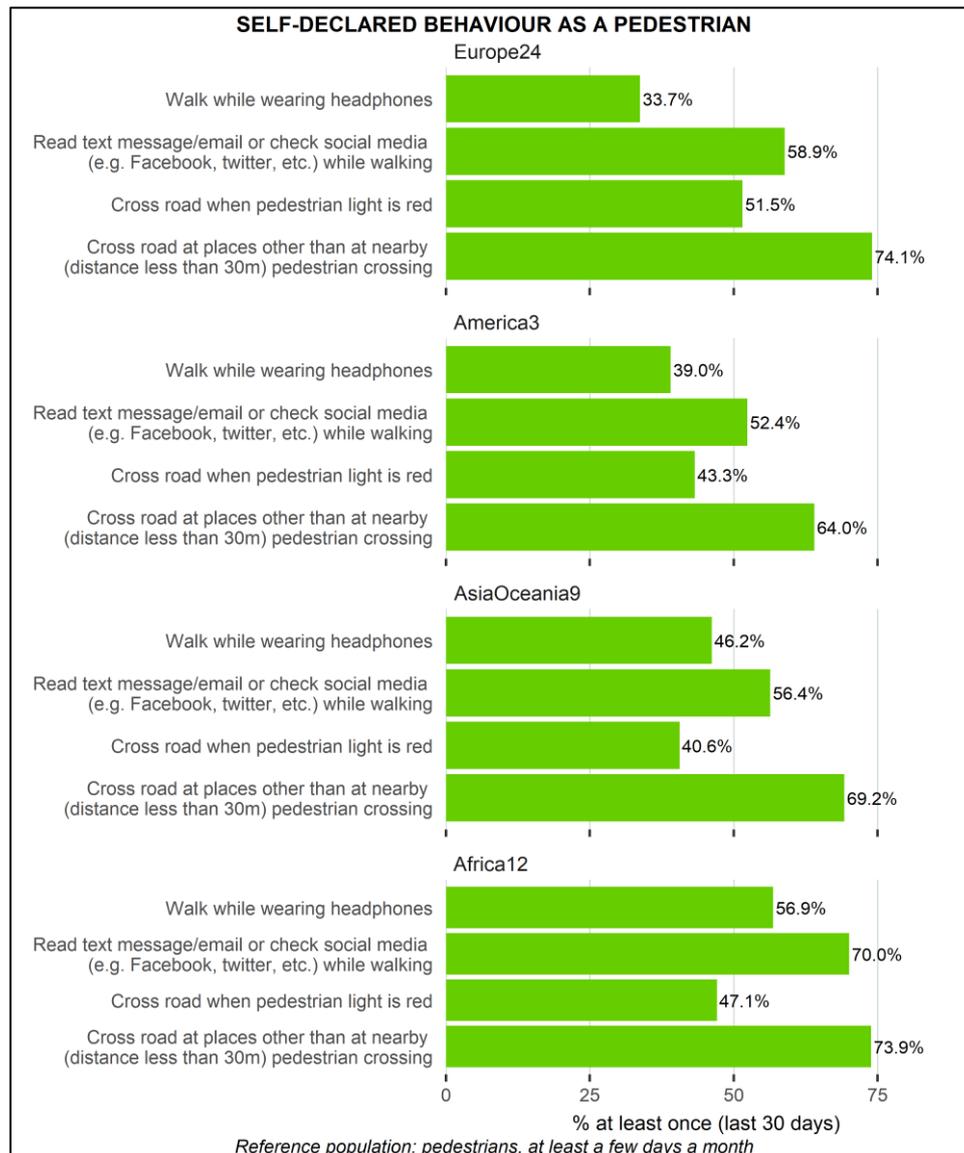


Figure 12: Self-declared risky driving behaviour of pedestrians (% of pedestrians that did it at least once in the past 30 days).

The behaviours that may increase risk for pedestrians – phone use, headphone use, red light running, crossing road at other places than pedestrian crossing – are quite common in all four regions.

Percentages for red light running range from 41% in Asia-Oceania (lowest) to 52% in Europe (highest).

In all four regions, over half of pedestrians read text messages or check social media while walking with the highest percentages for African pedestrians (70%) and lowest for American pedestrians (52%).

Walking while wearing headphones is most common in Africa (57%) and least common in Europe (34%).

The most frequently declared risky behaviour, crossing roads at other places than nearby pedestrian crossing, is reported by (almost) three quarters of pedestrians in Europe, Africa and Asia-Oceania (74%, 74%, 69%) and by more than 3 in 5 pedestrians in America (64%). In essence, a large amount of pedestrians seem to accept certain – in their view – likely minor risks, with the subjective advantages of the behaviour weighing stronger than the disadvantage.

Gender and age differences

The statistical tests of gender and age differences in risky driving behaviour of pedestrians are reported in Appendix 6.

In Europe, walking while listening to music, walking through a red light, walking while reading a text message or checking social media, and crossing the street a location nearby a pedestrian crossing is reported more frequently by male pedestrians than by female pedestrians.

In Asia-Oceania, no significant gender differences are found for these risky behaviours.

In Africa, male pedestrians more frequently report risky walking behaviour than female pedestrians for three of four behaviours (listening to music, reading text or checking email, red light running).

In America, male pedestrians report more risky behaviour for three behaviours (listening to music, red light running and crossing the street a location nearby a pedestrian crossing). Effect sizes for all behaviours and regions were mostly small.

The overall pattern for age differences in risky pedestrian behaviour is consistent: in all four regions younger pedestrians report more frequently to engage in risky pedestrian behaviour (listening to music, reading text/checking social media, red light running, crossing nearby pedestrian crossing) than older pedestrians, with effect sizes mostly ranging from medium to large (Cramer's V between 0.11 and 0.44).

3.1.5 Experiences of being checked by the police in traffic

Figure 13 presents results on the questions on how many times car drivers have been checked in traffic for alcohol or drugs in the past 12 months.

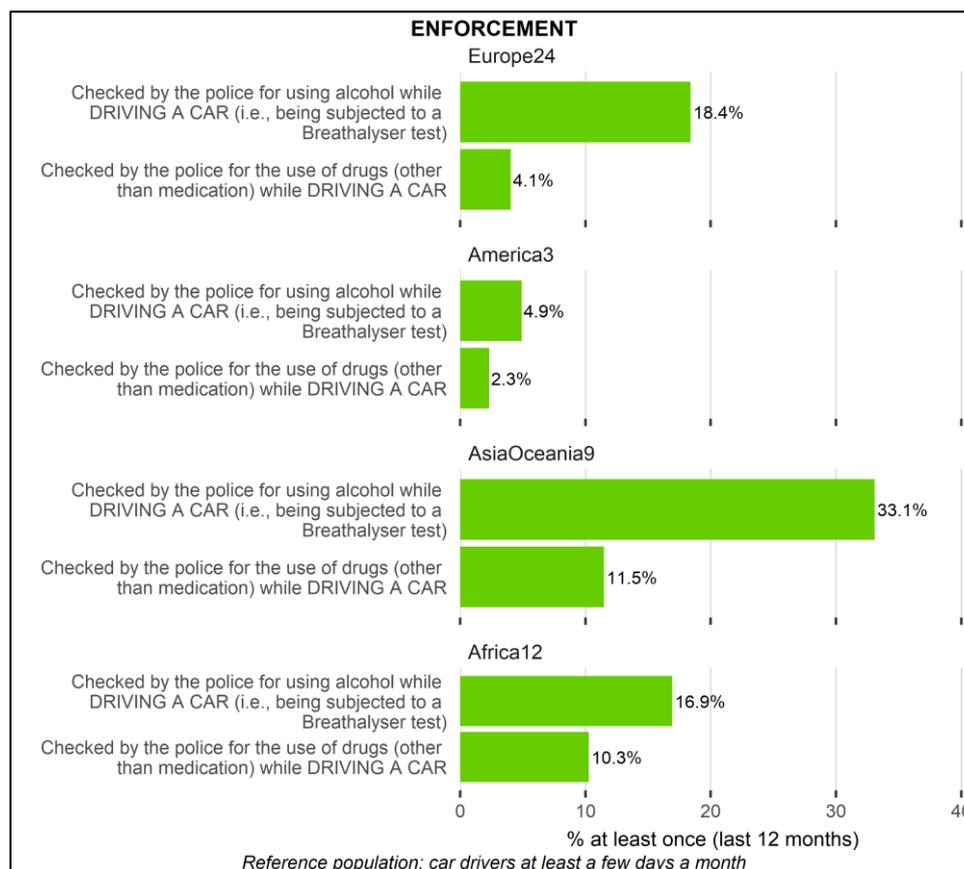


Figure 13: Self-reports of being checked by the police in traffic for alcohol or drugs per region at least once in the past 12 months.

In all four regions, being checked in traffic for alcohol occurs more frequently than being checked for drugs, with the highest percentages of alcohol checks being reported in Asia-Oceania (33%) and the lowest in America (5%), and Europe (18%) and Africa (17%) falling in between.

For checks on drugged driving the highest percentages are being reported in Asia-Oceania and Africa (12% and 10%), and low percentages in Europe (4%) and America (2%).

Gender and age differences

The statistical tests of gender and age differences in being checked by the police in traffic for alcohol or drugs are reported in Appendix 7.

In all four regions, male drivers tend to report more experience with being checked for using alcohol or drugs than female drivers, but statistical effect sizes were consistently small.

In all regions, younger drivers tended to report more experience with being checked than older drivers, with effect sizes ranging from small to medium.

Country differences

The results on traffic checks are further broken down by country in Figure 14.

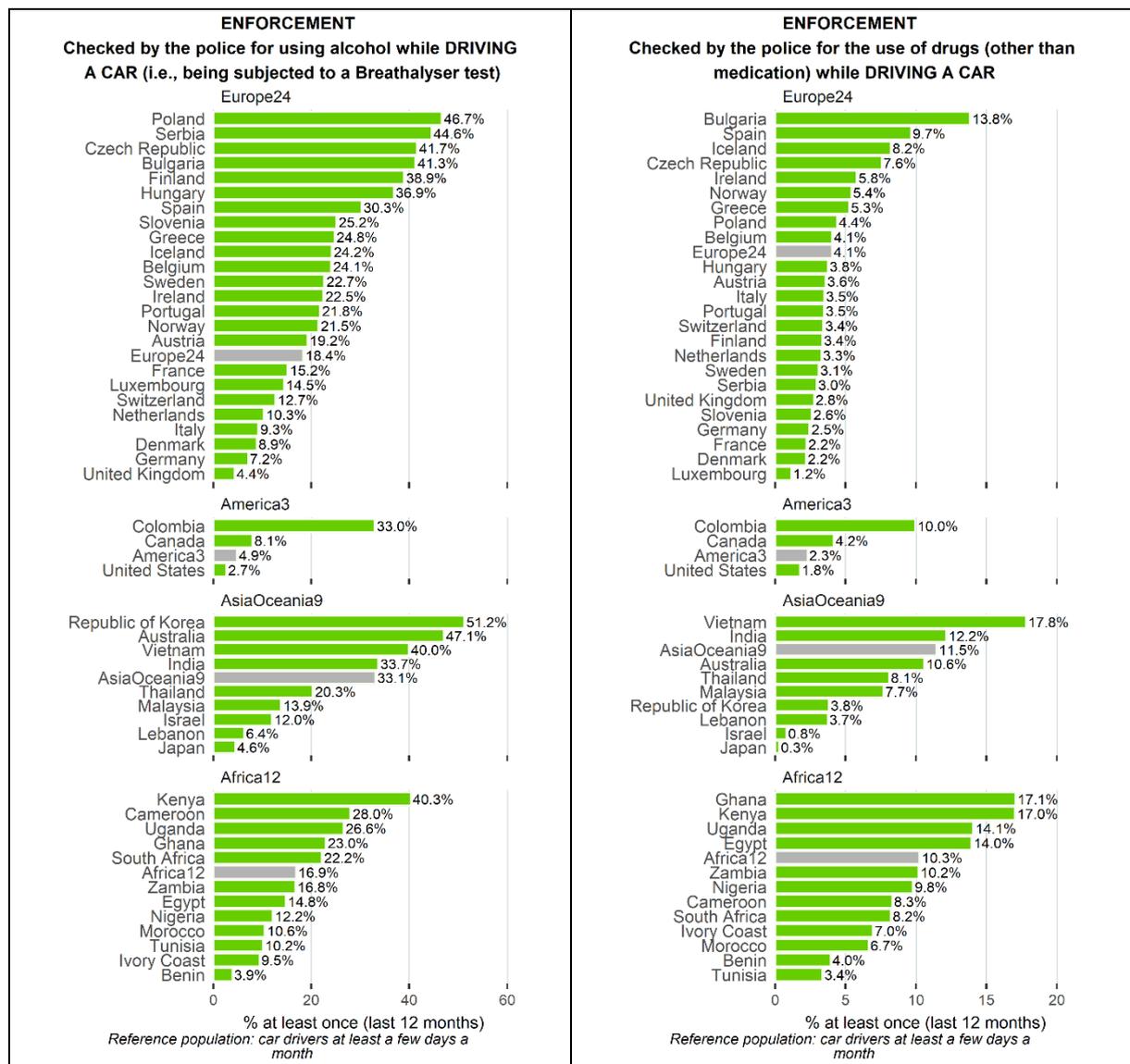


Figure 14: Self-reports of being checked by the police for alcohol or drugs in traffic per region and country at least once in the past 12 months.

In Europe, drivers in Poland (47%), Serbia (45%), Czech Republic (42%), Bulgaria (41%) and Finland (39%) most frequently report to have been checked for drinking and driving.

In Asia-Oceania, drivers in the Republic of Korea (51%), Australia (47%) and Vietnam (40%) also frequently report to have been checked for drinking and driving.

In Africa, drivers in Kenya stand out as the most frequent to report drink-driving checks (40%).

In America, Colombian drivers (33%) most frequently report to have been checked for drinking and driving while drivers in Canada (8%) and the United States (3%) have been checked less frequently.

Looking at reports of checks for drugged driving, the highest percentages are being reported in Vietnam (18%), Ghana (17%) and Kenya (17%).

3.1.6 The subjective likelihood of being checked by the police

The subjective likelihood of being checked by the police for a traffic violation are presented in Figure 15 with the percentages indicating the response 'likely' (answer categories 5-7).

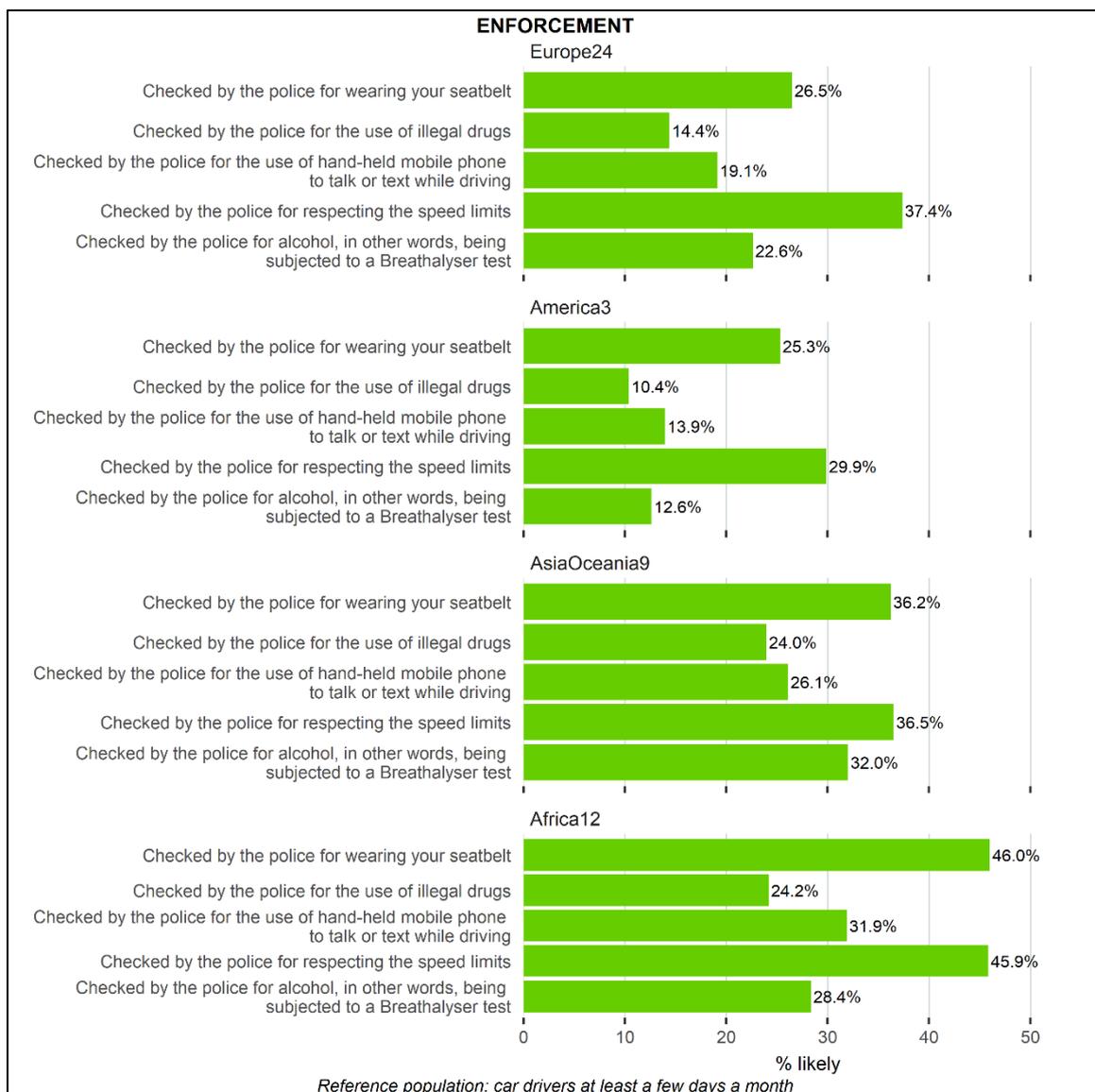


Figure 15: Car drivers' perceived likelihood of being checked for a traffic violation.

In all four regions, the reported likelihood of being checked is most frequent for speeding violations (30-46%) and for seat belt violations (25-46%).

Drivers in African countries report most often that they consider it likely to be checked in traffic (24-46%) and drivers in America report this likelihood least often (10-30%).

Gender and age differences

The statistical tests of gender and age differences in the perceived likelihood of being checked by the police for a traffic violation are reported in Appendix 8.

In all four regions, male drivers tend to report a higher likelihood of being checked for traffic violations than female drivers. However, statistical effect sizes are small (Cramer’s V < 0.10).

In all four regions, younger drivers tended to report higher likelihood of being checked than older drivers, with effect sizes ranging from small to medium. In Africa, there were no statistically significant age differences for three behaviours (speed limits, hand-held phone use for texting, seat belt use).

Country differences

Figures 16 and 17 present further results on the perceived likelihood of being checked, further split out per region and country.

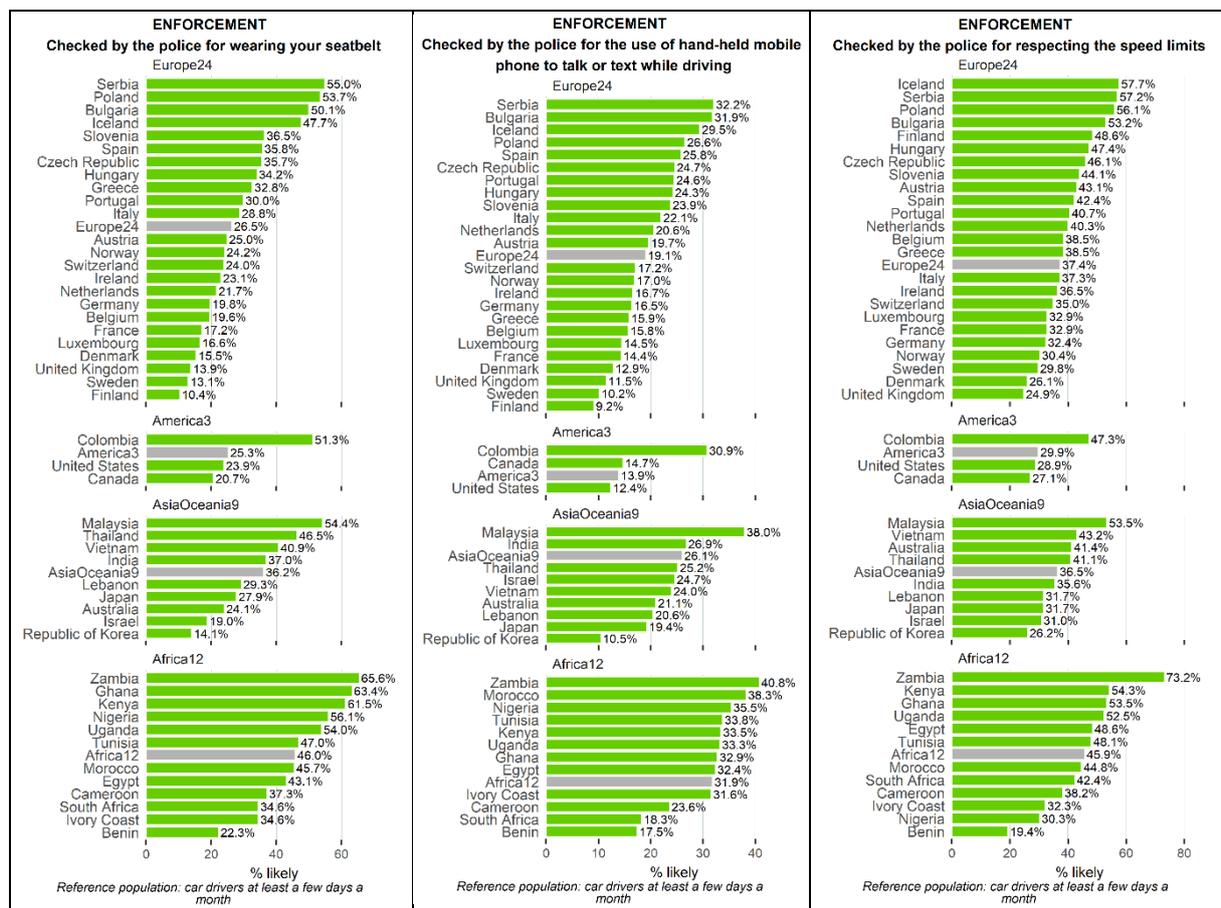


Figure 16: Car drivers’ perceived likelihood of being checked for seat belt, hand-held phone use and speeding by region and country.

Within Europe, drivers in Serbia, Poland, Bulgaria and Iceland very frequently report that being checked for wearing seat belts, hand-held phone use, speeding and drinking and driving is likely.

Drivers in Denmark, the United Kingdom, Sweden and Finland tend to report less often that it is likely that they will be checked for any of the five traffic violations.

In Asia-Oceania, for four out of five traffic violations drivers in Malaysia most often report that it is likely they will be checked.

In Africa, drivers in Zambia most often report that it is likely they will be checked for three out of five traffic violations.

In America, Colombian drivers report that it is likely they will be checked for all five traffic violations; the differences between answers from drivers in Canada and the United States are small.

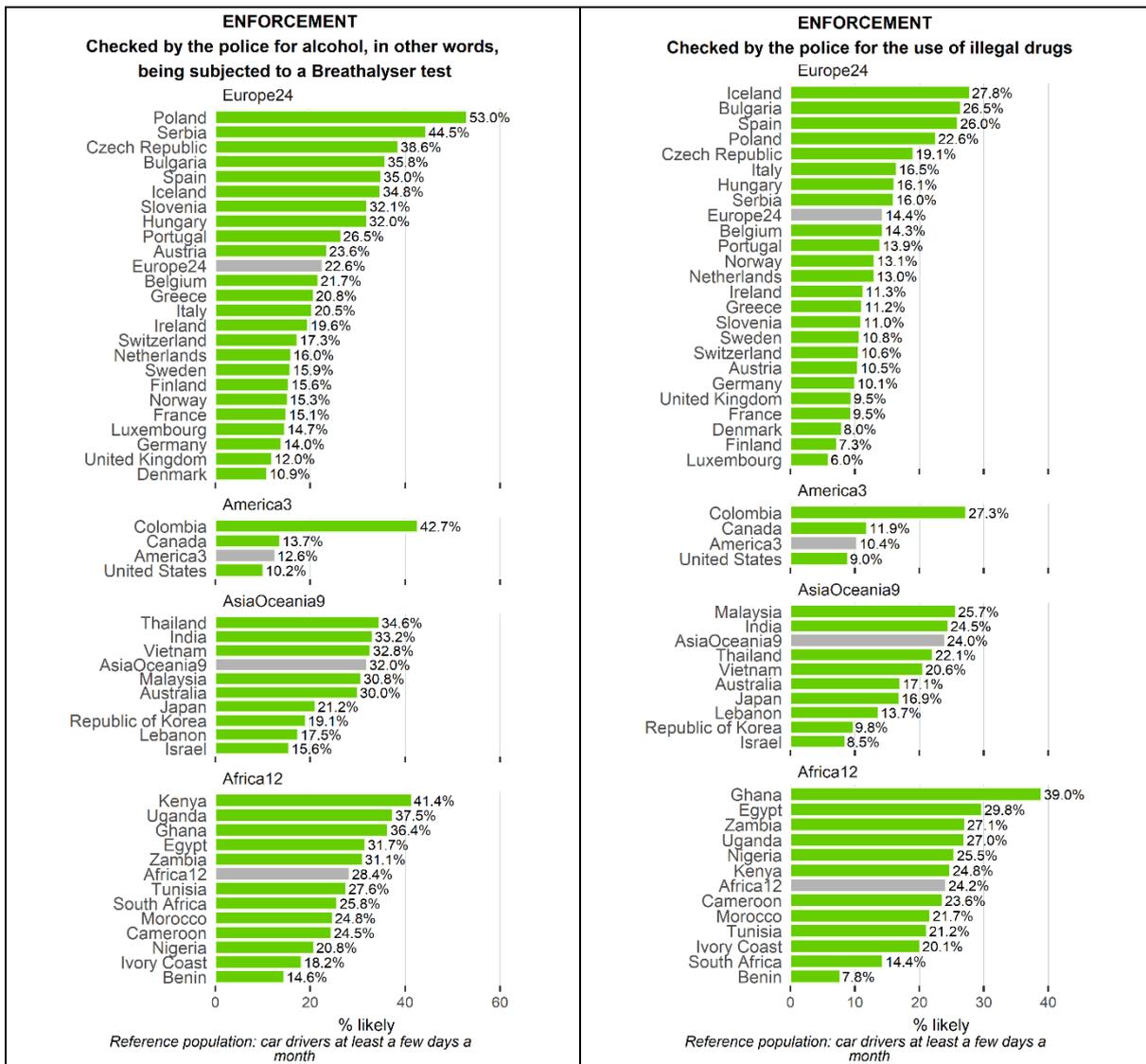


Figure 17: Car drivers' perceived likelihood of being checked for alcohol and illegal drugs by region and country.

3.1.7 Preferences for stricter rules and sanctions

As we have seen in previous sections, traffic violations by drivers, riders, cyclists and pedestrians are quite common. In general, road users seem to be willing to take risks which they may believe to be minor to gain a subjective benefit associated with the behaviour. Speeding may be experienced as pleasurable; driving, walking or cycling through a red light may seem to be the right thing when you are in a hurry; drunk driving, riding, cycling or walking may seem to be the best or only way to get

home again; driving, cycling or walking while checking some message on your phone may satisfy your craving to be informed of the state of affairs. No doubt that the risks seem minor to the offenders themselves. However, what do road users think about the strictness of sanctions and enforcement for traffic violations? In this section we present results on road users' opinions on strictness of sanctions and enforcement for two violations: DUI and speeding.

Figure 18 presents results on opinions on strictness of sanctions and enforcement of drinking and driving or road users in four world regions.

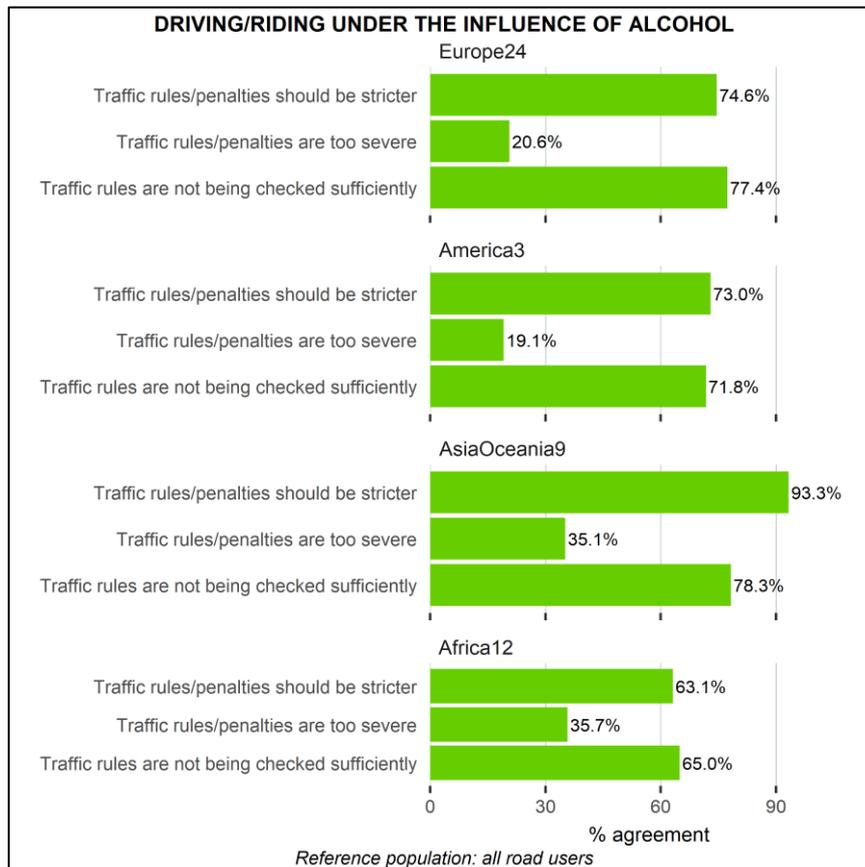


Figure 18: Road users' opinions on strictness of sanctions and enforcement for drinking and driving/riding by region.

In all four regions, there is a strong majority support for more strict sanctions and enforcement approach to drinking and driving, with the highest support for stricter sanctions and more enforcement being reported by road users in Asia-Oceania (93% and 78%) and the lowest support within African road users (63% and 65%).

Figure 19 presents results on opinions on stricter sanctions and more enforcement for driving faster than the speed limit.

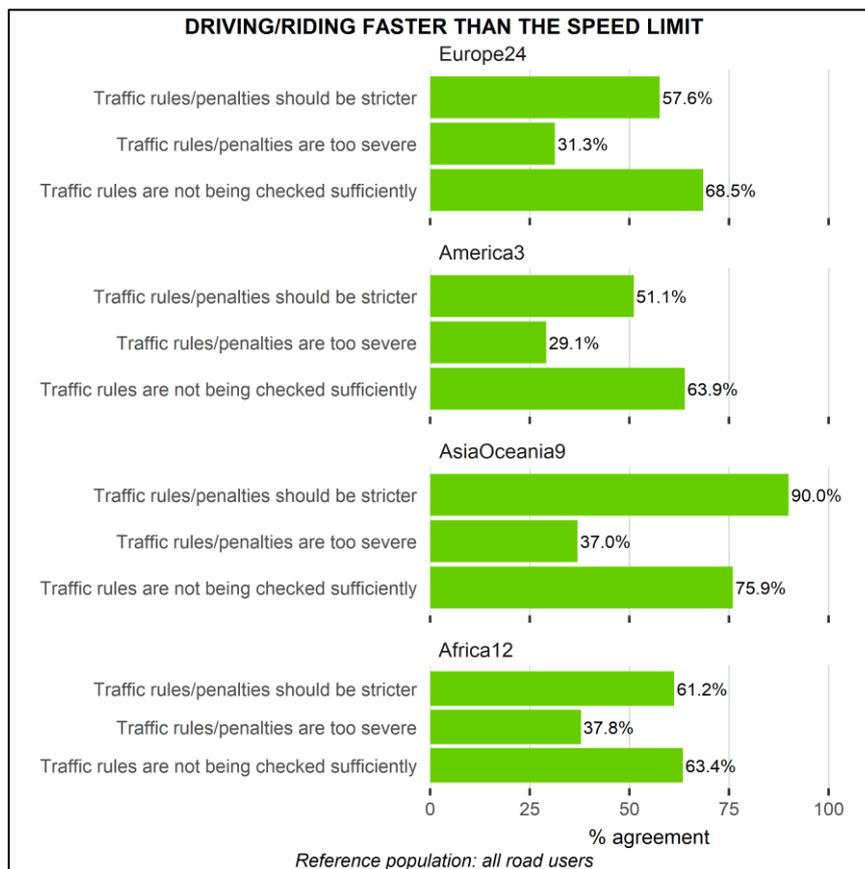


Figure 19: Road users' opinions on strictness of sanctions and enforcement for speeding by region.

With regard to speeding, again road users in Asia-Oceania are most vociferous in expressing their support for stricter speeding sanctions (90%) and more speed enforcement (76%).

Somewhat less but still considerable support for stricter speeding sanctions and more speed enforcement is expressed in Europe (58% and 69%), America (51% and 64%) and Africa (61% and 63%).

Gender and age differences

The statistical tests of gender and age differences in road users' opinions on strictness of sanctions and enforcement are reported in Appendix 9.

In all four regions, female road users tend to report a somewhat stronger preference for stricter sanctions than male road users. The statistical effect sizes are small (Cramers' $V < 0.12$).

In Europe, America and Africa, female road users tend to think that traffic rules are not checked sufficiently. The statistical effect sizes are small (Cramers' $V < 0.14$).

In Africa, no gender differences were found for two questions on drinking and driving (sufficient checking, penalties too severe), two questions on speeding (rules should be stricter, penalties too severe), and one question on mobile phone use (penalties too severe).

The significant age differences indicated that older road users were more in favour of stricter sanctions than younger road users in Europe, Asia-Oceania and America. Effect sizes ranged from small to medium. In Africa, no age differences were found for almost all questions.

Country differences

The results on preferred strictness of sanctions and enforcement are further broken down by region and country in Figures 20, 21 and 22.

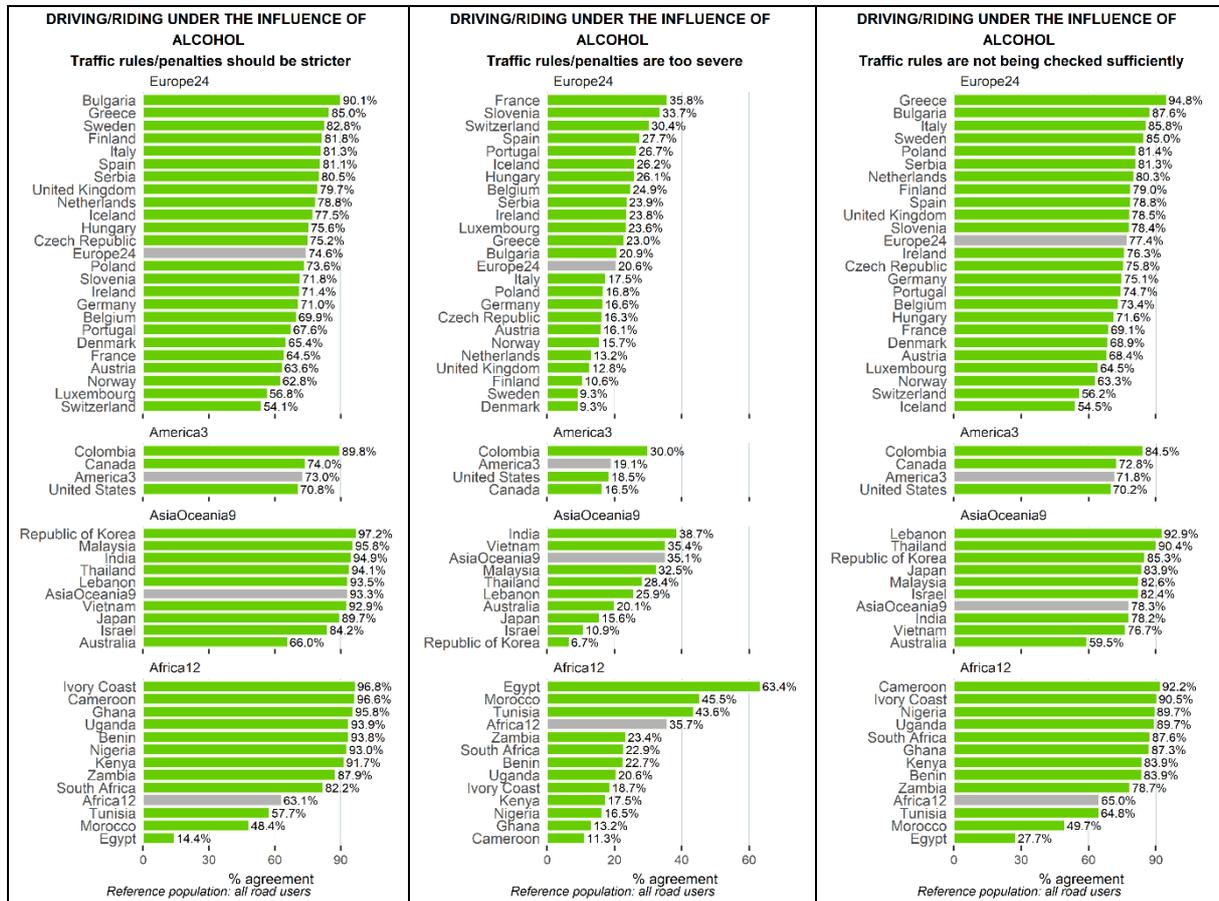


Figure 20: Road users’ opinions on strictness of sanctions and enforcement for drinking and driving/riding by region and country.

In nearly all surveyed countries, there is a majority support (> 60%) for a stricter approach to drinking and driving in the sense of stricter penalties and more traffic checks.

Unlike road users worldwide, road users in Egypt are not much in favour of more strict sanctions for drinking and driving (14%) and also not much in favour of more checks (28%); they find sanctions for drinking and driving too severe (63%). This finding should be put in the context of recent law change in Egypt. On October 19, 2017, the Egyptian Cabinet approved a new amendment to the Traffic Law, Law No. 66 of 1973. A new penalty system ensures suspension of the driver’s license and the deduction of five points for driving under the influence. In addition to the newly created points system, the amendment increases fines for traffic violations such as drinking and driving¹.

In Europe, road users in Bulgaria, Greece, Italy and Sweden tend to be most in favour of a stricter approach to drinking and driving (> 80%), whereas road users in Switzerland, Luxembourg and Norway are somewhat less in favour (54-65%). It is perhaps interesting to point out here that the lowest support for stricter sanctions is found in Switzerland (54%) which already has very strict sanctions against drinking and driving. In Austria, which has less strict drinking and driving sanctions, the support is 10% higher.

1. see: <https://www.loc.gov/law/foreign-news/article/egypt-cabinet-approves-amendment-to-traffic-law/>, accessed at October 7th 2019

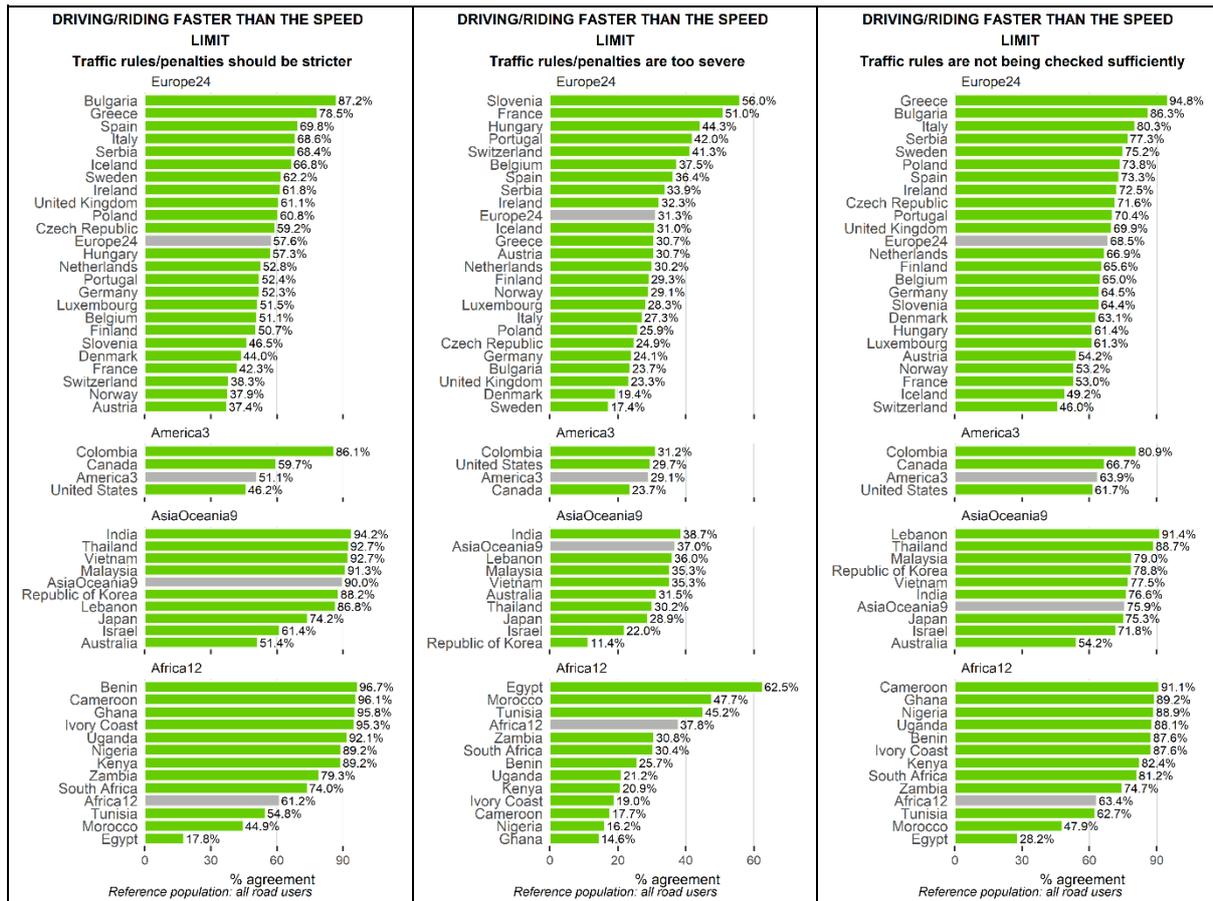


Figure 21: Road users' opinions on strictness of sanctions and enforcement for speeding by region and country.

Looking at opinions on strictness of speed control, we again find that road users in Egypt deviate from the general trend by not being very much in favour of stricter penalties (18%) or more checking (28%).

Within Europe, road users in France, Switzerland, Austria and Norway are not very much in favour of stricter penalties (37-42%) or more checks (46-54%). On the other hand, road users in Greece and Bulgaria are very much in favour of stricter penalties (79% and 87%) or more checking (95% and 86%). In France, gilets jaunes activists destroyed over half of France's speed cameras in protest against new 80 km/h speed limits for country roads introduced in 2018 (ETSC, 2019). A majority of French people were opposed to the new speed limits associating it with governmental arrogance (BBC News, 2018).

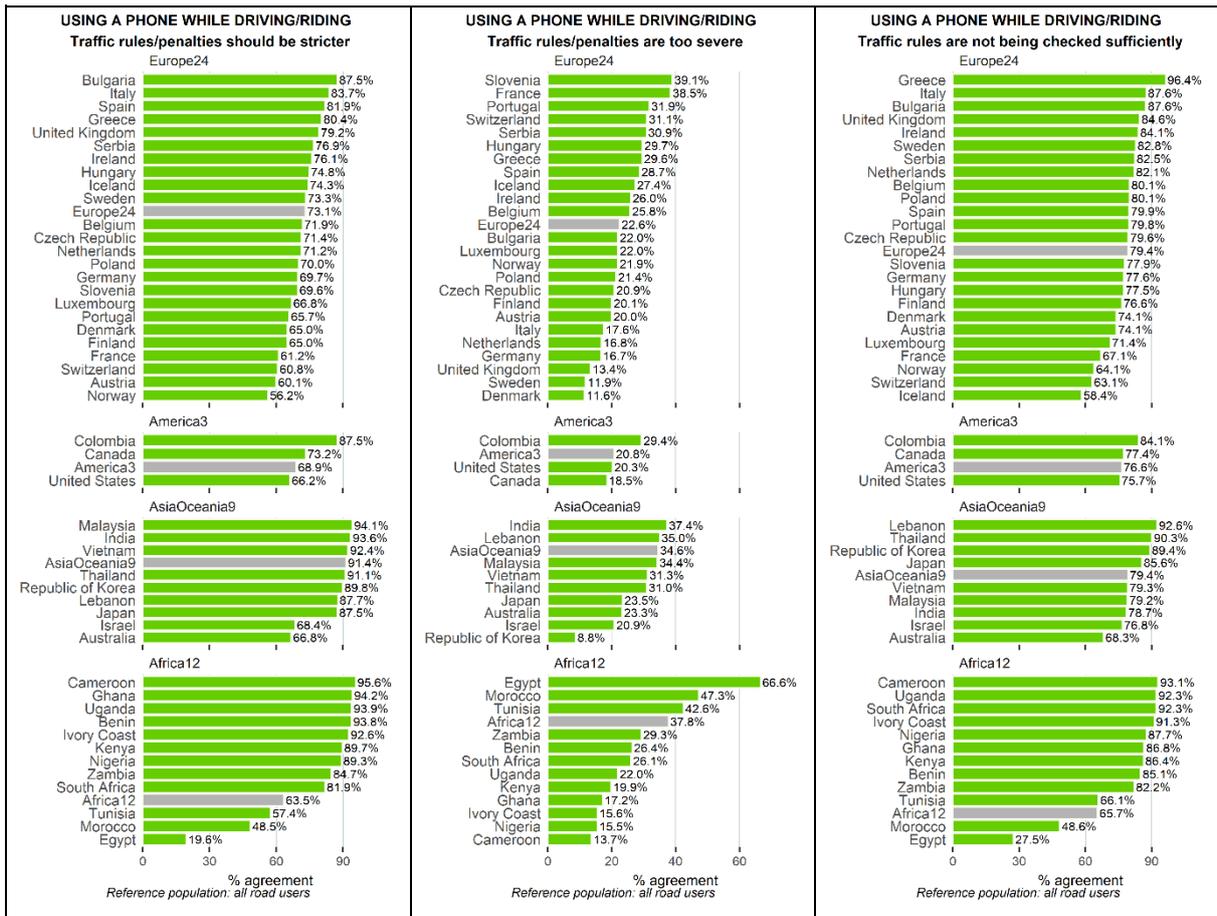


Figure 22: Road users' opinions on strictness of sanctions and enforcement for using a phone while driving/riding

The opinions on strictness of sanctions and enforcement of phone use while riding/driving tends to show the same pattern of preferences as for drinking and driving and speeding.

In nearly all surveyed countries, there is a clear majority support for stricter approach to phone use while driving/riding (65-95%).

Road users in Egypt are not much in favour of more strict sanctions for using a phone while driving/riding (20%) and also not much in favour of more checks (28%).

In Europe, road users in Greece, Italy and Bulgaria are amongst the strongest supporters for a stricter approach (84-96%) whereas road users in Norway, France and Switzerland tend to be somewhat less enthusiastic about a stricter approach (56-67%).

3.1.8 Comparison over time

The questions on drinking and driving, speeding outside built-up areas and reading text or email in the past 12 months were asked in ESRA1 and ESRA2. It should be noted that in ESRA1 these questions were answered by slightly different samples of respondents than in ESRA2. In ESRA1, the questions were answered by adult road users of which 91% had a driving license and nearly 97% said they drove at least a few days in a year (Achermann Stürmer, 2016). In ESRA2, the questions were answered by licensed car drivers who at least drove a few days a month. Basically, the ESRA1 sample includes a low percentage of non-car drivers and a low percentage of infrequent drivers, whereas the ESRA2 sample exclusively concerns licensed car drivers who drive frequently.

Table 2 juxtaposes the results from ESRA1 and ESRA2. Concerning drinking and driving, it seems that this risky behaviour has been reduced over time; the EU average has decreased from 31% to 22% and in a number of countries such as Finland, France, Germany, Italy and the United Kingdom substantial reductions in self-declared drinking and driving have occurred (9-14%).

Table 2: Self-declared risky driving behaviour in past 12 months

Country	Drive after drinking alcohol		Speeding outside built-up areas (except motorways/freeways)		Read a text message or email while driving	
	ESRA1	ESRA2	ESRA1	ESRA2	ESRA1	ESRA2
Australia	-	26.0%	-	61.8%	-	25.6%
Austria	30%	32.9%	84%	86.6%	36%	39.6%
Belgium	43%	35.1%	76%	78.5%	37%	37.0%
Benin	-	31.2%	-	42.9%	-	33.8%
Bulgaria	-	8.6%	-	61.2%	-	27.4%
Cameroon	-	24.7%	-	38.2%	-	39.3%
Canada	-	28.3%	-	81.9%	-	30.9%
Colombia	-	16.1%	-	51.4%	-	50.4%
Czech Republic	-	9.0%	-	83.5%	-	33.2%
Denmark	32%	26.8%	84%	86.5%	44%	38.9%
Egypt	-	11.0%	-	49.1%	-	56.2%
Finland	18%	9.5%	91%	86.6%	56%	47.3%
France	41%	29.8%	68%	79.3%	39%	35.7%
Germany	30%	21.2%	82%	81.1%	32%	27.7%
Ghana	-	12.2%	-	41.3%	-	40.7%
Greece	29%	33.9%	64%	65.1%	45%	35.0%
Hungary	-	4.5%	-	70.5%	-	20.6%
Iceland	-	16.9%	-	84.9%	-	58.3%
India	-	14.1%	-	49.0%	-	42.4%
Ireland	20%	16.3%	50%	68.8%	36%	34.1%
Israel	-	11.0%	-	75.4%	-	46.5%
Italy	34%	19.5%	73%	61.6%	49%	35.1%
Ivory Coast	-	31.9%	-	37.6%	-	43.1%
Japan	-	4.7%	-	70.6%	-	30.8%
Kenya	-	22.2%	-	59.4%	-	55.2%
Lebanon	-	19.9%	-	48.2%	-	57.7%
Luxembourg	-	51.9%	-	88.3%	-	51.3%
Malaysia	-	12.8%	-	68.9%	-	57.3%
Morocco	-	13.1%	-	52.0%	-	52.3%
Netherlands	29%	22.4%	66%	75.9%	33%	23.6%
Nigeria	-	17.8%	-	50.3%	-	44.8%
Norway	-	7.3%	-	81.3%	-	44.5%
Poland	12%	7.2%	64%	82.4%	32%	36.6%
Portugal	34%	35.0%	72%	80.8%	44%	45.9%
Republic of Korea	-	9.1%	-	63.9%	-	47.1%
Serbia	-	22.0%	-	68.4%	-	49.2%
Slovenia	30%	29.1%	61%	84.0%	34%	41.6%
South Africa	-	33.2%	-	68.4%	-	49.3%
Spain	35%	26.9%	64%	66.8%	36%	29.5%
Sweden	13%	7.8%	64%	85.1%	45%	35.0%
Switzerland	38%	39.2%	75%	79.9%	36%	35.6%
Thailand	-	29.1%	-	60.0%	-	42.2%
Tunisia	-	15.5%	-	54.7%	-	44.0%
Uganda	-	15.3%	-	45.5%	-	41.5%
United Kingdom	28%	19.7%	55%	70.6%	27%	21.3%
United States	-	21.3%	-	73.8%	-	42.9%
Vietnam	-	31.2%	-	47.9%	-	43.2%
Zambia	-	23.7%	-	54.2%	-	43.1%
EU total	31%	21.8%	68%	74.4%	36%	32.0%

Concerning speeding outside built-up areas, it seems that this may have increased somewhat over time.

Table 3 juxtaposes the results on experience with checks on alcohol and drugs from ESRA1 and ESRA2. The question on drugs checked was slightly changed in ESRA2. In ESRA1, the question on drugs referred to both drugs and medication; in ESRA2, it was nuanced that it concerned drugs other than medication. The EU averages for driving being checked for alcohol or for drugs are nearly the same in ESRA1 and ESRA2.

Table 3: Self-reports being checked for alcohol or drugs in the past 12 months

Country	Checked for alcohol		Checked for drugs/medication	
	ESRA1	ESRA2	ESRA1	ESRA2
Australia	-	47.1%	-	10.5%
Austria	17%	19.2%	2%	3.6%
Belgium	17%	24.1%	1%	4.1%
Benin	-	3.9%	-	4.0%
Bulgaria	-	41.3%	-	13.8%
Cameroon	-	28.0%	-	8.3%
Canada	-	8.1%	-	4.2%
Colombia	-	33.0%	-	10.0%
Czech Republic	-	41.7%	-	7.5%
Denmark	6%	8.9%	3%	2.2%
Egypt	-	14.8%	-	14.0%
Finland	37%	38.9%	0%	3.3%
France	23%	15.2%	7%	2.2%
Germany	8%	7.2%	2%	2.5%
Ghana	-	23.0%	-	17.1%
Greece	-	24.8%	-	5.3%
Hungary	-	36.9%	-	3.8%
Iceland	-	24.2%	-	8.2%
India	-	33.7%	-	12.1%
Ireland	9%	22.5%	2%	5.8%
Israel	-	12.0%	-	0.8%
Italy	15%	9.3%	5%	3.5%
Ivory Coast	-	9.5%	-	7.0%
Japan	-	4.6%	-	0.3%
Kenya	-	40.4%	-	17.1%
Lebanon	-	6.4%	-	3.7%
Luxembourg	-	14.5%	-	1.2%
Malaysia	-	13.9%	-	7.7%
Morocco	-	10.6%	-	6.7%
Netherlands	17%	10.3%	2%	3.3%
Nigeria	-	12.2%	-	9.7%
Norway	-	21.5%	-	5.4%
Poland	47%	46.7%	6%	4.4%
Portugal	19%	21.8%	2%	3.5%
Republic of Korea	-	51.2%	-	3.9%
Serbia	-	44.6%	-	3.0%
Slovenia	25%	25.2%	3%	2.6%
South Africa	-	22.2%	-	8.3%
Spain	29%	30.2%	5%	9.7%
Sweden	29%	22.7%	3%	3.1%
Switzerland	14%	12.7%	3%	3.4%
Thailand	-	20.3%	-	8.1%
Tunisia	-	10.2%	-	3.4%
Uganda	-	26.6%	-	14.1%
United Kingdom	5%	4.4%	4%	2.8%
United States	-	2.6%	-	1.8%
Vietnam	-	40.0%	-	17.8%
Zambia	-	16.8%	-	10.2%
EU total	19%	18.4%	4%	4.1%

It can be seen in Table 3 that in a few countries, the self-reports of having been checked for alcohol have decreased (France: 23% to 15%; Netherlands: 17% to 10%; Italy: 15% to 9%; Sweden 29% to 23%). In the Discussion Section 4.2 we will pay further attention to these results.

3.2 Advanced analyses

The advanced analyses part of the report applies only to 32 countries that participated in the first wave of ESRA2 (ESRA2_2018).

Two advanced analyses were done to investigate whether traffic violation behaviour could be predicted from enforcement-related variables (experience with enforcement and perceived likelihood of being checked), and from personal characteristics and beliefs and opinions concerning the violating behaviour. Binary logistic regression analyses were performed to predict the involvement in drinking and driving in the past 30 days, and the involvement in driving under the influence of drug in the past 30 days.

Prediction of driving after having drunk perhaps more alcohol than is legally permitted

Binary logistic regression was used to predict the involvement in illegal drinking and driving in the last 30 days (yes/no). In this analysis, the predicted dependent outcome variable was binary (yes or no driving when one may have been over legal limit for drinking and driving in the last 30 days). The independent variables in the analysis were background characteristics of gender (Q2), age (Q3) and country (Q1), and the ESRA2 questions on experience of being checked for drinking and driving control (Q21_1), the perceived likelihood of a drinking and driving check (Q20_1_1), the personal acceptability of driving while being over the legal (Q14_1) and the social acceptability of drinking and driving (Q13_1).

The independent variables in the analysis were either categorical (Q1 country, Q2 gender, Q yes/no being checked for alcohol) or continuous (Q14_1: personal acceptability of driving over legal limit; Q19_1_1: alcohol rules stricter; Q19_1_2: alcohol rules not checked sufficiently; Q19_1_3: alcohol penalties too severe; Q20_1_1: likelihood being checked for alcohol). These independent variables were entered in the model by way of forced entry method. Odds ratios (and the respective 95% Confidence Intervals) are used to measure the strength of association between the variables. The Exp(B) is known as the odds ratio predicted by the model. The odds ratio is computed by raising the base of the natural log to the b^{th} power, where b is the slope from the logistic regression equation.

The exp (B) represents the change in the relative risk of engaging in the violation behaviour (yes/no) associated with change in the independent variable when all other model variables have been held constant. When Exp (B) > 1 this indicates that higher values on independent variable go together with higher odds of engaging in the risk behaviour. With each increasing scale value of the independent variable there is an increase of $((\text{exp}(B)-1) \times 100)$ percent of engaging in the risk behaviour. On the other hand, when exp (B) < 1 this indicates that higher values on the independent variable go together with a lower odds of engaging in the risk behaviour. With each increasing scale value of the independent variable there is a decrease of $(1-\text{exp}(B) \times 100)$ percent of engaging in the risk behaviour. This will be further illustrated in results below.

Table 4 presents the first part of results of the binary logistic regression on self-reported illegal drinking and driving in the past 30 days. The total explained variance of the regression model was .42 (Nagelkerke R^2). The omnibus test of model coefficients was significant (Chi-square= 6573.253, df=47, $p \leq 0.001$) indicating that the fitted model with independent variables is an improvement over a baseline model without independent variables. In the table 4 the results are presented for independent variables age, gender, and alcohol-related opinions and perceptions. The results for the independent variable of country are presented in a separate Table 5.

First, we will clarify the meaning of results in Table 4 by giving some examples of how results for individual variables should be interpreted. One can see in the table that the independent predictor variable 'Personal acceptability' of drinking and driving (higher score: more personal acceptable) has a positive beta coefficient meaning that higher values on independent variable (i.e. higher personal acceptability) go together with higher odds of engaging in the risky behaviour (i.e. drinking and driving). The value of exp (B) for Personal acceptability is higher than 1 (namely 1.59) suggesting a positive relationship between higher values on the independent variable and higher odds of engaging in the risk behaviour. To be more precise the value of 1.59 indicates that with each higher unit/value on the scale of the independent variable, the odds of engaging in the risk behaviour increases with 59 percent $((1.59 - 1) \times 100\% = 59\%$ increase). Another example: in Table 4 the female category of the gender variable (compared to male) has a negative beta coefficient indicating that being female is negative related to

the odds of engaging in the risk behaviour; the exp (B) for gender/female is 0.628 meaning that being female instead of male lowers the odds of engaging in the risk behaviour with 37 percent ((1 – 0,628) * 100% = 37% decrease).

Table 4: Outcomes binary logistic regression analysis: age, gender, and alcohol-related opinions and perceptions as independent variables and self-declared driving over legal limit in past 30 days as dependent binary variable

Independent variables	B	S.E.	Wald	df	Sign.	Exp(B)	Lower 95% C.L	Upper 95% C.L
V002(1) Gender/Female	-.465	.050	86.029	1	.000	.628	.569	.693
Age	.008	.002	26.075	1	.000	1.008	1.005	1.011
V013_1 Social acceptability driving over alc. limit	.125	.028	20.602	1	.000	1.134	1.074	1.197
V014_1 Personal acceptability driving over alc. limit	.466	.033	193.987	1	.000	1.593	1.492	1.701
V015_1_1 Most friends would drive after alcohol	.158	.022	51.480	1	.000	1.171	1.122	1.223
V015_2_1 Short trips one can risk DUI	.267	.026	103.936	1	.000	1.306	1.241	1.375
V015_3_1 I trust myself to drive after alcohol	.210	.018	131.801	1	.000	1.234	1.190	1.279
V015_3_3 I am able to drive after much alc.	.337	.027	158.200	1	.000	1.400	1.329	1.476
V015_4_1 I often drive after alcohol	.616	.031	396.032	1	.000	1.852	1.743	1.968
V017_1 How often alcohol cause accident	-.066	.014	21.215	1	.000	.937	.911	.963
V018_1 Support install interlock	-.148	.021	50.090	1	.000	.862	.828	.899
V018_3 Support zero tolerance for all drivers	-.127	.018	47.085	1	.000	.881	.850	.914
V019_1_1 Stricter alcohol rules	.012	.058	.043	1	.836	1.012	.903	1.134
V019_1_2 Alcohol rules insufficiently checked	-.057	.057	.986	1	.321	.945	.845	1.057
V019_1_3 Alcohol penalties too severe	.219	.055	15.896	1	.000	1.245	1.118	1.386
V020_1_1 Perceived likelihood being checked alcohol	.074	.012	36.431	1	.000	1.077	1.051	1.103
V021_1di(1) Experienced alcohol check (no/yes)	.316	.057	31.067	1	.000	1.372	1.227	1.533

We can now summarise the results in Table 4 as follows:

The odds of engaging in driving when one may have been drinking more than the legal alcohol limit in the past 30 days significantly *increase* when people are getting older, when they find this behaviour to be more socially and personally acceptable, when they have beliefs that their friends would drive with alcohol, that one can safely drink and drive for short trips, when they trust their own ability to drive with alcohol, when they often drive after drinking alcohol, when they find penalties too severe, when they perceive a higher likelihood of alcohol checks in traffic and when they have actually been checked for drinking and driving.

On the other hand, the odds of engaging in drinking and driving in the past 30 days significantly *decrease* when riders are female, when they believe that alcohol is a more frequent cause of accidents, and when they are more supportive of interlock measures for alcohol offenders and zero tolerance policy for drinking and driving.

Not very surprisingly the personal acceptability of drinking and driving and the statement that one often drives after consuming some alcohol have the highest values for exp(B) and can be seen as the strongest predictors for self-reported drinking and driving. Perhaps somewhat counterintuitively the actual experience of having been checked for drinking and driving and the perceived likelihood of being checked are positively associated with higher odds of engaging in the risk behaviour. We will discuss the possible meaning of this finding later (in Section 4.2).

Table 5 presents the outcomes of the analysis for the country as independent variable. The reference country is Italy which as a value nearest to the EU mean for self-reported drinking and driving in the past 30 days.

Table 5: Outcomes binary logistic regression analysis: country as independent variable and self-declared driving over legal limit in past 30 days as dependent binary variable

Independent variables	B	S.E.	Wald	df	Sign.	Exp(B)	Lower 95% C.L	Upper 95% C.L
Reference country closest to EU average (= Italy)								
Belgium	0.495	0.146	11.504	1	0.001	1.641	1.233	2.185
Switzerland	0.453	0.164	7.613	1	0.006	1.572	1.140	2.168
Germany	-0.593	0.168	12.395	1	0.000	0.553	0.397	0.769
Denmark	0.022	0.188	0.013	1	0.909	1.022	0.707	1.477
Greece	0.281	0.166	2.882	1	0.090	1.324	0.958	1.832
Spain	0.305	0.173	3.100	1	0.078	1.357	0.966	1.906
Finland	-0.937	0.246	14.455	1	0.000	0.392	0.242	0.635
France	0.601	0.165	13.188	1	0.000	1.824	1.319	2.522
Ireland	-0.188	0.191	0.969	1	0.325	0.828	0.570	1.205
Austria	-0.355	0.170	4.361	1	0.037	0.701	0.503	0.978
Netherlands	-0.409	0.204	4.021	1	0.045	0.664	0.445	0.991
Poland	-0.801	0.221	13.100	1	0.000	0.449	0.291	0.693
Portugal	0.014	0.172	0.006	1	0.936	1.014	0.724	1.421
Sweden	-0.220	0.218	1.020	1	0.313	0.803	0.524	1.230
Slovenia	0.127	0.169	0.561	1	0.454	1.135	0.815	1.580
United Kingdom	-0.510	0.229	4.974	1	0.026	0.600	0.383	0.940
Canada	0.127	0.184	0.474	1	0.491	1.135	0.792	1.627
Czech Republic	0.149	0.199	0.565	1	0.452	1.161	0.787	1.714
Hungary	-0.989	0.254	15.191	1	0.000	0.372	0.226	0.611
Israel	-0.128	0.195	0.435	1	0.510	0.879	0.600	1.288
Croatia	-0.925	0.213	18.820	1	0.000	0.396	0.261	0.602
USA	-0.048	0.184	0.069	1	0.793	0.953	0.665	1.365
Australia	-0.625	0.201	9.699	1	0.002	0.535	0.361	0.793
Serbia	-0.368	0.190	3.763	1	0.052	0.692	0.478	1.004
Japan	-0.727	0.252	8.328	1	0.004	0.483	0.295	0.792
India	0.262	0.177	2.193	1	0.139	1.300	0.919	1.838
Egypt	0.007	0.202	0.001	1	0.972	1.007	0.678	1.496
Kenya	0.028	0.187	0.022	1	0.883	1.028	0.713	1.483
Nigeria	0.112	0.183	0.373	1	0.541	1.118	0.781	1.601
Morocco	-0.232	0.203	1.308	1	0.253	0.793	0.532	1.181
South Africa	0.406	0.165	6.060	1	0.014	1.500	1.086	2.072

After statistical correction for age and gender differences, enforcement-related perceptions and personal opinions and beliefs about drinking and driving, a number of countries have high or low values for exp (b) values indicating a higher or lower than average tendency of drivers in those countries to engage in self-report drinking and driving. When holding several variables constant, Belgium, France, Greece, Spain, Switzerland and South Africa are countries with increased odds of self-reported drinking and driving compared to the reference country. On the other hand, Australia, Finland, Croatia, Germany, Japan, Morocco, Netherlands, Poland, Serbia, and Sweden show decreased odds of self-reported drinking and driving compared to the reference country.

Prediction of driving under influence of drugs

Binary logistic regression was used to predict the involvement in driving within one hour of using drugs (other than medication). In this analysis, the predicted outcome variable was binary (yes or no driving within one hour of using drugs in the past 30 days). The independent variables in the analysis were background characteristics of gender (Q2), age (Q3) and country (Q1), and the ESRA2 questions on experience with drug checks in traffic (Q22_1), the perceived likelihood of a check on drugs in traffic (Q20_1_2), the social acceptability of drinking and driving (Q13_2) and the personal acceptability of driving while being over the legal (Q14_2).

The omnibus tests of model coefficients were strongly significant (Chi-square = 3726; df = 39; $p \leq 0.001$) indicating that the model with explanatory variables was an improvement over the baseline model. The Nagelkerke R^2 was .33 suggesting that the model roughly explains 33% of the variance in the outcome variable.

Table 6 presents the outcomes of the model for the independent variables (except the country variable which is presented in Table 7).

Table 6: Outcomes binary logistic regression analysis: age, gender, and drugged-driving related experiences and beliefs as independent variables and self-declared driving within one hour of using drugs as dependent binary variable

Independent variables	B	S.E.	Wald	df	Sign.	Exp(B)	Lower 95% C.L	Upper 95% C.L
Age	-0.014	0.002	52.430	1	0.000	0.986	0.982	0.990
Gender/female vs male	-0.479	0.059	66.423	1	0.000	0.619	0.552	0.695
Social acceptability drugged driving	0.355	0.029	152.022	1	0.000	1.426	1.347	1.508
Personal acceptability drugged driving	0.857	0.033	677.394	1	0.000	2.355	2.208	2.512
Perception drugged driving as frequent acc. cause	-0.185	0.016	139.809	1	0.000	0.831	0.806	0.857
Perceived likelihood drug check in traffic	0.121	0.014	75.884	1	0.000	1.129	1.099	1.160
Been checked for drugged driving past 12 months (no, yes)	1.077	0.085	159.353	1	0.000	2.936	2.484	3.471

As we have explained earlier the Exp(B) is known as the odds ratio predicted by the model. The odds ratio is computed by raising the base of the natural log to the b^{th} power, where b is the slope from the logistic regression equation. The exp (B) represents the change in the relative risk of engaging in the violation behaviour (yes/no) associated with change in the independent variable when all other model variables have been held constant.

As can be seen in Table 6, the odds of engaging in driving under the influence of drugs is smaller than 1 for age, gender, and perception of driving under influence of drugs. This indicates a lowered odds of engaging in driving under the influence of drugs for older drivers (versus younger), for female drivers (versus male) and for drivers who perceive driving under influence as frequent accident cause (versus those who perceive this less so). The results can be further specified as follows:

Concerning age, for each increasing year the odds of engaging in the risk behaviour is lowered with $(1 - .986) * 100\% = 1.4\%$.

Compared to males females have a $(1 - .619) * 100\% = 38\%$ lower odds of engaging in the risk behaviour.

Concerning the perception of drugged driving as accident cause, with each unit increase on the rating scale of 1 = never to 5 = (almost) always the odds of engaging in the risk behaviour lowers with $(1 - .83) * 100\% = 17\%$.

The odds of engaging in driving under the influence of drugs tend to be higher (> 1) when drugged driving is more socially and personally acceptable, and when the perceived likelihood of a drug check is higher and there is more experience with drug enforcement. These results can be further nuanced as follows:

Concerning the experience with drugs checks in traffic, those who have been checked for drugs in traffic have a $(2.936 - 1) * 100\% = 194\%$ higher odds of having engaged in driving under the influence of drugs in the past 30 days. The positive relationship between odds of engaging in risk behaviour on the one hand and more experience with drug checks and higher perceived likelihood of being checked for drugged driving on the other hand will be discussed later (in Section 4.2).

Concerning personal acceptability, with each unit increase on the scale of acceptability (scale: unacceptable 1-2-3-4-5 acceptable) the odds of engaging in the risk behaviour increases with $(2.355 - 1) * 100\% = 135\%$.

Table 7 presents further results from the regression analysis for country as independent variable. The Netherlands was used as the reference country for this variable since the average score of the Netherlands on the question on driving under the influence of drugs was closest to the EU mean.

Table 7: Outcomes binary logistic regression analysis: country as independent variable and self-declared driving over legal limit in past 30 days as dependent binary variable

Independent variables	B	S.E.	Wald	df	Sign.	Exp(B)	Lower 95% C.L	Upper 95% C.L
Reference country closest to EU average (= Netherlands)								
Belgium	0.247	0.226	1.190	1	0.275	1.280	0.822	1.994
Switzerland	-0.149	0.275	0.295	1	0.587	0.861	0.503	1.476
Germany	-0.469	0.250	3.517	1	0.061	0.626	0.384	1.021
Denmark	0.011	0.283	0.001	1	0.970	1.011	0.580	1.760
Greece	0.289	0.243	1.414	1	0.234	1.335	0.829	2.149
Spain	0.165	0.256	0.415	1	0.520	1.179	0.714	1.949
Finland	-0.745	0.364	4.198	1	0.040	0.475	0.233	.968
France	0.298	0.258	1.338	1	0.247	1.347	0.813	2.231
Ireland	0.295	0.253	1.355	1	0.244	1.343	0.818	2.205
Italy	0.072	0.266	0.073	1	0.786	1.075	0.638	1.809
Austria	0.228	0.242	0.884	1	0.347	1.256	0.781	2.018
Poland	-0.839	0.314	7.146	1	0.008	0.432	0.233	.799
Portugal	0.027	0.264	0.011	1	0.918	1.028	0.612	1.725
Sweden	0.132	0.277	0.227	1	0.634	1.141	0.663	1.964
Slovenia	-0.181	0.277	0.424	1	0.515	0.835	0.485	1.437
UK	0.367	0.266	1.901	1	0.168	1.443	0.857	2.431
Canada	0.833	0.235	12.599	1	0.000	2.300	1.452	3.644
Czech Republic	-0.615	0.348	3.114	1	0.078	0.541	0.273	1.070
Hungary	-0.568	0.332	2.925	1	0.087	0.567	0.296	1.087
Israel	-0.432	0.286	2.273	1	0.132	0.649	0.370	1.138
Croatia	-0.314	0.282	1.237	1	0.266	0.731	0.420	1.270
USA	1.106	0.229	23.414	1	0.000	3.024	1.931	4.733
Australia	-0.010	0.263	0.001	1	0.971	0.991	0.591	1.659
Serbia	-0.043	0.274	0.025	1	0.874	0.957	0.560	1.637
Japan	0.259	0.241	1.155	1	0.282	1.295	0.808	2.077
India	0.982	0.225	19.029	1	0.000	2.669	1.717	4.148
Egypt	0.527	0.232	5.153	1	0.023	1.694	1.075	2.670
Kenya	1.007	0.229	19.279	1	0.000	2.737	1.746	4.290
Nigeria	1.333	0.220	36.769	1	0.000	3.791	2.464	5.831
Morocco	0.446	0.238	3.499	1	0.061	1.562	0.979	2.492
South Africa	0.755	0.230	10.746	1	0.001	2.127	1.354	3.339

After statistical correction for age and gender differences, and questions on acceptability and enforcement of drugged driving, a number of countries have significantly increased or decreased odds of driver population engaging in drugged driving in the past 30 days. Compared to the reference country (Netherlands), Canada, India, Kenya, Nigeria, USA, and South Africa have significantly increased odds of drivers engaging in driving under the influence of drugs. On the other hand, Finland, Czech Republic, Germany, Hungary, and Poland, present decreased odds of engaging in this risk behaviour (compared to reference country Netherlands). For a number of these countries there is evidence from other sources that is consistent with the increased or decreased odd of engaging in the risk behaviour (to be presented later in Discussion Section 4.2).

These results are also in line with prevalence rates of drugged driving found in the DRUID project. The DRUID project confirms the relatively low prevalence of driving under influence of illegal drugs (< 1% at road side surveys) in Northern and Eastern Europe region (Houwing et al., 2011).

3.3 Limitations of the data

In general, self-report data are vulnerable to a number of biases. Common biases are the following (Choi & Pak, 2005; Krosnick & Presser, 2010):

Desirability bias – the tendency of respondents to provide answers which present a favourable image of themselves, e.g., individuals may over-report good behaviour or under-report bad, or undesirable behaviour

Bias through misunderstanding of questions (e.g., questions with difficult words, long questions)

Recall error - unintentional faulty answers due to memory errors

The method for advanced analysis was binary logistic regression. Although the regression analysis identifies a number of explanatory variables that predict the self-declared fatigue driving, the associations between explanatory and dependent variables are correlational and the causal direction of influence between variables is not indicated by the analysis.

4 Summary and discussion

In Section 4.1 of this chapter we summarise results on the prevalence of self-declared violation and risk behaviour by drivers and other road user groups (question 1), on self-reported experience with enforcement checks (questions 2), on the perceived likelihood of enforcement checks (questions 3) and on opinions on stricter enforcement and sanctions (question 4). In addition, results of advanced analyses of variables that are related to driving under influence of alcohol and drugs are summarised. A further discussion of some findings is presented in Section 4.2.

4.1 Summary

Prevalence of the risky self-declared traffic behaviour among drivers

In all four regions, the most frequently reported traffic violations are talking on hands-free phone and speeding inside urban areas, speeding on main roads outside urban areas and speeding on motorways with between 40% and 70% of road users admitting to these traffic violations.

Driving after drinking alcohol is being reported by one in five drivers in Europe, America and Africa and by one in six drivers in Asia-Oceania.

The use of a smartphone while driving for calling, reading email or texting has become common behaviour in many countries. The most distracting variant of phone use while driving is reading a text message/email or checking social media which requires that sight is averted from the roadway. In African countries, the percentages for this risky behaviour range between 22% and 52%. In Europe, this behaviour is somewhat less frequent with percentages varying mostly between 15% and 41%, with the exception of drivers from Iceland reporting it just over 53%.

The unsafe transport of children is frequent in Asia-Oceania and Africa (> 40%), and less frequent in Europe and America (< 15%).

The age differences in risky behaviour were nearly all significant in all four regions with younger drivers reporting to engage more in risky driving behaviour than older drivers with effect sizes mostly varying between small to medium.

In three regions - Europe, America and Africa - for nearly all risky behaviours males reported to engage more frequently in the behaviour than females; most often the gender differences were quite small.

Reported traffic violations by other road user groups

Moped riders and motorcyclists:

In all four regions, nearly half of all moped riders and motorcyclists report to drive faster than the speed limits on roads outside of built-up areas.

Riding without a helmet - which is not a violation in many ESRA2 countries - is reported by nearly a half of riders in Africa and Asia-Oceania, by two in five riders in America and by one in four riders in Europe.

Younger moped riders and motorcycle riders report more frequently to engage in each of the four risky behaviours (drinking and riding, speeding outside built-up areas, riding without helmet and reading text/email or checking social media during riding). Nearly all effect sizes are medium to large.

Cyclists:

In all four regions, cycling after having drunk perhaps too much alcohol is reported by one in six cyclists.

Cyclists in Asia-Oceania and Africa more frequently report to read a text message or check social media while cycling (about one in three), to cycle wearing headphones (two in five to about half), and to cycle on road next to the cycle lane (slightly over half) than cyclists in Europe and America.

Younger cyclists reported more frequent risky cycling behaviour than older cyclists in three regions- Europe, Asia-Oceania and America - with effect sizes mostly between medium to large.

Pedestrians:

The behaviours that may increase risk for pedestrians - phone use, headphone use, red light running, crossing road at other place than pedestrian crossing - are frequently reported by pedestrians in all four regions (percentages mostly ranging between 40% and 75%).

In all four regions, younger pedestrians report more frequently to engage in risky pedestrian behaviour (listening to music, reading text/checking social media, red light running, crossing nearby pedestrian crossing) than older pedestrians, with effect sizes mostly ranging from medium to large.

Drivers' experience of being checked for alcohol or drugs in traffic

In all four regions, being checked in traffic for alcohol occurs more frequently than being checked for drugs, with the highest percentages of alcohol checks being reported in Asia-Oceania (33%) and the lowest in America (5%), and Europe (18%) and Africa (17%) falling in between.

For checks on drugged driving the highest percentages are being reported in Asia-Oceania and Africa (12% and 10%), and low percentages in Europe (4%) and America (2%).

In all four regions, male drivers tend to report more experience with being checked for using alcohol or drugs than female drivers, but statistical effect sizes were consistently small.

In all four regions, younger drivers tended to report more experience with being checked than older drivers, with effect sizes ranging from small to medium.

Perceived likelihood of being checked

In all four regions, the reported likelihood of being checked is most frequent for speeding violations (percentages ranging between 30% and 46%) and for seat belt violations (percentages ranging between 25% and 46%).

Drivers in African countries report most often that they consider it likely to be checked in traffic (percentages ranging between 24% and 46%) and drivers in America report this likelihood least often (percentages ranging between 10% and 30%).

In all four regions, male drivers tend to report a higher likelihood of being checked for traffic violations than female drivers, but statistical effect sizes are consistently small.

In all four regions, younger drivers tended to report higher likelihood of being checked than older drivers, with effect sizes ranging from small to medium.

Opinions on strictness of enforcement

Worldwide, in nearly all surveyed countries, there is a majority support among road users (> 60%) for a stricter approach to drinking and driving in the sense of stricter penalties and more traffic checks.

In nearly all surveyed countries, there is a clear majority support for stricter approach to phone use while driving/riding (percentages ranging between 65% and 95%).

On the questions on strictness of sanctions and enforcement, female road users tend to report a somewhat stronger preference for stricter sanctions and more enforcement than male road users, but the statistical effect sizes are small.

Older road users were more in favour of stricter sanctions for drinking and driving, speeding and use of hand-held mobile phone than younger road users with effect sizes ranging from small to medium. In Africa, no age differences were found for almost all questions.

Changes over time

Answers on violation behaviour of car drivers were compared between ESRA1 and ESRA2. The operational definition of car drivers slightly changed between ESRA1 and ESRA2. In view of this it cannot be excluded that the differences reported below may be partly due to slightly differing samples of ESRA1 and ESRA2.

Concerning drinking and driving, it seems that this risky behaviour has been reduced over time: the EU average has decreased from 31% to 22% and in a number of countries such as Denmark, Finland, France, Germany, the Netherlands, Italy, Spain and the United Kingdom substantial reductions in self-declared drinking and driving have occurred.

Concerning speeding outside built-up areas, it seems that this may have increased somewhat over time.

Reading a text or email while driving seems to have slightly reduced overall, with large reductions in some countries (Italy, Finland, Greece, the Netherlands, Sweden). However, these data should not be taken at face value since there is evidence that at least for one of these countries (the Netherlands) the ESRA2 reports of less email reading and/or texting seems not be supported by actual observations of phone use in traffic.

Variables associated with driving under influence of alcohol or drugs

The odds of engaging in driving when one may have been drinking more than the legal alcohol limit in the past thirty days are significantly *increased* when people are getting older, when they find this behaviour to be more socially and personally acceptable, when they have beliefs that their friends would drive with alcohol, that one can safely drink and drive for short trips, when they trust their own ability to drive with alcohol, when they often drive after drinking alcohol, when they find penalties too severe, when they perceive a higher likelihood of alcohol checks in traffic and when they have actually been checked for drinking and driving.

On the other hand, the odds of engaging in drinking and driving in the past thirty days is significantly *decreased* when riders are female, when they believe that alcohol is a more frequent cause of accidents, when they believe more that alcohol rules are insufficiently checked and when they are more supportive of interlock measures for alcohol offenders and zero tolerance policy for drinking and driving.

The odds of engaging in driving under the influence of drugs are lower for older drivers, for female drivers (versus male) and for drivers who perceive driving under influence as frequent accident cause (versus those who perceive this less so). The odds of engaging in driving under the influence of drugs were increased when drugged driving is more socially and personally acceptable, and when the perceived likelihood of a drug check is higher and there is more experience with drug enforcement.

The positive relationship between odds of engaging in driving under influence of alcohol or drugs and higher perceived likelihood of control and being checked for DUI can be explained by various processes. It can be assumed that, first, drivers who use drugs do so at times and near locations where police may focus enforcement efforts, that, second, these drivers are more motivated to look for and notice police checks, and third, that these drivers may show driving behaviour that alerts the police to their vehicle.

4.2 Discussion and recommendations

In this section we discuss some of the more remarkable findings. ESRA results are compared with evidence from other sources and some counterintuitive results are explained in terms of possible underlying processes.

Violations by other road users

The self-declared violation rates by other road user groups are far from small if we look at violations such as speeding outside built-up areas by motorcyclists and moped riders (42% to 46% in world regions), and red light crossing by pedestrians (41% to 52% in world regions). Cyclists' involvement in risky, though not necessarily illegal, behaviour is also high with self-reported rates in world regions between 19% and 31% for reading text messages/emails or checking social media while cycling and between 30% and 48% for wearing headphones while cycling. Cycling without helmet is a worldwide common behaviour (51% to 70% in world regions).

To support the safety of vulnerable road users, ETSC (2018) recommends that enforcement should be intensified on speeding in urban areas where there are high numbers of pedestrians and cyclists. In addition, enforcement of rule violations by moped riders, cyclists, and pedestrians themselves should not be ignored.

Preferably the enforcement of risky behaviour of vulnerable road users is based on a problem-analysis of what physical, legal and personal factors may impact on rule breaking. For example, in Montreal, Chaloux & El-Geneidy (2019) studied the motivation of cyclists to comply or not comply with traffic laws. They found that actions labelled as careless and dangerous by other road users were often considered the safest and most rational by cyclists themselves. This reflects a discrepancy between the safety goals of traffic laws and the cycling reality as perceived by cyclists. These researchers advocate for a consideration of more bicycle-specific rules for the road.

Changes over time

In this report we looked at changes between ESRA1 and ESRA2 in self-reported drinking and driving, speeding outside built-up area, texting while driving, and self-reported experience with alcohol and drugs checks. The changes over time between ESRA1 and ESRA2 may have been influenced by slightly differing car driving populations of ESRA1 and ESRA2. The general question is whether changes in self-reports can be confirmed with data from other measurements.

Concerning drinking and driving, it seems that this risky behaviour has been reduced over time: the EU average has decreased from 31% to 22% and in a number of countries such as Denmark, Finland, France, Germany, the Netherlands, Italy, Spain and the United Kingdom substantial reductions in self-declared drinking and driving have occurred. There is other evidence for a number of these countries which confirms a positive trend in drinking and driving in recent years. Roadside surveys of drinking and driving in the Netherlands indicated that the percentage of heavy alcohol offenders in traffic (BAC > 1.3‰) has been further reduced from 0.3% in 2015 to 0.1% in 2017 (I&O Research, 2018). In Denmark, also the problem of drinking and driving seems to have been reduced; the share of alcohol-related road fatalities has reduced from 23% in 2008 to 14% in 2017 (Ehlers, 2018). For Spain, a positive development in drinking and driving between 2015 and 2018 was reported by Domingo-Slave et al. (2019). Roadside surveys indicated a significant decrease in drivers tested positive for alcohol (from 3.4% in 2013 to 2.6% in 2015; $p < 0.05$).

Another development over time was that in a few countries, the self-reports of having been checked for alcohol in traffic have decreased (France: 23% to 15%; Netherlands: 17% to 10%; Italy: 15% to 9%; Sweden 29% to 23%). For the Netherlands, these self-report data are confirmed by data on the factual number of alcohol checks. In 2013, over 6,000 large random breath testing checks were conducted in the Netherlands; this number was halved to slightly over 3,000 in 2016; Dutch police have changed tactics from large scale random breath testing checks to smaller scale unobtrusive checks factually resulting in less road users being checked (NOS, 2017). For Sweden, a reduction of check on speed and driver's sobriety has begun in 2012 (The Local, 2018). The reasons for the reduction of traffic policing included a high workload for the police, specifically following a reorganization in 2015, in which responsibility for traffic checks shifted from a dedicated unit of traffic police to municipal police officers (The Local, 2018).

In two countries, Ireland and Belgium, the self-reports of being checked for alcohol have substantially increased (Ireland: from 9% to 23%; Belgium: from 17% to 24%). For Belgium, the increase in self-reports of being checked corresponds with objective numbers. In Belgium, in 2014-2015, slightly over 300,000 drivers were tested for alcohol, whereas this number increased to slightly over 450,000 in 2016-2017 (41% increase) (Pelssers, 2018). In Ireland, the number of DUI checkpoints hardly changed in 2014-2017. In 2017, a total of 8,920 drivers were arrested for drinking and driving compared to 8,067 arrests in 2016 and 7,419 arrests in 2015. Compared to 2015, there was a 20% increase in DUI arrests in 2017.

Concerning speeding outside built-up areas, it was found that this may have increased somewhat over time. Reading a text or email while driving seems to have slightly reduced overall, with large reductions in some countries (Italy, Finland, Greece, Netherlands, Sweden). However, these data should not be taken at face value. For instance, for the Netherlands, there is objective evidence that the use of smartphone (for various purposes such as texting, reading mails etc.) while driving has increased on different roadways between 2016 and 2018 (NDC Nederland, Goudappel Coffeng, 2018).

Relationship between perceived control likelihood and risk behaviour

The advanced statistical analyses indicated both for drinking and driving and driving under the influence of drugs positive relationships between perceived likelihood of control and engagement in risky behaviour and experience with enforcement and engagement in risky behaviour. The higher the perceived likelihood of control, the more engagement in the risky behaviour, and also the more experience with enforcement, the more engagement in the risky behaviour. Below we discuss the processes that may explain these findings.

Perhaps somewhat counterintuitively the actual experience of having been checked for drinking and driving and the perceived likelihood of being checked are positively associated with higher odds of

engaging in the risky behaviour. One explanation could be that drivers who drink and drive do so at times and near locations where police may focus extra enforcement on this risky behaviour. That would bring the regular drink-drivers more in contact with DUI enforcement, explaining their increased perceived likelihood of check and increased experience with this enforcement. Part of the explanation could also be that drivers who drink and drive change their driving behaviour in a way that brings their vehicle to the attention of the traffic police. The finding that perceived likelihood of enforcement is positively related to engagement in risky behaviour has also been found in Dutch traffic surveys where respondents who report more speeding behaviour also tend to report a higher perceived likelihood of speed checks (Duijm et al., 2012).

The positive relationship between odds of engaging in risky behaviour and higher perceived likelihood of control and being checked for drugged driving can be explained by various processes. It can be assumed that, first, drivers who use drugs do so at times and near locations where police may focus enforcement efforts, that, second, these drivers are more motivated to look for and notice police checks, and third, that these drivers may show driving behaviour that alerts the police to their vehicle.

Driving under the influence of drugs

The advanced statistical analysis found that a number of countries had significantly increased or decreased odds of driver population engaging in drugged driving in the past 30 days. Compared to the reference country closest to the EU average of self-reported driving under the influence of drugs (Netherlands), Canada, India, Kenya, Nigeria, USA, and South Africa have significantly increased odds of drivers engaging in driving under the influence of drugs. For a number of these countries there is (confirming) evidence from other sources that drug use in the general or in the car driver population is high:

Concerning *Canada*, Robertson et al. (2017) report that 7% of drivers tested positive for drugs at a roadside survey - a higher rate than the average rate in Europe being 2% according to DRUID (Houwing et al., 2011; Atchison, 2017) and that in 2014 42% of fatally injured drivers tested positive for drugs.

For the *USA*, Hedlund (2017) reports that at roadside surveys illegal drugs use was found for 15% of drivers in weekend nights and 12% for drivers at weekdays. Marijuana was the most prevalent drug, with 12.6% of drivers testing positive on weekend nights (Hedlund, 2017; p. 8).

A national survey in *Nigeria* indicated that nearly 15% of the adult population in Nigeria (around 14.3 million people) reported a "considerable level" of use of psychoactive drug substances— a rate much higher than the 2016 global average of 5.6% among adults (Kazeem, 2019).

Lieberman et al. (2019) report that knowledge of the extent of drugged driving in *South Africa* is limited. Furthermore, they report results of road side drug testing in South Africa where one in seven (14%) drivers tested positive for drugs.

On the other hand, Finland, Czech Republic, Germany, Hungary, and Poland, present decreased odds of engaging in this risk behaviour (compared to reference country Netherlands). These results are also in line with prevalence rates of drugged driving found in the DRUID project. The DRUID project confirms the relatively low prevalence of driving under influence of illegal drugs (< 1% at road side surveys) in Northern and Eastern Europe (Houwing et al., 2011).

Key recommendations

Drinking and driving and speeding should remain the top priorities for traffic enforcement on the four continents.

The enforcement of seat belt use and safe transport of children is especially important in African and Asia-Oceanic countries.

A new challenge for traffic enforcement worldwide is the frequent use of (hand-held) smartphones by drivers, cyclists and pedestrians.

New legislation on distraction in traffic and on drugs in traffic, or the possible revision of current legislation should take into account traffic policing practices in order to facilitate as much as possible traffic enforcement operations in these areas.

In some particular countries driving under the influence of drugs is a widespread and rising problem that needs focused attention in terms of health prevention, communication and traffic enforcement.

The fairly high reported violation rates of road users other than drivers - moped riders, motorcyclists, cyclists and pedestrians - indicates that these groups should not be ignored in road infrastructure (planning), traffic education, or in traffic enforcement planning. Being both vulnerable and engaging in risky behaviour may make motorcyclists, moped riders and cyclists, ideal target groups for special road safety campaigns or enforcement actions. Even though pedestrians are likely not a high-risk group they should not be completely ignored when thinking about campaigns and enforcement.

ESRA closing statement

The initial aim of ESRA was to develop a system for gathering reliable and comparable information about people's attitudes towards road safety in several European countries. This objective has been achieved and the initial expectations have even been exceeded. ESRA has become a global initiative which already conducted surveys in 60 countries across six continents. The outputs of the ESRA project have become building blocks of national and international road safety monitoring systems.

The ESRA project has also demonstrated the feasibility and the added value of joint data collection on road safety attitudes and performance by partner organizations in a large number of countries. The intention is to repeat this initiative on a triennial basis, retaining a core set of questions in every wave allowing the development of time series of road safety performance indicators.

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References

- Achermann Stürmer, Y. (2016). *Driving under the influence of alcohol and drugs. ESRA thematic report no. 2. ESRA project (European Survey of Road users' safety Attitude)*. Bern, Switzerland: Swiss Council for Accident Prevention.
- Alfonsi, R., Meta, E., & Ammari, A. (2017). *Seatbelt law and enforcement, European Road Safety Decision Support System, developed by the H2020 project SafetyCube*. Retrieved from: www.roadsafety-dss.eu on 26 July 2019
- Atchison, L. (2017). *Preventing drug driving in Europe. Policy measures for national and EU action*. Brussels: European Transport Safety Council.
- BBC News (2018). Speed limit cut on French roads angers rural voters. BBC press release 16 June 2018 accessed August 22 2019 at: <https://www.bbc.com/news/world-europe-44472557>
- Blais, É., & Gagné, M. P. (2010). The effect on collisions with injuries of a reduction in traffic citations issued by police officers. *Injury Prevention, 16* (6), 393-397.
- Buttler, I. (2016) *Enforcement and support for road safety policy measures. ESRA thematic report no. 6. ESRA project (European Survey of Road users' safety Attitudes)*. Warschau, Poland: Instytutu Transportu Samochodowego.
- Calinescu, T., & Admindaite, D. (2018). *Progress in reducing drink driving in Europe*. Brussels: European Transport Safety Council ETSC.
- Chaloux, N., & El-Geneidy, A. (2019). Rules of the road: Compliance and 38 defiance among the different types of cyclists. Paper presented at the 98th Annual Meeting of the 39 Transportation Research Board. Washington: Transportation Research Board
- Choi, B.C.K., Pak, A.W.P. (2005). A catalog of biases in questionnaires. *Preventing Chronic Disease, 2* (1), A13.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- DaCoTA (2012). *Speed Enforcement, Deliverable 4.8t of the EC FP7 project DaCoTA*. Brussels: European Commission.
- DeAngelo, G., & Hansen, B. (2014). Life and death in the fast lane: Police enforcement and traffic fatalities. *American Economic Journal: Economic Policy, 6* (2), 231-257.
- Dingus, T.A., Guo, F., Lee, S., Antin, J.F., et al. (2016). Driver crash risk factors and prevalence evaluation using naturalistic driving data. *National Academy of Sciences of the United States of America PNAS, 113*, p. 2636-2641.
- Domingo-Salvany, A., Herrero, M.J., Fernandez, B., Perez, J., Del Real, P., González-Luque, J.C., de la Torre, R. (2017). Prevalence of psychoactive substances, alcohol and illicit drugs, in Spanish drivers: A roadside study in 2015. *Forensic Science International, 278*, 253-259
- Duijm, S., Kraker, J. de, Schalkwijk, M., Boekwilt, L., et al. (2012). *PROV 2011 Periodiek Regionaal Onderzoek Verkeersveiligheid ("PROV 2011. Periodical regional research road safety")*. Amsterdam: TNS-NIPO, Amsterdam.
- Elliott, M. & Broughton, J. (2005). *How methods and levels of policing affect road casualty rates*. TRL Report 637. Crowthorne: Transport Research Laboratory.
- Ehlers, P. (2018). Drink driving strategies in Denmark. Brussels: European Transport safety Council. Retrieved October 10 2019 from:
- Erke, A., Goldenbeld, C. & Vaa, T. (2009). *Good practice in the selected key areas: Speeding, drink driving and seat belt wearing: Results from meta-analysis. Deliverable 9 of the PEPPER project*. Brussels: European Commission.
- ETSC (1999). *Police enforcement strategies to reduce traffic casualties in Europe*. Brussels: European Transport Safety Council ETSC, Brussels.

- ETSC (2011). *Traffic Law Enforcement Across the EU Tackling the Three Main Killers on Europe's Roads*. Brussels: European Transport Safety Council, Brussels.
- ETSC (2016a). *How traffic law enforcement can contribute to safer roads (PIN Flash 31)*. Brussels: European Transport Safety Council.
- ETSC (2016b). *Cuts to police enforcement across Europe doubly damaging for road safety*. ETSC Press release June 20th 2016, accessed July 25th 2019 at: <https://etsc.eu/cuts-to-police-enforcement-across-europe-doubly-damaging-for-road-safety/>
- ETSC (2018). *Briefing: 5th EU Road Safety Action Programme 2020-2030*. Brussels: European Transport Safety Council, Brussels.
- ETSC (2019). *Speed camera vandalism in France puts up to 75% of devices out of action*. ETSC News 5 April 2019. Brussels: European Transport Safety Council ETSC, Brussels. ETSC press release accessed August 22 2-19 at: <https://etsc.eu/speed-camera-vandalism-in-france-puts-up-to-75-of-devices-out-of-action/>
- European Commission (2018). *Speed Enforcement*. Brussels: European Commission, Directorate General for Transport, February 2018. Accessed 25 July 2019 at: https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/ersosynthesis2018-speedenforcement.pdf
- GAO (2015). *Drug-impaired driving. Additional Support Needed for Public Awareness Initiatives. Report GAO-15-293*. Washington: United States Government Accountability Office.
- Garda (2017). *Annual report 2016*. Dublin: An Garda Síochána.
- Garda (2018). *Annual report 2017*. Dublin: An Garda Síochána.
- Goldenbeld, C., Daniels, S. & Schermers, G. (2019). Red light cameras revisited. Recent evidence on red light camera safety effects. *Accident Analysis & Prevention*, 128, 139-147.
- Goldenbeld, C., & Schagen, I. van (2017). Traffic rule violations - Red Light Running, European Road Safety Decision Support System, developed by the H2020 project SafetyCube. Retrieved from www.roadsafety-dss.eu on: July 25th 2019, https://www.roadsafety-dss.eu/assets/data/pdf/synopses/Traffic_rule_violations_Red_Light_Running_08122016.pdf
- Hedlund, J. (2017). *Drug impaired driving. A guide for states*. Washington: Governors Highway Safety Association (GHSA).
- Hels, T., Bernhoft, I.M., Lyckegaard, A., Houwing, S., Hagenzieker, M., Mathijssen, R., Legrand, S.-A., Isalberti, C., Van Den Linden, T. & Verstraete, A. (2011). *Risk of injury by driving with alcohol and other drugs. DRUID Deliverable 2.3.5. Driving under the Influence of Drugs, Alcohol and Medicines*. Brussels: European Commission.
- Høye, A. (2015). Safety effects of section control - An empirical Bayes evaluation. *Accident Analysis and Prevention*, 78, 169-178.
- Houwing, S., Hagenzieker, M., Mathijssen, R., Bernhoft, I.M., et al. (2011). *Prevalence of alcohol and other psychoactive substances in drivers in general traffic. Part 1: General results; Part 2: Country reports*. Deliverable 2.2.3 of DRUID, Driving Under the Influence of Drugs, Alcohol and Medicines. Brussels: European Commission.
- Hu, W., & Cicchino, J.B. (2017). Effects of turning on and off red light cameras on fatal crashes in large U.S. cities. *Journal of Safety Research*, 61, 141-148.
- I&O Research (2018). *Rijden onder invloed in Nederland in 2002-2017: ontwikkeling van het alcoholgebruik van automobilisten in weekendnachten "Driving under the influence in the Netherlands 2002-2017: development of alcohol use by car drivers in weekend nights"*. The Hague: Ministry of Infrastructure and Water Management.
- Ko, M., Geedipally, S.R., Walden, T.D. & Wunderlicht, R.C. (2017). Effects of red light running camera systems installation and then deactivation on intersection safety. *Journal of Safety Research*, 62, 117-126.

- Krosnick, J. A., & Presser, S. (2010). *Questionnaire design*. In: J. D. Wright & P. V. Marsden (Eds.), *Handbook of Survey Research* (Second Edition). West Yorkshire, England: Emerald Group.
- Mäkinen, T., Zaidel, D.M., Andersson, G., Biecheler-Fretel, M.B., Christ. R., Cauzard, J.P., Elvik, R., Goldenbeld, C., Gelau, C., Heidstra, J., Jayet, M.-C., Nilsson, G., Papaioannou, P. Rothengatter, T., Quimby, A., Rehnova, V. and Vaa, T. (2003) *Traffic enforcement in Europe: effects, measures, needs and future*. Final report of ESCAPE. Espoo: VTT.
- Nakano, Y., Okamura, K., Kosuge, R., Kihira, M., & Fujita, G. (2019). Effect of visible presence of policing activities on drivers' vigilance and intention to refrain from non-driving activities: A scenario-based survey of general Japanese drivers. *Accident Analysis and Prevention*, 133, 105293,
- Kazeem, Y. (2019). A national survey has confirmed the massive scale of Nigeria's drug problem. Quartz Africa, January 31 2019, accessed 3 October 2019 at: <https://qz.com/africa/1538843/nigeria-drug-abuse-14-million-adults-use-drugs/>
- Lacey, J.H., Brainard, K., & Sitnow, S. (2010). *Drug Per Se Laws: A Review of Their Use in States*. (Report No. DOT HS 811 317). Washington, DC: National Highway Traffic Safety Administration NHTSA.
- Liebenberg, J., Toit-Prinsloo, L. du, Saayman, G. & Steenkamp, V. (2018). Drugged driving in South Africa An urgent need for review and reform. *South Africa Crime Quarterly*, 67, 7-18.
- Meesmann, U., Torfs, K., Nguyen, H., & Van den Berghe, W. (2017). *Do we care about road safety? Key findings from the ESRA1 project in 38 countries*. ESRA project (E-Survey of Road users' Attitudes). Brussels, Belgium: Vias institute.
- Meesmann, U., Torfs, K., Wardenier, N. & Van den Berghe, W. (2021) *ESRA2 methodology. ESRA2 report Nr. 1 (updated version)*. ESRA project (E-Survey of Road users' Attitudes). Brussels, Belgium: Vias institute.
- NDC Nederland, Goudappel Coffeng (2018). *Apparatuurgebruik gemotoriseerd verkeer In auto's, bestelwagens en vrachtwagens*. Den Haag: Rijkswaterstaat.
- NOS (2017). Aantal alcoholcontroles afgelopen drie jaar gehalveerd, press release posted 2-2-2017 by the Dutch Broadcasting Foundation (Nederlandse Omroep Stichting – NOS). Accessed August 7 2019 et: <https://nos.nl/artikel/2156235-aantal-alcoholcontroles-afgelopen-drie-jaar-gehalveerd.html>,
- OECD (2018). *Speed and crash risk*. Paris: OECD, IRTAD.
- Peck, R.C., Gebers, M.A., Voas, R.B. & Romano, E. (2008). The relationship between blood alcohol concentration (BAC), age, and crash risk. *Journal of Safety Research*, 39, nr. 3, p. 311-319.
- Peden, M., Scurfield, R., Sleet D., Mohan, D., Hyder, A.A., Jarawan, E., & Mathers, C. (2004) (Eds.) *The World Report on Road traffic injury prevention*. Geneva: World Health Organization WHO.
- Pelssers, B. (2018). *Hoe het effect van alcoholcontroles op de verkeersveiligheid verhogen? Een analyse van de verdeling van overtredingen voor rijden onder invloed van alcohol en van alcoholgerelateerde verkeersongevallen met het oog op een efficiëntere verdeling van alcoholcontroles*. Brussels: VIAS institute.
- Rezapour, M., Wulff, S.S., & Ksaibati, K (2018). Effectiveness of enforcement resources in the highway patrol in reducing fatality rates. *IATSS Research*, 42, 259-264.
- Robertson, R.D., Hing, M.M., Woods-Fry, H., & Vanlaar, W.G.M. (2017). *Road safety monitor 2017. Drugs and driving in Canada*. Ottawa, Ontario: Traffic Injury Research Foundation.
- Rocco, L. & Sampaio, B. (2016). Are handheld cell phone and texting bans really effective in reducing fatalities? *Empirical Economics*, 51 (2), 853-876.
- Rudisill, T.M., Baus, A.D., & Jarrett, T. (2018). Challenges of enforcing cell phone use while driving laws among police: a qualitative study. *Injury Prevention*, 19(2), S192-S193
- Steinbach, R., Perkins, C., Edwards, P., Beecher, D., et al. (2016). *Speed cameras to reduce speeding traffic and road traffic injuries*. London: Cochrane Injuries Group, London School of Hygiene & Tropical Medicine.

SWOV (2018). *Sustainable Safety 3rd edition – The advanced vision for 2018-2030. Principles for design and organization of a casualty-free road traffic system*. The Hague: SWOV Institute for Road Safety Research.

The Local (2018). *Why did road traffic death increase in Sweden this year?* Web article The Local, 20 December 2018. Retrieved October 8 2019 from: <https://www.thelocal.se/20181220/why-have-fatal-road-accidents-risen-in-sweden>

Theofilatos, A., (2017). *Law and Enforcement - Distraction: Laws and enforcement against mobile phone use while driving*, European Road Safety Decision Support System, developed by the H2020 project SafetyCube. Retrieved from www.roadsafety-dss.eu on 26 July 2019

UNdata, United Nations Statistics Division, 2019. Population statistics on gender and age per country. Available at: <http://data.un.org/Data.aspx?d=POP&f=tableCode:22%20> [13/06/2019].

Zaal, D. (1994) *Traffic Law Enforcement: A review of the literature*. Report no. 53. Clayton, Victoria: Monash University, Accident Research Centre.

Appendix 1: ESRA2 Questionnaire

Introduction

In this questionnaire, we ask you some questions about your experience with, and your attitudes towards traffic and road safety. When responding to a question, please answer in relation to the traffic and road safety situation in [COUNTRY]. There are no right or wrong answers; what matters is your own experience and perception. Thank you for your contribution!

Socio-demographic information

Q1) In which country do you live? _____

Q2) Are you ... male – female – other (only in country who officially recognizes another gender)

Q3a) In which year were you born? Dropdown menu

Q3b) In which month were you born? Dropdown menu

Q4_1) What is the highest qualification or educational certificate that you have obtained? none - primary education - secondary education - bachelor's degree or similar - master's degree or higher

Q4_2) What is the highest qualification or educational certificate that your mother has obtained? none - primary education - secondary education - bachelor's degree or similar - master's degree or higher - I don't know

Q5a) Which of the following terms best describes your current professional occupation? white collar or office worker (excluding executive)/employee (public or private sector) →Q5b - blue collar or manual worker/worker →Q5b - executive →Q5b - self-employed/independent professional →Q5b - currently no professional occupation →Q5c

Q5b) Do you have to drive or ride a vehicle for work? (Please indicate the job category that is most appropriate for you) yes, I work as a taxi, bus, truck driver, ... - yes, I work as a courier, mailman, visiting patients, food delivery, salesperson, ... - no

Q5c) You stated that you currently have no professional occupation. Which of the following terms best describes your current situation? I am ... a student - unemployed, looking for a job – retired - not fit to work - a stay-at-home spouse or parent - other

Q6) What is the postal code of the municipality in which you live? _____

Q7) In which region do you live? Drop down menu

Q8a) How far do you live from the nearest bus stop, light rail stop, or metro/underground station? less than 500 metres → Q8b - between 500 metres and 1 kilometre → Q8b - more than 1 kilometre → skip Q8b

Q8b) What is the frequency of your nearest bus stop, light rail stop, or metro/underground station? at least 3 times per hour - 1 or 2 times per hour - less than 1 time per hour

Mobility & exposure

Q9) Do you have a car driving licence or permit (including learner's permit)? yes - no

Q10) During the past 12 months, how often did you use each of the following transport modes in [country]? How often did you ...? at least 4 days a week - 1 to 3 days a week - a few days a month - a few days a year - never

Items (random): walk minimum 100m (pedestrian; including jogging, inline skate, skateboard, ...) - cycle (non-electric) - cycle on an electric bicycle/e-bike/pedelec - drive a moped (≤ 50 cc or ≤ 4 kW; non-electric - drive a motorcycle (> 50 cc and > 4 kW non-electric) - drive an electric moped (≤ 4 kW) - drive an electric motorcycle (> 4 kW) - drive a powered personal transport device such as an electric step, hoverboard, solowheel,... - drive a car (non-electric or non-hybrid) - drive a taxi - drive a bus as a driver - drive a truck/lorry - drive a hybrid or electric car - take a taxi or use a ride-hail service (e.g. Uber, Lyft) - take the train - take the bus - take the

tram/streetcar - take the subway - take the aeroplane - take a ship/boat or ferry - be a passenger in a car - use another transport mode

Q11) Over the last 30 days², have you transported a child (<18 years of age) in a car? yes - no

Items: below 150cm - above 150cm

Self-declared safe and unsafe behaviour in traffic

Q12_1a) Over the last 12 months, how often did you as a CAR DRIVER ...?

You can indicate your answer on a scale from 1 to 5, where 1 is "never" and 5 is "(almost) always". The numbers in between can be used to refine your response.

Binary variable for all items: at least once (2-5) - never (1)

Items (random):

- drive after drinking alcohol
- drive faster than the speed limit outside built-up areas (but not on motorways/freeways)
- read a text message or email while driving

Q12_1b) Over the last 30 days, how often did you as a CAR DRIVER ...?³

You can indicate your answer on a scale from 1 to 5, where 1 is "never" and 5 is "(almost) always". The numbers in between can be used to refine your response.

Binary variable for all items: at least once (2-5) - never (1)

Items (random):

- drive when you may have been over the legal limit for drinking and driving
- drive after drinking alcohol
- drive 1 hour after using drugs (other than medication)
- drive after taking medication that carries a warning that it may influence your driving ability
- drive faster than the speed limit inside built-up areas
- drive faster than the speed limit outside built-up areas (but not on motorways/freeways)
- drive faster than the speed limit on motorways/freeways
- drive without wearing your seatbelt
- transport children under 150cm without using child restraint systems (e.g. child safety seat, cushion)
- transport children over 150cm without wearing their seatbelts
- talk on a hand-held mobile phone while driving
- talk on a hands-free mobile phone while driving
- read a text message/email or check social media (e.g. Facebook, twitter, etc.) while driving
- drive when you were so sleepy that you had trouble keeping your eyes open

Q12_2) Over the last 30 days, how often did you as a CAR PASSENGER ...?⁴ You can indicate your answer on a scale from 1 to 5, where 1 is "never" and 5 is "(almost) always". The numbers in between can be used to refine your response.

Binary variable for all items: at least once (2-5) - never (1)

Item:

- travel without wearing your seatbelt in the back seat

Q12_3) Over the last 30 days, how often did you as a MOPED DRIVER OR MOTORCYCLIST ...?⁵ You can indicate your answer on a scale from 1 to 5, where 1 is "never" and 5 is "(almost) always". The numbers in between can be used to refine your response.

Binary variable for all items: at least once (2-5) - never (1)

Items (random):

- ride when you may have been over the legal limit for drinking and driving
- ride faster than the speed limit outside built-up areas (but not on motorways/freeways)
- ride a moped or motorcycle without a helmet
- read a text message/email or check social media (e.g. Facebook, twitter, etc.) while riding a moped or motorcycle

² For data collection in Benin, due to the covid-19 situation, some wordings of questions needed to be addressed. During this period, this sentence was phrased as follow: "During a typical month, do you transport a child (<18 years of age) in your car at least one day of the month?"

³ For data collection in Benin, during covid-19 lockdown: "During a typical month, how often do you as a CAR DRIVER...?"

⁴ For data collection in Benin, during covid-19 lockdown: "During a typical month, how often do you as a CAR PASSENGER ...?"

⁵ For data collection in Benin, during covid-19 lockdown: "During a typical month, how often do you as a MOPED DRIVER OR MOTORCYCLIST ...?"

Q12_4) Over the last 30 days, how often did you as a CYCLIST ...?⁶ You can indicate your answer on a scale from 1 to 5, where 1 is "never" and 5 is "(almost) always". The numbers in between can be used to refine your response.

Binary variable for all items: at least once (2-5) - never (1)

Items (random):

- cycle when you think you may have had too much to drink
- cycle without a helmet
- cycle while listening to music through headphones
- read a text message/email or check social media (e.g. Facebook, twitter, etc.) while cycling
- cycle on the road next to the cycle lane

Q12_5) Over the last 30 days, how often did you as a PEDESTRIAN ...? You can indicate your answer on a scale from 1 to 5, where 1 is "never" and 5 is "(almost) always". The numbers in between can be used to refine your response.

Binary variable for all items: at least once (2-5) - never (1)

Items (random):

- listen to music through headphones as a pedestrian while walking in the streets
- read a text message/email or check social media (e.g. Facebook, twitter, etc.) while walking in the streets
- cross the road when a pedestrian light is red
- cross the road at places other than at a nearby (distance less than 30m) pedestrian crossing

Acceptability of safe and unsafe traffic behaviour

Q13_1) Where you live, how acceptable would most other people say it is for a CAR DRIVER to....?

You can indicate your answer on a scale from 1 to 5, where 1 is "unacceptable" and 5 is "acceptable". The numbers in between can be used to refine your response.

Binary variable: acceptable (4-5) – unacceptable/neutral (1-3)

Items (random):

- drive when he/she may be over the legal limit for drinking and driving
- drive 1 hour after using drugs (other than medication)
- drive faster than the speed limit outside built-up areas (but not on motorways/freeways)
- not wear a seatbelt while driving
- transport children in the car without securing them (child's car seat, seatbelt, etc.)
- talk on a hand-held mobile phone while driving
- read a text message/email or check social media (e.g. Facebook, twitter, etc.) while driving

Q14_1) How acceptable do you, personally, feel it is for a CAR DRIVER to...? You can indicate your answer on a scale from 1 to 5, where 1 is "unacceptable" and 5 is "acceptable". The numbers in between can be used to refine your response.

Binary variable: acceptable (4-5) – unacceptable/neutral (1-3)

Items (random)

- drive when he/she may be over the legal limit for drinking and driving
- drive 1 hour after using drugs (other than medication)
- drive after taking a medication that may influence the ability to drive
- drive faster than the speed limit inside built-up areas
- drive faster than the speed limit outside built-up areas (but not on motorways/freeways)
- drive faster than the speed limit on motorways/freeways
- not wear a seatbelt while driving
- transport children in the car without securing them (child's car seat, seatbelt, etc.)
- talk on a hand-held mobile phone while driving
- talk on a hand-free mobile phone while driving
- read a text message/email or check social media (e.g. Facebook, twitter, etc.) while driving
- drive when they're so sleepy that they have trouble keeping their eyes open

Attitudes towards safe and unsafe behaviour in traffic

Q15) To what extent do you agree with each of the following statements? You can indicate your answer on a scale from 1 to 5, where 1 is "disagree" and 5 is "agree". The numbers in between can be used to refine your response.

Binary variable: agree (4-5) – disagree/neutral (1-3)

Items (random):

Normative beliefs & subjective norms (including injunctive norms from Q13)

⁶ For data collection in Benin, during covid-19 lockdown: "During a typical month, how often do you as a CYCLIST ...?"

- Most of my friends would drive after having drunk alcohol.
- Most of my friends would drive 20 km/h over the speed limit in a residential area.

Behaviour believe & attitudes

- For short trips, one can risk driving under the influence of alcohol.
- I have to drive fast; otherwise, I have the impression of losing time.
- Respecting speed limits is boring or dull.
- For short trips, it is not really necessary to use the appropriate child restraint.
- I use a mobile phone while driving, because I always want to be available.
- To save time, I often use a mobile phone while driving.

Perceived behaviour control (here: self-efficacy)

- I trust myself to drive after having a glass of alcohol.
- I have the ability to drive when I am a little drunk after a party
- I am able to drive after drinking a large amount of alcohol (e.g. half a liter of wine).
- I trust myself when I drive significantly faster than the speed limit.
- I am able to drive fast through a sharp curve.
- I trust myself when I check my messages on the mobile phone while driving.
- I have the ability to write a message on the mobile phone while driving.
- I am able to talk on a hand-held mobile phone while driving.

Habits

- I often drive after drinking alcohol.
- Even when I am a little drunk after a party, I drive.
- It sometimes happens that I drive after consuming a large amount of alcohol (e.g. a liter of beer or half a liter of wine).
- I often drive faster than the speed limit.
- I like to drive in a sporty fast manner through a sharp curve.
- It happens sometimes that I write a message on the mobile phone while driving.
- I often talk on a hand-held mobile phone while driving.
- I often check my messages on the mobile phone while driving.

Intentions

- I will do my best not to drive after drinking alcohol in the next 30 days.
- I will do my best to respect speed limits in the next 30 days.
- I will do my best not to use my mobile phone while driving in the next 30 days.

Quality control items

- Indicate number 1 on the answering scale.
- Indicate number 4 on the answering scale.

Subjective safety & risk perception

Q16) How safe or unsafe do you feel when using the following transport modes in [country]? You can indicate your answer on a scale from 0 to 10, where 0 is "very unsafe" and 10 is "very safe". The numbers in between can be used to refine your response.

Items (random) = Items indicated by the respondent in Q10 are displayed.

Q17) How often do you think each of the following factors is the cause of a road crash involving a car? You can indicate your answer on a scale from 1 to 6, where 1 is "never" and 6 is "(almost) always". The numbers in between can be used to refine your response.

Binary variable: often/frequently (4-6) - not that often/not frequently (1-3)

Items (random)

- driving after drinking alcohol
- driving after taking drugs (other than medication)
- driving faster than the speed limit
- using a hand-held mobile phone while driving
- using a hands-free mobile phone while driving
- inattentiveness or day-dreaming while driving
- driving while tired

Support for policy measures

Q18) Do you oppose or support a legal obligation to ...? You can indicate your answer on a scale from 1 to 5, where 1 is "oppose" and 5 is "support". The numbers in between can be used to refine your response.

Binary variable: support (4-5) – oppose/neutral (1-3)

Items (random)

- install an alcohol "interlock" for drivers who have been caught drunk driving on more than one occasion (technology that won't let the car start if the driver's alcohol level is over the legal limit)

- have zero tolerance for alcohol (0,0 ‰) for novice drivers (licence obtained less than 2 years)
- have zero tolerance for alcohol (0,0 ‰) for all drivers
- install Intelligent Speed Assistance (ISA) in new cars (which automatically limits the maximum speed of the vehicle and can be turned off manually)
- install Dynamic Speed Warning signs (traffic control devices that are programmed to provide a message to drivers exceeding a certain speed threshold)
- have a seatbelt reminder system for the front and back seats in new cars
- require all cyclists to wear a helmet
- require cyclists under the age of 12 to wear a helmet
- require all moped drivers and motorcyclists to wear a helmet
- require pedestrians to wear reflective material when walking in the streets in the dark
- require cyclists to wear reflective material when cycling in the dark
- require moped drivers and motorcyclists to wear reflective material when driving in the dark
- have zero tolerance for using any type of mobile phone while driving (hand-held or hands-free) for all drivers
- not using headphones (or earbuds) while walking in the streets
- not using headphones (or earbuds) while riding a bicycle

Q19_1) What do you think about the current traffic rules and penalties in your country for driving or riding under the influence of alcohol? agree – disagree

Items:

- The traffic rules should be stricter.
- The traffic rules are not being checked sufficiently.
- The penalties are too severe.

Q19_2) What do you think about the current traffic rules and penalties in your country for driving or riding faster than the speed limit? agree – disagree

Items: Q19_1

Q19_3) What do you think about the current traffic rules and penalties in your country for using a mobile phone while driving or riding? agree – disagree

Items: Q19_1

Enforcement

Q20_1) On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for... You can indicate your answer on a scale from 1 to 7, where 1 is "very unlikely" and 7 is "very likely". The numbers in between can be used to refine your response.

Binary variable: likely (5-7) – unlikely/neutral (1-4)

Items (random)

- ... alcohol, in other words, being subjected to a Breathalyser test
- ... the use of illegal drugs
- ... respecting the speed limits (including checks by a police car with a camera, fixed cameras, mobile cameras, and section control systems)
- ... wearing your seatbelt
- ... the use of hand-held mobile phone to talk or text while driving

Q21_1) In the past 12 months, how many times have you been checked by the police for using alcohol while DRIVING A CAR (i.e., being subjected to a Breathalyser test)? never – 1 time – at least 2 times - I prefer not to respond to this question

Binary variable: at least once - never (removing "I prefer not to respond to this Q")

Q22_1) In the past 12 months, how many times have you been checked by the police for the use of drugs (other than medication) while DRIVING A CAR? never – 1 time – at least 2 times - I prefer not to respond to this question

Binary variable: at least once - never (removing "I prefer not to respond to this Q")

Involvement in road crashes

Introduction: The following questions focus on road crashes. With road crashes, we mean any collision involving at least one road vehicle (e.g., car, motorcycle, or bicycle) in motion on a public or private road to which the public has right of access. Furthermore, these crashes result in material damage, injury, or death. Collisions include those between road vehicles, road vehicles and pedestrians, road vehicles and animals or fixed obstacles, road and rail vehicles, and one road vehicle alone.

Q23_1a) In the past 12 months, how many times have you personally been involved in road crashes in which you or somebody else had to be taken to the hospital? ___ times (number; max. 10) if 0 →

Q23_2a; if >0 → Q23_1b → Q23_2a

Binary variable: at least once - never

Q23_1b) Please indicate the transport modes you were using at the time of these crashes.

Items indicated by the respondent in Q10 are displayed; Threshold = 'at least a few days a year'.

Number to be indicated after each transport mode; note the sum should be equal to the number indicated in Q23_1a

Q23_2a) In the past 12 months, how many times have you personally been involved in road crashes with only minor injuries (no need for hospitalisation) for you or other people? ___ times (number; max. 10) if 0 → Q23_3a; if >0 → Q23_2b → Q23_3a

Binary variable: at least once - never

Q23_2b) = Q23_1b

Q23_3a) In the past 12 months, how many times have you personally been involved in road crashes with only material damage?

___ times (number; max. number 10) if 0 → skip Q23_3b; if >0 → Q23_3b → next Q

Binary variable: at least once - never

Q23_3b) = Q23_1b

Vehicle automation

I2) Introduction: The following questions focus on your opinion about automated passenger cars. We talk about two different levels of vehicle automation:

Semi-automated passenger cars: Drivers can choose to have the vehicle control all critical driving functions, including monitoring the road, steering, and accelerating or braking in certain traffic and environmental conditions. These vehicles will monitor roadways and prompt drivers when they need to resume control of the vehicle.

Fully-automated passenger cars: The vehicle controls all critical driving functions and monitoring all traffic situations. Drivers do not take control of the vehicle at any time.

Q24) How interested would you be in using the following types of automated passenger car? You can indicate your answer on a scale from 1 to 7, where 1 is "not at all interested" and 7 is "very interested". The numbers in between can be used to refine your response.

Binary variable: interested (5-7) - not interested/neutral (1-4)

Items:

- semi-automated passenger car
- fully-automated passenger car

Q25_1) How likely do you think it is that the following benefits will occur if everyone would use a semi-automated passenger car? You can indicate your answer on a scale from 1 to 7, where 1 is "very unlikely" and 7 is "very likely". The numbers in between can be used to refine your response.

Binary variable: likely (5-7) – unlikely/neutral (1-4)

Items (random):

- fewer crashes
- reduced severity of crash
- less traffic congestion
- shorter travel time
- lower vehicle emissions
- better fuel economy
- time for functional activities, not related to driving (e.g. working)
- time for recreative activities, not related to driving (e.g. reading, sleeping, eating)

Q25_2) How likely do you think it is that the following benefits will occur if everyone would use a fully-automated passenger car? You can indicate your answer on a scale from 1 to 7, where 1 is "very unlikely" and 7 is "very likely". The numbers in between can be used to refine your response.

Items (random) = Q25_1

Bonus question to be filled in by national partner

Q26)? You can indicate your answer on a scale from 1 to 5, where 1 is "...." and 5 is "....". The numbers in between can be used to refine your response.
Items (random; 4 items)

Q27)? You can indicate your answer on a scale from 1 to 5, where 1 is "...." and 5 is "....". The numbers in between can be used to refine your response.
Items (random; 4 items)

Social desirability scale

Introduction: The survey is almost finished. The following questions have nothing to do with road safety, but they are important background information. There are no good or bad answers.

Q28) To what extent are the following statements true? You can indicate your answer on a scale from 1 to 5, where 1 is "very untrue" and 5 is "very true". The numbers in between can be used to refine your response.
Items (random):

- I always respect the highway code, even if the risk of getting caught is very low.
- I would still respect speed limits at all times, even if there were no police checks.
- I have never driven through a traffic light that had just turned red.
- I do not care what other drivers think about me.
- I always remain calm and rational in traffic. (if needed pop-up: rational = non-emotional)
- I am always confident of how to react in traffic situations.

Appendix 2: ESRA2 weights

The following weights were used to calculate representative means on national and regional level. They are based on UN population statistics (UNdata, 2019). The weighting took into account small corrections with respect to national representativeness of the sample based on gender and six age groups (18-24y, 25-34y, 35-44y, 45-54y, 55-64y, 65y+). For the regions, the weighting also took into account the population size of each country in the total set of countries from this region.

Individual country weight	Individual country weight is a weighting factor based on the gender*6 age groups (18-24y, 25-34y, 35-44y, 45-54y, 55-64y, 65y+) distribution in a country as retrieved from the UN population statistics.
Europe24 weight	European weighting factor based on all 24 European countries participating in ESRA2, considering individual country weight and population size of the country as retrieved from the UN population statistics.
America3 weight	American weighting factor based on all 3 North and Latin American countries participating in ESRA2, considering individual country weight and population size of the country as retrieved from the UN population statistics.
AsiaOceania9 weight	Asian and Oceanian weighting factor based on all 9 Asian and Oceanian countries participating in ESRA2, considering individual country weight and population size of the country as retrieved from the UN population statistics.
Africa12 weight	African weighting factor based on all 12 African countries participating in ESRA2, considering individual country weight and population size of the country as retrieved from the UN population statistics.

Appendix 3: Sample sizes (not weighted)

Abbrev.	Country	Respondents Total	Car drivers	Car passengers	At least a few days a month		
					Cyclists	PTW	Pedestrians
AT	Austria	1999	977	739	980	242	1951
BE	Belgium	1985	1532	1245	797	209	1789
CH	Switzerland	1020	788	669	427	141	990
DE	Germany	1989	1506	1193	998	204	1862
DK	Denmark	984	732	775	556	82	931
EL	Greece	1015	823	844	367	269	975
ES	Spain	980	784	660	384	189	926
FI	Finland	994	703	701	483	73	950
FR	France	994	779	675	268	89	890
IE	Ireland	1031	782	813	302	95	925
IT	Italy	980	865	668	473	223	911
NL	Netherlands	983	710	571	722	141	893
PL	Poland	993	734	718	607	116	921
PT	Portugal	998	874	705	252	137	902
SE	Sweden	987	679	729	467	121	936
SI	Slovenia	1035	868	758	572	165	992
UK	United Kingdom	963	651	701	227	70	853
CA	Canada	980	758	696	275	90	810
CZ	Czech Republic	989	598	648	345	105	918
HU	Hungary	1014	720	802	586	161	987
IL	Israel	984	830	762	140	48	886
KR	Republic of Korea	1043	752	845	420	121	928
US	United States	1016	808	819	234	96	778
AU	Australia	968	778	697	198	71	861
NO	Norway	1040	813	708	436	89	993
CO	Colombia	1013	575	895	603	367	945
RS	Serbia	1041	757	937	560	157	1001
JP	Japan	980	623	595	410	108	746
IN	India	1035	713	901	598	757	937
EG	Egypt	996	611	835	424	357	828
KE	Kenya	1000	618	947	467	387	943
NG	Nigeria	1000	711	948	452	487	923
MA	Morocco	1047	626	883	413	327	903
ZA	South Africa	1013	845	857	263	150	872
BJ	Benin	272	74	197	103	204	251
BG	Bulgaria	1005	685	826	417	153	913
CM	Cameroon	204	87	201	49	122	194
GH	Ghana	378	178	360	151	165	350
IS	Iceland	413	341	271	230	157	357
CI	Ivory Coast	379	123	363	79	112	362
LB	Lebanon	1016	731	678	272	221	857
LU	Luxembourg	555	505	392	189	46	545
MY	Malaysia	529	452	417	242	252	470
TH	Thailand	1026	674	649	695	763	881
TN	Tunisia	383	231	321	134	111	348
UG	Uganda	378	190	361	154	162	359
VN	Vietnam	1009	501	745	691	933	952
ZM	Zambia	478	252	448	164	109	453
TOTAL		45114	31947	33168	19276	9954	41148
Europe24		25987	19206	17748	11645	3434	24311
AsiaOceania9		8590	6054	6289	3666	3274	7518
America3		3009	2141	2410	1112	553	2533
Africa12		7528	4546	6721	2853	2693	6786

Appendix 4: Gender and age results on risky behaviour car drivers

This appendix contains the results for statistical significance testing of gender and age differences. For the following list of questions results are presented in tables A4.1. to A4.16.

Question	Table number
Q12_1a_1. Over the last 12 months, how often did you as a CAR DRIVER drive after drinking alcohol?	A4.1
Q12_1a_2. Over the last 12 months, how often did you as a CAR DRIVER drive faster than the speed limit outside built-up areas (but not on motorways/freeways)?	A4.2
Q12_1a_3. Over the last 12 months, how often did you as a CAR DRIVER read a text message or email while driving?	A4.3
Q12_1b_1. Over the last 30 days, how often did you as a CAR DRIVER drive when you may have been over the legal limit for drinking and driving?	A4.4
Q12_1b_2. Over the last 30 days, how often did you as a CAR DRIVER drive after drinking alcohol?	A4.5
Q12_1b_3. Over the last 30 days, how often did you as a CAR DRIVER drive 1 hour after using drugs (other than medication)?	A4.6
Q12_1b_4. Over the last 30 days, how often did you as a CAR DRIVER drive after taking medication that carries a warning that it may influence your driving ability?	A4.7
Q12_1b_5. Over the last 30 days, how often did you as a CAR DRIVER drive faster than the speed limit inside built-up areas ?	A4.8
Q12_1b_6. Over the last 30 days, how often did you as a CAR DRIVER drive faster than the speed limit outside built-up areas (but not on motorways/freeways)?	A4.9
Q12_1b_7. Over the last 30 days, how often did you as a CAR DRIVER drive faster than the speed limit on motorways/freeways?	A4.10
Q12_1b_8. Over the last 30 days, how often did you as a CAR DRIVER drive without wearing your seatbelt?	A4.11
Q12_1b_9. Over the last 30 days, how often did you as a CAR DRIVER transport children under 150cm without using child restraint systems (e.g. child safety seat cushion)?	A4.12
Q12_1b_10. Over the last 30 days, how often did you as a CAR DRIVER transport children over 150cm without wearing their seatbelts?	A4.13
Q12_1b_11. Over the last 30 days, how often did you as a CAR DRIVER talk on a hand-held mobile phone while driving?	A4.14
Q12_1b_12. Over the last 30 days, how often did you as a CAR DRIVER talk on a hands-free mobile phone while driving?	A4.15
Q12_1b_13. Over the last 30 days, how often did you as a CAR DRIVER read a text message/email or check social media (e.g. Facebook, twitter, etc.) while driving?	A4.16
Q12_1b_14. Over the last 30 days, how often did you as a CAR DRIVER drive when you were so sleepy that you had trouble keeping your eyes open?	A4.17

Table A4.1. Over the last 12 months, how often did you as a CAR DRIVER drive after drinking alcohol?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
never (1)	85.6% ^b	71.4% ^a		never (1)	74.7% ^a	75.7% ^a	75.7% ^a	80.9% ^b	80.2% ^b	79.9% ^b
at least once (2-5)	14.4% ^b	28.6% ^a		at least once (2-5)	25.3% ^a	24.3% ^a	24.3% ^a	19.1% ^b	19.8% ^b	20.1% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	538.45	1	0.000	Chi-Square	62.72	5	0.000			
Cramer's V	0.172			Cramer's V	0.059					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	85.1% ^a	84.4% ^a		never (1)	84.0% ^a	83.6% ^a	83.7% ^a	90.0% ^b	86.4% ^{a,b}	84.9% ^{a,b}
at least once (2-5)	14.9% ^a	15.6% ^a		at least once (2-5)	16.0% ^a	16.4% ^a	16.3% ^a	10.0% ^b	13.6% ^{a,b}	15.1% ^{a,b}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	0.51	1	0.476	Chi-Square	20.55	5	0.001			
Cramer's V	0.009			Cramer's V	0.058					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	84.5% ^b	71.6% ^a		never (1)	73.0% ^a	74.9% ^a	77.4% ^{a,b}	81.3% ^{a,b}	79.1% ^{a,b}	82.5% ^b
at least once (2-5)	15.5% ^b	28.4% ^a		at least once (2-5)	27.0% ^a	25.1% ^a	22.6% ^{a,b}	18.7% ^{a,b}	20.9% ^{a,b}	17.5% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	56.81	1	0.000	Chi-Square	14.96	5	0.011			
Cramer's V	0.157			Cramer's V	0.080					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	85.5% ^b	78.5% ^a		never (1)	85.6% ^a	82.0% ^b	81.0% ^b	80.9% ^b	85.5% ^{a,b}	68.4% ^c
at least once (2-5)	14.5% ^b	21.5% ^a		at least once (2-5)	14.4% ^a	18.0% ^b	19.0% ^b	19.1% ^b	14.5% ^{a,b}	31.6% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	55.88	1	0.000	Chi-Square	79.18	5	0.000			
Cramer's V	0.089			Cramer's V	0.107					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.2. Over the last 12 months, how often did you as a CAR DRIVER drive faster than the speed limit outside built-up areas (but not on motorways/freeways)?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
never (1)	30.7% ^b	20.8% ^a		never (1)	22.2% ^{a,b}	20.2% ^a	23.2% ^{b,c}	25.8% ^c	30.1% ^d	29.4% ^d
at least once (2-5)	69.3% ^b	79.2% ^a		at least once (2-5)	77.8% ^{a,b}	79.8% ^a	76.8% ^{b,c}	74.2% ^c	69.9% ^d	70.6% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	232.54	1	0.000	Chi-Square	126.62	5	0.000			
Cramer's V	0.113			Cramer's V	0.083					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	51.3% ^b	41.1% ^a		never (1)	41.5% ^a	47.0% ^b	46.5% ^{a,b}	45.6% ^{a,b}	48.1% ^{a,b}	48.7% ^{a,b}
at least once (2-5)	48.7% ^b	58.9% ^a		at least once (2-5)	58.5% ^a	53.0% ^b	53.5% ^{a,b}	54.4% ^{a,b}	51.9% ^{a,b}	51.3% ^{a,b}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	62.74	1	0.000	Chi-Square	12.68	5	0.027			
Cramer's V	0.102			Cramer's V	0.046					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	30.0% ^b	23.5% ^a		never (1)	30.4% ^a	25.8% ^a	23.9% ^a	29.3% ^a	26.2% ^a	28.1% ^a
at least once (2-5)	70.0% ^b	76.5% ^a		at least once (2-5)	69.6% ^a	74.2% ^a	76.1% ^a	70.7% ^a	73.8% ^a	71.9% ^a
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	12.17	1	0.000	Chi-Square	5.20	5	0.392			
Cramer's V	0.073			Cramer's V	0.047					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	53.8% ^b	42.4% ^a		never (1)	46.9% ^a	47.9% ^a	48.1% ^a	48.0% ^a	50.2% ^a	44.0% ^a
at least once (2-5)	46.2% ^b	57.6% ^a		at least once (2-5)	53.1% ^a	52.1% ^a	51.9% ^a	52.0% ^a	49.8% ^a	56.0% ^a
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	91.19	1	0.000	Chi-Square	4.52	5	0.477			
Cramer's V	0.114			Cramer's V	0.025					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.3. Over the last 12 months, how often did you as a CAR DRIVER read a text message or email while driving?

* gender				* age group												
Europe24				Europe24	18-24	25-34	35-44	45-54	55-64	65+						
never (1)	female	male		never (1)	48.0%a	48.2%a	56.6%b	68.9%c	82.6%d	88.2%e						
at least once (2-5)	29.5%b	34.4%a		at least once (2-5)	52.0%a	51.8%a	43.4%b	31.1%c	17.4%d	11.8%e						
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tests	Value	df	p-value	Tests	Value	df	p-value									
Chi-Square	49.60	1	0.000	Chi-Square	2079.98	5	0.000									
Cramer's V	0.052			Cramer's V	0.338											
AsiaOceania9				AsiaOceania9												
never (1)	female	male		never (1)	50.4%a	52.7%a,b	55.8%b,c	61.3%c	69.6%d	69.8%d						
at least once (2-5)	44.0%a	43.9%a		at least once (2-5)	49.6%a	47.3%a,b	44.2%b,c	38.7%c	30.4%d	30.2%d						
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tests	Value	df	p-value	Tests	Value	df	p-value									
Chi-Square	0.02	1	0.899	Chi-Square	87.35	5	0.000									
Cramer's V	0.002			Cramer's V	0.120											
America3				America3												
never (1)	female	male		never (1)	43.4%a	41.6%a	45.7%a	60.56%b	66.4%b	82.7%c						
at least once (2-5)	40.8%a	43.4%a		at least once (2-5)	56.6%a	58.4%a	54.3%a	39.4%b	33.6%b	17.3%c						
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tests	Value	df	p-value	Tests	Value	df	p-value									
Chi-Square	1.69	1	0.194	Chi-Square	224.41	5	0.000									
Cramer's V	0.027			Cramer's V	0.311											
Africa12				Africa12												
never (1)	female	male		never (1)	47.0%a	47.1%a	51.0%a,b	53.5%b	70.8%c	47.9%a,b						
at least once (2-5)	46.2%b	52.1%a		at least once (2-5)	53.0%a	52.9%a	49.0%a,b	46.5%b	29.2%c	52.1%a,b						
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tests	Value	df	p-value	Tests	Value	df	p-value									
Chi-Square	23.66	1	0.000	Chi-Square	100.82	5	0.000									
Cramer's V	0.058			Cramer's V	0.120											

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.4. Over the last 30 days, how often did you as a CAR DRIVER drive when you may have been over the legal limit for drinking and driving?

* gender				* age group												
Europe24				Europe24	18-24	25-34	35-44	45-54	55-64	65+						
never (1)	female	male		never (1)	83.3%a	84.2%a	85.1%a,b	87.1%b	89.4%c	90.4%c						
at least once (2-5)	7.8%b	17.8%a		at least once (2-5)	16.7%a	15.8%a	14.9%a,b	12.9%b	10.6%c	9.6%c						
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tests	Value	df	p-value	Tests	Value	df	p-value									
Chi-Square	400.69	1	0.000	Chi-Square	106.89	5	0.000									
Cramer's V	0.148			Cramer's V	0.077											
AsiaOceania9				AsiaOceania9												
never (1)	female	male		never (1)	76.8%a	79.7%a,b	81.5%b	87.2%c	87.1%c	84.8%b,c,d						
at least once (2-5)	18.7%a	19.0%a		at least once (2-5)	23.2%a	20.3%a,b	18.5%b	12.8%c	12.9%c	15.2%b,c,d						
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tests	Value	df	p-value	Tests	Value	df	p-value									
Chi-Square	0.15	1	0.702	Chi-Square	48.39	5	0.000									
Cramer's V	0.005			Cramer's V	0.090											
America3				America3												
never (1)	female	male		never (1)	83.9%a	86.4%a	86.0%a	90.2%a	87.9%a	95.1%b						
at least once (2-5)	7.2%b	15.9%a		at least once (2-5)	16.1%a	13.6%a	14.0%a	9.8%a	12.1%a	4.9%b						
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tests	Value	df	p-value	Tests	Value	df	p-value									
Chi-Square	44.03	1	0.000	Chi-Square	32.26	5	0.000									
Cramer's V	0.138			Cramer's V	0.118											
Africa12				Africa12												
never (1)	female	male		never (1)	84.6%a	86.4%a	85.7%a	86.1%a	86.0%a	69.6%b						
at least once (2-5)	10.7%b	19.4%a		at least once (2-5)	15.4%a	13.6%a	14.3%a	13.9%a	14.0%a	30.4%b						
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Tests	Value	df	p-value	Tests	Value	df	p-value									
Chi-Square	100.51	1	0.000	Chi-Square	93.28	5	0.000									
Cramer's V	0.120			Cramer's V	0.116											

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.5. Over the last 30 days, how often did you as a CAR DRIVER drive after drinking alcohol?

* gender				* age group							
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	86.8% ^b	73.0% ^a		never (1)	75.7% ^a	76.8% ^a	77.6% ^a	82.1% ^b	82.0% ^b	81.5% ^b	
at least once (2-5)	13.2% ^b	27.0% ^a		at least once (2-5)	24.3% ^a	23.2% ^a	22.4% ^a	17.9% ^b	18.0% ^b	18.5% ^b	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	537.66	1	0.000	Chi-Square	69.59	5	0.000				
Cramer's V	0.172			Cramer's V	0.062						
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	85.2% ^b	82.9% ^a		never (1)	83.8% ^a	82.0% ^a	83.1% ^a	89.4% ^b	86.6% ^{a,b}	84.3% ^{a,b}	
at least once (2-5)	14.8% ^b	17.1% ^a		at least once (2-5)	16.2% ^a	18.0% ^a	16.9% ^a	10.6% ^b	13.4% ^{a,b}	15.7% ^{a,b}	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	5.54	1	0.019	Chi-Square	24.25	5	0.000				
Cramer's V	0.030			Cramer's V	0.063						
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	84.1% ^b	73.5% ^a		never (1)	77.4% ^{a,b}	71.6% ^a	78.4% ^{a,b}	81.7% ^b	80.9% ^{b,c}	83.1% ^{b,d}	
at least once (2-5)	15.9% ^b	26.5% ^a		at least once (2-5)	22.6% ^{a,b}	28.4% ^a	21.6% ^{a,b}	18.3% ^b	19.1% ^{b,c}	16.9% ^{b,d}	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	39.28	1	0.000	Chi-Square	22.06	5	0.001				
Cramer's V	0.130			Cramer's V	0.097						
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	83.9% ^b	77.9% ^a		never (1)	82.8% ^a	80.8% ^a	81.0% ^a	80.3% ^a	84.0% ^a	69.8% ^b	
at least once (2-5)	16.1% ^b	22.1% ^a		at least once (2-5)	17.2% ^a	19.2% ^a	19.0% ^a	19.7% ^a	16.0% ^a	30.2% ^b	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	40.18	1	0.000	Chi-Square	44.94	5	0.000				
Cramer's V	0.076			Cramer's V	0.080						

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.6. Over the last 30 days, how often did you as a CAR DRIVER drive 1 hour after using drugs (other than medication)?

* gender				* age group							
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	97.0% ^b	93.2% ^a		never (1)	89.4% ^a	90.4% ^a	93.1% ^b	97.1% ^c	98.1% ^{c,d}	98.2% ^d	
at least once (2-5)	3.0% ^b	6.8% ^a		at least once (2-5)	10.6% ^a	9.6% ^a	6.9% ^b	2.9% ^c	1.9% ^{c,d}	1.8% ^d	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	139.40	1	0.000	Chi-Square	445.45	5	0.000				
Cramer's V	0.088			Cramer's V	0.156						
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	79.3% ^a	81.2% ^a		never (1)	80.5% ^{a,b}	78.7% ^{a,b}	77.5% ^a	83.1% ^{b,c}	88.7% ^c	83.0% ^{a,b,c}	
at least once (2-5)	20.7% ^a	18.8% ^a		at least once (2-5)	19.5% ^{a,b}	21.3% ^{a,b}	22.5% ^a	16.9% ^{b,c}	11.3% ^c	17.0% ^{a,b,c}	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	3.16	1	0.076	Chi-Square	31.99	5	0.000				
Cramer's V	0.023			Cramer's V	0.073						
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	90.9% ^b	85.4% ^a		never (1)	86.4% ^{a,b}	80.1% ^a	85.7% ^{a,b}	91.2% ^{b,d}	91.4% ^{b,c,d}	94.1% ^d	
at least once (2-5)	9.1% ^b	14.6% ^a		at least once (2-5)	13.6% ^{a,b}	19.9% ^a	14.3% ^{a,b}	8.8% ^{b,d}	8.6% ^{b,c,d}	5.9% ^d	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	16.77	1	0.000	Chi-Square	52.46	5	0.000				
Cramer's V	0.085			Cramer's V	0.150						
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	86.7% ^b	80.8% ^a		never (1)	81.6% ^a	86.2% ^b	86.2% ^b	85.7% ^b	86.2% ^{a,b}	63.2% ^c	
at least once (2-5)	13.3% ^b	19.2% ^a		at least once (2-5)	18.4% ^a	13.8% ^b	13.8% ^b	14.3% ^b	13.8% ^{a,b}	36.8% ^c	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	44.04	1	0.000	Chi-Square	176.15	5	0.000				
Cramer's V	0.079			Cramer's V	0.159						

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.7. Over the last 30 days, how often did you as a CAR DRIVER drive after taking medication that carries a warning that it may influence your driving ability?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
never (1)	86.6% ^b	83.7% ^a		never (1)	82.7% ^{a,c}	82.7% ^a	84.9% ^{a,b}	86.5% ^b	85.2% ^{b,c}	86.7% ^{b,d}
at least once (2-5)	13.4% ^b	16.3% ^a		at least once (2-5)	17.3% ^{a,c}	17.3% ^a	15.1% ^{a,b}	13.5% ^b	14.8% ^{b,c}	13.3% ^{b,d}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	31.46	1	0.000	Chi-Square	34.25	5	0.000			
Cramer's V	0.042			Cramer's V	0.043					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	76.2% ^b	72.5% ^a		never (1)	72.9% ^{a,b}	69.7% ^a	74.9% ^b	81.2% ^{c,d}	84.4% ^c	75.0% ^{a,b,d}
at least once (2-5)	23.8% ^b	27.5% ^a		at least once (2-5)	27.1% ^{a,b}	30.3% ^a	25.1% ^b	18.8% ^{c,d}	15.6% ^c	25.0% ^{a,b,d}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	10.53	1	0.001	Chi-Square	62.86	5	0.000			
Cramer's V	0.042			Cramer's V	0.102					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	86.7% ^b	83.5% ^a		never (1)	79.7% ^a	80.9% ^a	84.5% ^{a,b}	85.4% ^{a,b}	90.3% ^b	88.5% ^{b,c}
at least once (2-5)	13.3% ^b	16.5% ^a		at least once (2-5)	20.3% ^a	19.1% ^a	15.5% ^{a,b}	14.6% ^{a,b}	9.7% ^b	11.5% ^{b,c}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	4.74	1	0.029	Chi-Square	24.08	5	0.000			
Cramer's V	0.045			Cramer's V	0.102					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	81.0% ^a	79.3% ^a		never (1)	82.8% ^a	79.4% ^a	80.8% ^a	80.9% ^a	82.3% ^a	67.6% ^b
at least once (2-5)	19.0% ^a	20.7% ^a		at least once (2-5)	17.2% ^a	20.6% ^a	19.2% ^a	19.1% ^a	17.7% ^a	32.4% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	3.13	1	0.077	Chi-Square	57.96	5	0.000			
Cramer's V	0.021			Cramer's V	0.091					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.8. Over the last 30 days, how often did you as a CAR DRIVER drive faster than the speed limit inside built-up areas?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
never (1)	49.6% ^b	38.2% ^a		never (1)	37.0% ^a	37.4% ^a	41.4% ^b	43.2% ^b	48.1% ^c	50.1% ^c
at least once (2-5)	50.4% ^b	61.8% ^a		at least once (2-5)	63.0% ^a	62.6% ^a	58.6% ^b	56.8% ^b	51.9% ^c	49.9% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	236.92	1	0.000	Chi-Square	175.36	5	0.000			
Cramer's V	0.114			Cramer's V	0.098					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	58.9% ^b	53.7% ^a		never (1)	54.5% ^a	56.0% ^{a,b}	56.5% ^{a,b}	56.3% ^{a,b}	53.0% ^a	63.3% ^b
at least once (2-5)	41.1% ^b	46.3% ^a		at least once (2-5)	45.5% ^a	44.0% ^{a,b}	43.5% ^{a,b}	43.7% ^{a,b}	47.0% ^a	36.7% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	16.15	1	0.000	Chi-Square	9.49	5	0.091			
Cramer's V	0.052			Cramer's V	0.040					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	43.6% ^a	41.4% ^a		never (1)	42.9% ^{a,b,c}	35.5% ^a	39.0% ^{a,b}	44.8% ^{b,c}	49.8% ^c	44.4% ^{b,c,d}
at least once (2-5)	56.4% ^a	58.6% ^a		at least once (2-5)	57.1% ^{a,b,c}	64.5% ^a	61.0% ^{a,b}	55.2% ^{b,c}	50.2% ^c	55.6% ^{b,c,d}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	1.16	1	0.283	Chi-Square	20.06	5	0.001			
Cramer's V	0.022			Cramer's V	0.093					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	63.5% ^b	53.9% ^a		never (1)	58.7% ^a	58.7% ^a	59.2% ^a	61.0% ^a	62.3% ^a	43.3% ^b
at least once (2-5)	36.5% ^b	46.1% ^a		at least once (2-5)	41.3% ^a	41.3% ^a	40.8% ^a	39.0% ^a	37.7% ^a	56.7% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	66.51	1	0.000	Chi-Square	52.46	5	0.000			
Cramer's V	0.098			Cramer's V	0.087					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.9. Over the last 30 days, how often did you as a CAR DRIVER drive faster than the speed limit outside built-up areas (but not on motorways/freeways)?

* gender				* age group						
Europe24		female	male	Europe24	18-24	25-34	35-44	45-54	55-64	65+
never (1)	38.7% ^b	26.8% ^a		never (1)	29.8% ^a	29.3% ^a	30.6% ^a	31.2% ^a	37.3% ^b	35.2% ^b
at least once (2-5)	61.3% ^b	73.2% ^a		at least once (2-5)	70.2% ^a	70.7% ^a	69.4% ^a	68.8% ^a	62.7% ^b	64.8% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	292.88	1	0.000	Chi-Square	70.40	5	0.000			
Cramer's V	0.127			Cramer's V	0.062					
AsiaOceania9		female	male	AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	57.2% ^b	48.6% ^a		never (1)	48.5% ^a	53.9% ^{b,c}	50.4% ^{a,b}	55.3% ^{b,c}	54.7% ^{a,b,c}	59.8% ^c
at least once (2-5)	42.8% ^b	51.4% ^a		at least once (2-5)	51.5% ^a	46.1% ^{b,c}	49.6% ^{a,b}	44.7% ^{b,c}	45.3% ^{a,b,c}	40.2% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	43.40	1	0.000	Chi-Square	21.92	5	0.001			
Cramer's V	0.085			Cramer's V	0.060					
America3		female	male	America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	39.1% ^b	30.8% ^a		never (1)	41.6% ^a	32.9% ^a	32.4% ^a	36.2% ^a	36.3% ^a	34.8% ^a
at least once (2-5)	60.9% ^b	69.2% ^a		at least once (2-5)	58.4% ^a	67.1% ^a	67.6% ^a	63.8% ^a	63.7% ^a	65.2% ^a
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	17.28	1	0.000	Chi-Square	7.38	5	0.194			
Cramer's V	0.086			Cramer's V	0.056					
Africa12		female	male	Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	58.7% ^b	44.9% ^a		never (1)	49.0% ^a	53.0% ^a	50.9% ^a	53.6% ^a	46.6% ^a	51.6% ^a
at least once (2-5)	41.3% ^b	55.1% ^a		at least once (2-5)	51.0% ^a	47.0% ^a	49.1% ^a	46.4% ^a	53.4% ^a	48.4% ^a
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	130.46	1	0.000	Chi-Square	11.91	5	0.036			
Cramer's V	0.137			Cramer's V	0.041					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.10. Over the last 30 days, how often did you as a CAR DRIVER drive faster than the speed limit on motorways/freeways?

* gender				* age group						
Europe23(a)		female	male	Europe23(a)	18-24	25-34	35-44	45-54	55-64	65+
never (1)	46.4% ^b	31.1% ^a		never (1)	35.3% ^{a,b}	32.8% ^a	35.8% ^{a,b}	38.5% ^b	43.2% ^c	42.8% ^c
at least once (2-5)	53.6% ^b	68.9% ^a		at least once (2-5)	64.7% ^{a,b}	67.2% ^a	64.2% ^{a,b}	61.5% ^b	56.8% ^c	57.2% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	443.73	1	0.000	Chi-Square	116.23	5	0.000			
Cramer's V	0.156			Cramer's V	0.080					
AsiaOceania9		female	male	AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	57.7% ^b	47.3% ^a		never (1)	47.2% ^a	53.0% ^b	52.6% ^b	52.1% ^{a,b}	56.7% ^b	58.9% ^b
at least once (2-5)	42.3% ^b	52.7% ^a		at least once (2-5)	52.8% ^a	47.0% ^b	47.4% ^b	47.9% ^{a,b}	43.3% ^b	41.1% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	64.53	1	0.000	Chi-Square	22.29	5	0.000			
Cramer's V	0.104			Cramer's V	0.061					
America3		female	male	America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	33.0% ^b	26.8% ^a		never (1)	40.3% ^a	24.7% ^{b,c}	24.2% ^b	33.3% ^{a,d}	32.7% ^{a,c,d}	28.7% ^{b,d}
at least once (2-5)	67.0% ^b	73.2% ^a		at least once (2-5)	59.7% ^a	75.3% ^{b,c}	75.8% ^b	66.7% ^{a,d}	67.3% ^{a,c,d}	71.3% ^{b,d}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	10.48	1	0.001	Chi-Square	29.66	5	0.000			
Cramer's V	0.067			Cramer's V	0.113					
Africa12		female	male	Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	58.3% ^b	44.2% ^a		never (1)	49.4% ^{a,b}	49.9% ^{a,b}	51.7% ^{a,b}	52.7% ^a	55.7% ^a	45.2% ^b
at least once (2-5)	41.7% ^b	55.8% ^a		at least once (2-5)	50.6% ^{a,b}	50.1% ^{a,b}	48.3% ^{a,b}	47.3% ^a	44.3% ^a	54.8% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	137.52	1	0.000	Chi-Square	14.27	5	0.014			
Cramer's V	0.140			Cramer's V	0.045					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.11. Over the last 30 days, how often did you as a CAR DRIVER drive without wearing your seatbelt?

* gender				* age group							
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	86.0% ^b	79.6% ^a		never (1)	74.4% ^a	79.0% ^b	80.3% ^b	85.2% ^{c,d}	84.7% ^c	87.0% ^d	
at least once (2-5)	14.0% ^b	20.4% ^a		at least once (2-5)	25.6% ^a	21.0% ^b	19.7% ^b	14.8% ^{c,d}	15.3% ^c	13.0% ^d	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	131.72	1	0.000	Chi-Square	194.96	5	0.000				
Cramer's V	0.085			Cramer's V	0.103						
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	63.2% ^a	61.4% ^a		never (1)	54.9% ^a	58.7% ^a	63.8% ^b	67.8% ^{b,d}	80.8% ^c	72.3% ^d	
at least once (2-5)	36.8% ^a	38.6% ^a		at least once (2-5)	45.1% ^a	41.3% ^a	36.2% ^b	32.2% ^{b,d}	19.2% ^c	27.7% ^d	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	2.03	1	0.154	Chi-Square	123.01	5	0.000				
Cramer's V	0.018			Cramer's V	0.143						
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	85.4% ^b	78.0% ^a		never (1)	69.7% ^a	77.1% ^a	77.9% ^a	85.2% ^b	87.0% ^b	89.7% ^b	
at least once (2-5)	14.6% ^b	22.0% ^a		at least once (2-5)	30.3% ^a	22.9% ^a	22.1% ^a	14.8% ^b	13.0% ^b	10.3% ^b	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	21.63	1	0.000	Chi-Square	67.40	5	0.000				
Cramer's V	0.097			Cramer's V	0.170						
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	60.0% ^b	51.2% ^a		never (1)	51.4% ^a	55.1% ^a	60.1% ^b	53.0% ^a	70.4% ^c	42.5% ^d	
at least once (2-5)	40.0% ^b	48.8% ^a		at least once (2-5)	48.6% ^a	44.9% ^a	39.9% ^b	47.0% ^a	29.6% ^c	57.5% ^d	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	54.62	1	0.000	Chi-Square	102.56	5	0.000				
Cramer's V	0.088			Cramer's V	0.121						

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.12. Over the last 30 days, how often did you as a CAR DRIVER transport children under 150cm without using child restraint systems (e.g. child safety seat cushion)?

* gender				* age group							
Europe23(a)	female	male		Europe23(a)	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	88.9% ^b	81.5% ^a		never (1)	69.5% ^a	82.4% ^b	82.3% ^b	88.6% ^c	90.1% ^{c,d}	92.7% ^d	
at least once (2-5)	11.1% ^b	18.5% ^a		at least once (2-5)	30.5% ^a	17.6% ^b	17.7% ^b	11.4% ^c	9.9% ^{c,d}	7.3% ^d	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	79.25	1	0.000	Chi-Square	217.09	5	0.000				
Cramer's V	0.104			Cramer's V	0.173						
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	59.2% ^b	55.6% ^a		never (1)	49.4% ^a	62.7% ^b	57.4% ^{b,c,d}	54.2% ^{a,c}	54.5% ^{a,b}	46.2% ^{a,d}	
at least once (2-5)	40.8% ^b	44.4% ^a		at least once (2-5)	50.6% ^a	37.3% ^b	42.6% ^{b,c,d}	45.8% ^{a,c}	45.5% ^{a,b}	53.8% ^{a,d}	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	4.29	1	0.038	Chi-Square	37.10	5	0.000				
Cramer's V	0.036			Cramer's V	0.106						
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	89.6% ^a	88.3% ^a		never (1)	90.6% ^{a,b,c}	82.4% ^a	86.0% ^{a,b}	95.0% ^{b,c}	96.9% ^c	95.7% ^{b,c,d}	
at least once (2-5)	10.4% ^a	11.7% ^a		at least once (2-5)	9.4% ^{a,b,c}	17.6% ^a	14.0% ^{a,b}	5.0% ^{b,c}	3.1% ^c	4.3% ^{b,c,d}	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	0.33	1	0.569	Chi-Square	25.63	5	0.000				
Cramer's V	0.020			Cramer's V	0.180						
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+	
never (1)	57.8% ^b	49.1% ^a		never (1)	55.4% ^{a,b}	54.0% ^{a,b}	49.6% ^{a,c}	56.1% ^b	58.5% ^{a,b}	40.6% ^c	
at least once (2-5)	42.2% ^b	50.9% ^a		at least once (2-5)	44.6% ^{a,b}	46.0% ^{a,b}	50.4% ^{a,c}	43.9% ^b	41.5% ^{a,b}	59.4% ^c	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	30.12	1	0.000	Chi-Square	27.32	5	0.000				
Cramer's V	0.086			Cramer's V	0.082						

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.13. Over the last 30 days, how often did you as a CAR DRIVER transport children over 150cm without wearing their seatbelts?

* gender				* age group								
Europe23(a)				Europe23(a)								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	90.0% ^b	84.3% ^a		77.6% ^a	81.3% ^a	85.6% ^b	90.5% ^c	90.8% ^c	92.2% ^c			
at least once (2-5)	10.0% ^b	15.7% ^a		22.4% ^a	18.7% ^a	14.4% ^b	9.5% ^c	9.2% ^c	7.8% ^c			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	49.44	1	0.000	Chi-Square	147.64	5	0.000					
Cramer's V	0.085			Cramer's V	0.147							
AsiaOceania9				AsiaOceania9								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	53.9% ^a	52.7% ^a		48.8% ^a	55.4% ^{a,b}	52.2% ^{a,b}	57.3% ^b	56.8% ^{a,b}	44.2% ^{a,b}			
at least once (2-5)	46.1% ^a	47.3% ^a		51.2% ^a	44.6% ^{a,b}	47.8% ^{a,b}	42.7% ^b	43.2% ^{a,b}	55.8% ^{a,b}			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	0.44	1	0.509	Chi-Square	13.52	5	0.019					
Cramer's V	0.012			Cramer's V	0.068							
America3				America3								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	88.1% ^a	88.7% ^a		90.7% ^a	71.1% ^b	90.5% ^a	93.1% ^a	92.4% ^a	96.5% ^a			
at least once (2-5)	11.9% ^a	11.3% ^a		9.3% ^a	28.9% ^b	9.5% ^a	6.9% ^a	7.6% ^a	3.5% ^a			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	0.06	1	0.802	Chi-Square	46.67	5	0.000					
Cramer's V	0.010			Cramer's V	0.265							
Africa12				Africa12								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	55.1% ^b	51.1% ^a		54.4% ^{a,b,c}	55.9% ^a	49.3% ^{b,c}	50.5% ^{a,b,c}	57.4% ^{a,b}	43.8% ^c			
at least once (2-5)	44.9% ^b	48.9% ^a		45.6% ^{a,b,c}	44.1% ^a	50.7% ^{b,c}	49.5% ^{a,b,c}	42.6% ^{a,b}	56.2% ^c			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	5.76	1	0.016	Chi-Square	18.33	5	0.003					
Cramer's V	0.039			Cramer's V	0.070							

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.14. Over the last 30 days, how often did you as a CAR DRIVER talk on a hand-held mobile phone while driving?

* gender				* age group								
Europe24				Europe24								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	75.0% ^b	67.5% ^a		59.3% ^a	60.2% ^a	63.5% ^b	71.0% ^c	78.7% ^d	84.4% ^e			
at least once (2-5)	25.0% ^b	32.5% ^a		40.7% ^a	39.8% ^a	36.5% ^b	29.0% ^c	21.3% ^d	15.6% ^e			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	127.02	1	0.000	Chi-Square	812.27	5	0.000					
Cramer's V	0.084			Cramer's V	0.211							
AsiaOceania9				AsiaOceania9								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	60.7% ^a	58.9% ^a		58.5% ^a	58.4% ^a	58.3% ^a	58.3% ^a	63.4% ^a	73.4% ^b			
at least once (2-5)	39.3% ^a	41.1% ^a		41.5% ^a	41.6% ^a	41.7% ^a	41.7% ^a	36.6% ^a	26.6% ^b			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	1.95	1	0.163	Chi-Square	30.62	5	0.000					
Cramer's V	0.018			Cramer's V	0.071							
America3				America3								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	60.9% ^a	64.3% ^a		48.7% ^a	52.9% ^a	57.9% ^{a,b}	63.1% ^b	66.8% ^{b,c}	79.5% ^d			
at least once (2-5)	39.1% ^a	35.7% ^a		51.3% ^a	47.1% ^a	42.3% ^{a,b}	36.9% ^b	33.2% ^{b,c}	20.5% ^d			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	2.82	1	0.093	Chi-Square	103.88	5	0.000					
Cramer's V	0.035			Cramer's V	0.211							
Africa12				Africa12								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	52.2% ^b	45.0% ^a		51.1% ^a	44.1% ^b	48.6% ^{a,c}	45.1% ^{b,c}	60.8% ^d	49.4% ^{a,b}			
at least once (2-5)	47.8% ^b	55.0% ^a		48.9% ^a	55.9% ^b	51.4% ^{a,c}	54.9% ^{b,c}	39.2% ^d	50.6% ^{a,b}			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	35.93	1	0.000	Chi-Square	53.61	5	0.000					
Cramer's V	0.072			Cramer's V	0.088							

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.15. Over the last 30 days, how often did you as a CAR DRIVER talk on a hands-free mobile phone while driving?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
never (1)	56.9% ^b	47.5% ^a		never (1)	41.4% ^a	45.1% ^{a,b}	45.7% ^b	51.1% ^c	57.9% ^d	62.9% ^e
at least once (2-5)	43.1% ^b	52.5% ^a		at least once (2-5)	58.6% ^a	54.9% ^{a,b}	54.3% ^b	48.9% ^c	42.1% ^d	37.1% ^e
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	158.57	1	0.000	Chi-Square	419.50	5	0.000			
Cramer's V	0.093			Cramer's V	0.152					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	41.5% ^b	45.2% ^a		never (1)	43.3% ^{a,b}	40.5% ^a	41.7% ^{a,b}	46.2% ^b	42.8% ^{a,b}	60.8% ^c
at least once (2-5)	58.5% ^b	54.8% ^a		at least once (2-5)	56.7% ^{a,b}	59.5% ^a	58.3% ^{a,b}	53.8% ^b	57.2% ^{a,b}	39.2% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	8.70	1	0.003	Chi-Square	50.16	5	0.000			
Cramer's V	0.038			Cramer's V	0.091					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	47.1% ^a	50.1% ^a		never (1)	41.5% ^{a,b}	37.6% ^a	37.4% ^a	49.9% ^{b,c}	55.4% ^c	64.8% ^d
at least once (2-5)	52.9% ^b	49.9% ^a		at least once (2-5)	58.5% ^{a,b}	62.4% ^a	62.6% ^a	50.1% ^{b,c}	44.6% ^c	35.2% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	2.09	1	0.148	Chi-Square	101.87	5	0.000			
Cramer's V	0.030			Cramer's V	0.209					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	36.6% ^b	34.3% ^a		never (1)	37.9% ^a	31.0% ^b	33.5% ^{a,b}	35.3% ^{a,b}	38.6% ^a	47.5% ^c
at least once (2-5)	63.4% ^b	65.7% ^a		at least once (2-5)	62.1% ^a	69.0% ^b	66.5% ^{a,b}	64.7% ^{a,b}	61.4% ^a	52.5% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	4.17	1	0.041	Chi-Square	56.08	5	0.000			
Cramer's V	0.024			Cramer's V	0.090					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.16. Over the last 30 days, how often did you as a CAR DRIVER read a text message/email or check social media (e.g. Facebook, twitter, etc.) while driving?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
never (1)	78.2% ^b	73.2% ^a		never (1)	56.9% ^a	58.3% ^a	66.3% ^b	77.6% ^c	88.3% ^d	92.3% ^e
at least once (2-5)	21.8% ^b	26.8% ^a		at least once (2-5)	43.1% ^a	41.7% ^a	33.7% ^b	22.4% ^c	11.7% ^d	7.7% ^e
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	60.49	1	0.000	Chi-Square	1826.53	5	0.000			
Cramer's V	0.058			Cramer's V	0.317					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	60.6% ^a	60.1% ^a		never (1)	57.3% ^a	56.1% ^a	59.3% ^a	65.8% ^b	71.3% ^{b,c}	74.8% ^c
at least once (2-5)	39.4% ^a	39.9% ^a		at least once (2-5)	42.7% ^a	43.9% ^a	40.7% ^a	34.2% ^b	28.7% ^{b,c}	25.2% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	0.19	1	0.667	Chi-Square	77.22	5	0.000			
Cramer's V	0.006			Cramer's V	0.113					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	63.9% ^a	64.6% ^a		never (1)	49.5% ^a	45.2% ^a	52.1% ^a	69.3% ^b	76.0% ^b	86.1% ^c
at least once (2-5)	36.1% ^a	35.4% ^a		at least once (2-5)	50.5% ^a	54.8% ^a	47.9% ^a	30.7% ^b	24.0% ^b	13.9% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	0.13	1	0.724	Chi-Square	241.23	5	0.000			
Cramer's V	0.007			Cramer's V	0.322					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	58.0% ^b	53.3% ^a		never (1)	51.5% ^a	50.5% ^a	56.7% ^b	59.5% ^b	75.3% ^c	55.0% ^{a,b}
at least once (2-5)	42.0% ^b	46.7% ^a		at least once (2-5)	48.5% ^a	49.5% ^a	43.3% ^b	40.5% ^b	24.7% ^c	45.0% ^{a,b}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	15.43	1	0.000	Chi-Square	113.58	5	0.000			
Cramer's V	0.047			Cramer's V	0.128					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A4.17. Over the last 30 days, how often did you as a CAR DRIVER drive when you were so sleepy that you had trouble keeping your eyes open?

* gender				* age group							
Europe24		female	male	Europe24		18-24	25-34	35-44	45-54	55-64	65+
never (1)	84.5% ^b	76.3% ^a		never (1)	70.9% ^a	72.9% ^a	76.4% ^b	79.5% ^c	85.9% ^d	89.2% ^e	
at least once (2-5)	15.5% ^b	23.7% ^a		at least once (2-5)	29.1% ^a	27.1% ^a	23.6% ^b	20.5% ^c	14.1% ^d	10.8% ^e	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	195.74	1	0.000	Chi-Square	489.32	5	0.000				
Cramer's V	0.104			Cramer's V	0.164						
AsiaOceania9		female	male	AsiaOceania9		18-24	25-34	35-44	45-54	55-64	65+
never (1)	74.1% ^a	74.4% ^a		never (1)	74.1% ^a	71.7% ^a	75.1% ^a	80.4% ^b	77.3% ^{a,b}	73.6% ^{a,b}	
at least once (2-5)	25.9% ^a	25.6% ^a		at least once (2-5)	25.9% ^a	28.3% ^a	24.9% ^a	19.6% ^b	22.7% ^{a,b}	26.4% ^{a,b}	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	0.07	1	0.789	Chi-Square	23.89	5	0.000				
Cramer's V	0.003			Cramer's V	0.063						
America3		female	male	America3		18-24	25-34	35-44	45-54	55-64	65+
never (1)	84.3% ^b	72.5% ^a		never (1)	64.9% ^a	69.5% ^a	73.6% ^a	85.2% ^b	83.5% ^b	89.2% ^b	
at least once (2-5)	15.7% ^b	27.5% ^a		at least once (2-5)	35.1% ^a	30.5% ^a	26.4% ^a	14.8% ^b	16.5% ^b	10.8% ^b	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	47.48	1	0.000	Chi-Square	105.19	5	0.000				
Cramer's V	0.143			Cramer's V	0.213						
Africa12		female	male	Africa12		18-24	25-34	35-44	45-54	55-64	65+
never (1)	81.8% ^b	74.8% ^a		never (1)	76.8% ^a	78.5% ^a	79.3% ^a	80.2% ^a	85.7% ^b	63.5% ^c	
at least once (2-5)	18.2% ^b	25.2% ^a		at least once (2-5)	23.2% ^a	21.5% ^a	20.7% ^a	19.8% ^a	14.3% ^b	36.5% ^c	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value				
Chi-Square	49.50	1	0.000	Chi-Square	82.41	5	0.000				
Cramer's V	0.084			Cramer's V	0.109						

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Appendix 5: Gender and age results on risky behaviour moped riders and motorcyclists

This appendix contains the results for statistical significance testing of gender and age differences. For the following list of questions results are presented in tables A5.1 to A5.4.

Question	Table number
Q12_3_1. Over the last 30 days, how often did you as a MOPED DRIVER OR MOTORCYCLIST ride when you may have been over the legal limit for drinking and driving?	A5.1
Q12_3_2. Over the last 30 days, how often did you as a MOPED DRIVER OR MOTORCYCLIST ride faster than the speed limit outside built-up areas (but not on motorways/freeways)?	A5.2
Q12_3_3. Over the last 30 days, how often did you as a MOPED DRIVER OR MOTORCYCLIST ride a moped or motorcycle without a helmet?	A5.3
Q12_3_4. Over the last 30 days, how often did you as a MOPED DRIVER OR MOTORCYCLIST read a text message/email or check social media (e.g. Facebook, twitter, etc.) while riding a moped or motorcycle?	A5.4

Table A5.1. Over the last 30 days, how often did you as a MOPED DRIVER OR MOTORCYCLIST ride when you may have been over the legal limit for drinking and driving?

* gender				* age group									
Europe23(a)				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	86.0% ^b	77.3% ^a		68.7% ^a	73.4% ^{a,b}	78.5% ^b	90.5% ^c	90.0% ^c	88.5% ^c				
at least once (2-5)	14.0% ^b	22.7% ^a		31.3% ^a	26.6% ^{a,b}	21.5% ^b	9.5% ^c	10.0% ^c	11.5% ^c				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	32.80	1	0.000	Chi-Square	139.75	5	0.000						
Cramer's V	0.102			Cramer's V	0.211								
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	78.6% ^b	81.2% ^a		80.2% ^{a,b}	80.2% ^{a,b}	77.0% ^a	84.8% ^b	81.2% ^{a,b}	80.2% ^{a,b}				
at least once (2-5)	21.4% ^b	18.8% ^a		19.8% ^{a,b}	19.8% ^{a,b}	23.0% ^a	15.2% ^b	18.8% ^{a,b}	19.8% ^{a,b}				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	6.18	1	0.013	Chi-Square	15.47	5	0.009						
Cramer's V	0.033			Cramer's V	0.051								
America3				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	81.6% ^a	77.2% ^a		75.4% ^{a,c}	66.7% ^a	79.7% ^{a,c}	98.1% ^b	77.8% ^{a,c}	92.9% ^{b,c}				
at least once (2-5)	18.4% ^a	22.8% ^a		24.6% ^{a,c}	33.3% ^a	20.3% ^{a,c}	1.9% ^b	21.2% ^{a,c}	7.1% ^{b,c}				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	0.91	1	0.339	Chi-Square	23.99	5	0.000						
Cramer's V	0.052			Cramer's V	0.264								
Africa12				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	83.4% ^b	80.9% ^a		83.8% ^a	83.2% ^a	84.4% ^a	86.4% ^a	96.5% ^b	48.2% ^c				
at least once (2-5)	16.6% ^b	19.1% ^a		16.2% ^a	16.8% ^a	15.6% ^a	13.6% ^a	3.5% ^b	51.8% ^c				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	4.27	1	0.039	Chi-Square	266.83	5	0.000						
Cramer's V	0.032			Cramer's V	0.256								

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A5.2. Over the last 30 days, how often did you as a MOPED DRIVER OR MOTORCYCLIST ride faster than the speed limit outside built-up areas (but not on motorways/freeways)?

* gender				* age group								
Europe23(a)				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	67.7% ^b	48.3% ^a		43.9% ^a	51.0% ^{a,b}	53.7% ^b	62.4% ^{c,e}	57.4% ^{b,c,d}	67.7% ^e			
at least once (2-5)	32.3% ^b	51.7% ^a		56.1% ^a	49.0% ^{a,b}	46.3% ^b	37.6% ^{c,e}	42.6% ^{b,c,d}	32.34% ^e			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	105.49	1	0.000	Chi-Square	64.96	5	0.000					
Cramer's V	0.184			Cramer's V	0.144							
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	61.5% ^b	53.1% ^a		52.3% ^a	59.8% ^b	54.5% ^a	62.3% ^b	64.2% ^b	56.2% ^{a,b}			
at least once (2-5)	38.5% ^b	46.9% ^a		47.7% ^a	40.2% ^b	45.5% ^a	37.7% ^b	35.8% ^b	43.8% ^{a,b}			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	42.17	1	0.000	Chi-Square	36.97	5	0.000					
Cramer's V	0.085			Cramer's V	0.079							
America3				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	52.0% ^a	54.2% ^a		52.4% ^a	43.8% ^a	52.2% ^a	62.3% ^a	62.5% ^a	71.4% ^a			
at least once (2-5)	48.0% ^a	45.8% ^a		47.6% ^a	56.2% ^a	47.8% ^a	37.7% ^a	37.5% ^a	28.6% ^a			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	0.15	1	0.695	Chi-Square	10.04	5	0.074					
Cramer's V	0.021			Cramer's V	0.171							
Africa12				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	63.6% ^b	54.2% ^a		59.6% ^a	59.0% ^a	60.3% ^a	58.2% ^a	71.0% ^b	31.9% ^c			
at least once (2-5)	36.4% ^b	45.8% ^a		40.4% ^a	41.0% ^a	39.7% ^a	41.8% ^a	29.0% ^b	68.1% ^c			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	34.47	1	0.000	Chi-Square	99.61	5	0.000					
Cramer's V	0.092			Cramer's V	0.157							

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A5.3. Over the last 30 days, how often did you as a MOPED DRIVER OR MOTORCYCLIST ride a moped or motorcycle without a helmet?

* gender				* age group								
Europe23(a)				Europe23(a)								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	80.2% ^b	71.0% ^a		62.2% ^a	68.9% ^{a,b}	72.4% ^b	84.9% ^c	79.8% ^c	82.5% ^c			
at least once (2-5)	19.8% ^b	29.0% ^a		37.7% ^a	31.1% ^{a,b}	27.6% ^b	15.1% ^c	20.2% ^c	17.5% ^c			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	30.28	1	0.000	Chi-Square	102.56	5	0.000					
Cramer's V	0.098			Cramer's V	0.181							
AsiaOceania9				AsiaOceania9								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	55.7% ^b	51.6% ^a		46.1% ^a	57.8% ^b	52.7% ^c	58.5% ^{b,c}	61.4% ^{b,c}	52.1% ^{a,b,c}			
at least once (2-5)	44.3% ^b	48.4% ^a		53.9% ^a	42.2% ^b	47.3% ^c	41.5% ^{b,c}	38.6% ^{b,c}	47.9% ^{a,b,c}			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	9.48	1	0.002	Chi-Square	65.34	5	0.000					
Cramer's V	0.040			Cramer's V	0.105							
America3				America3								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	66.4% ^a	60.3% ^a		47.7% ^a	57.3% ^{a,b}	68.1% ^{a,b,c}	76.9% ^{b,c}	56.3% ^{a,b,c}	85.2% ^c			
at least once (2-5)	33.6% ^a	39.7% ^a		52.3% ^a	42.7% ^{a,b}	31.9% ^{a,b,c}	23.1% ^{b,c}	43.8% ^{a,b,c}	14.8% ^c			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	1.26	1	0.261	Chi-Square	19.24	5	0.002					
Cramer's V	0.061			Cramer's V	0.238							
Africa12				Africa12								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	60.7% ^b	49.3% ^a		52.6% ^{a,b}	49.3% ^a	56.1% ^{b,c,e}	62.4% ^c	65.0% ^{c,d}	52.5% ^{a,e}			
at least once (2-5)	39.3% ^b	50.7% ^a		47.4% ^{a,b}	50.7% ^a	43.9% ^{b,c,e}	37.6% ^c	35.0% ^{c,d}	47.5% ^{a,e}			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	50.47	1	0.000	Chi-Square	34.03	5	0.000					
Cramer's V	0.111			Cramer's V	0.091							

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A5.4. Over the last 30 days, how often did you as a MOPED DRIVER OR MOTORCYCLIST read a text message/email or check social media (e.g. Facebook, twitter, etc.) while riding a moped or motorcycle?

* gender				* age group								
Europe23(a)				Europe23(a)								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	79.7% ^a	77.2% ^a		63.5% ^a	68.2% ^a	77.5% ^b	88.1% ^c	92.6% ^c	92.1% ^c			
at least once (2-5)	20.3% ^a	22.8% ^a		36.5% ^a	31.8% ^a	22.5% ^b	11.9% ^c	7.4% ^c	7.9% ^c			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	2.39	1	0.122	Chi-Square	219.09	5	0.000					
Cramer's V	0.028			Cramer's V	0.265							
AsiaOceania9				AsiaOceania9								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	68.8% ^a	70.7% ^a		65.9% ^a	69.7% ^a	68.7% ^a	77.5% ^b	82.5% ^b	72.5% ^{a,b}			
at least once (2-5)	31.2% ^a	29.3% ^a		34.1% ^a	30.3% ^a	31.3% ^a	22.5% ^b	17.5% ^b	27.5% ^{a,b}			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	2.52	1	0.112	Chi-Square	48.74	5	0.000					
Cramer's V	0.021			Cramer's V	0.091							
America3				America3								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	74.2% ^a	67.0% ^a		70.3% ^{a,b}	54.3% ^a	65.2% ^{a,c,d}	88.5% ^b	84.8% ^{b,c}	82.1% ^{b,d}			
at least once (2-5)	25.8% ^a	33.0% ^a		29.7% ^{a,b}	45.7% ^a	34.8% ^{a,c,d}	11.5% ^b	15.2% ^{b,c}	17.9% ^{b,d}			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	1.94	1	0.164	Chi-Square	26.03	5	0.000					
Cramer's V	0.076			Cramer's V	0.276							
Africa12				Africa12								
	female	male		18-24	25-34	35-44	45-54	55-64	65+			
never (1)	74.4% ^b	66.2% ^a		66.2% ^a	67.0% ^a	73.4% ^b	76.1% ^b	86.6% ^c	64.5% ^a			
at least once (2-5)	25.6% ^b	33.8% ^a		33.8% ^a	33.0% ^a	26.6% ^b	23.9% ^b	13.4% ^c	35.5% ^a			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	30.85	1	0.000	Chi-Square	50.85	5	0.000					
Cramer's V	0.087			Cramer's V	0.112							

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Appendix 6: Gender and age results on risky behaviour of cyclists and pedestrians

This appendix contains the results for statistical significance testing of gender and age differences. For the following list of questions results are presented in tables A6.1. to A6.9.

Question	Table number
Q12_4_1. Over the last 30 days, how often did you as a CYCLIST cycle when you think you may have had too much to drink?	A6.1
Q12_4_2. Over the last 30 days, how often did you as a CYCLIST cycle without a helmet?	A6.2
Q12_4_3. Over the last 30 days, how often did you as a CYCLIST cycle while listening to music through headphones?	A6.3
Q12_4_4. Over the last 30 days, how often did you as a CYCLIST read a text message/email or check social media (e.g. Facebook, twitter, etc.) while cycling?	A6.4
Q12_4_5. Over the last 30 days, how often did you as a CYCLIST cycle on the road next to the cycle lane?	A6.5
Q12_5_1. Over the last 30 days, how often did you as a PEDESTRIAN listen to music through headphones as a pedestrian while walking in the streets?	A6.6
Q12_5_2. Over the last 30 days, how often did you as a PEDESTRIAN read a text message/email or check social media (e.g. Facebook, Twitter, etc.) while walking in the streets?	A6.7
Q12_5_3. Over the last 30 days, how often did you as a PEDESTRIAN cross the road when a pedestrian light is red?	A6.8
Q12_5_4. Over the last 30 days, how often did you as a PEDESTRIAN cross the road at places other than at a nearby (distance less than 30m) pedestrian crossing?	A6.9

Table A6.1. Over the last 30 days, how often did you as a CYCLIST cycle when you think you may have had too much to drink?

* gender				* age group									
Europe23(a)				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	88.9% ^b	77.6% ^a		70.6% ^a	78.3% ^b	81.3% ^b	87.9% ^c	87.6% ^c	88.4% ^c				
at least once (2-5)	11.1% ^b	22.4% ^a		at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	225.73	1	0.000	Chi-Square	258.48	5	0.000						
Cramer's V	0.149			Cramer's V	0.160								
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	79.6% ^a	81.5% ^a		82.8% ^{a,c}	79.4% ^{a,b}	77.6% ^b	80.6% ^{a,b}	81.5% ^{a,b,c}	90.1% ^c				
at least once (2-5)	20.4% ^a	18.5% ^a		at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	2.93	1	0.087	Chi-Square	22.79	5	0.000						
Cramer's V	0.024			Cramer's V	0.066								
America3				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	91.3% ^b	80.4% ^a		79.1% ^{a,c,d}	75.0% ^a	83.8% ^{a,b}	93.6% ^b	90.4% ^{b,c}	90.4% ^{b,d}				
at least once (2-5)	8.7% ^b	19.6% ^a		at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	17.55	1	0.000	Chi-Square	28.50	5	0.000						
Cramer's V	0.149			Cramer's V	0.189								
Africa12				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	84.3% ^a	84.3% ^a		84.0% ^a	87.9% ^{b,c}	84.9% ^{a,b}	83.9% ^{a,b}	91.8% ^c	67.6% ^d				
at least once (2-5)	15.7% ^a	15.7% ^a		at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	0.00	1	0.960	Chi-Square	100.58	5	0.000						
Cramer's V	0.001			Cramer's V	0.151								

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A6.2. Over the last 30 days, how often did you as a CYCLIST cycle without a helmet?

* gender				* age group								
Europe23(a)				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	31.2% ^a	30.8% ^a		24.4% ^a	33.4% ^{b,d}	29.4% ^c	34.3% ^b	29.8% ^{c,d}	32.3% ^{b,c}			
at least once (2-5)	68.8% ^a	69.2% ^a		at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	0.17	1	0.679	Chi-Square	45.46	5	0.000					
Cramer's V	0.004			Cramer's V	0.067							
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	31.7% ^a	29.2% ^a		25.0% ^{a,c}	39.0% ^b	29.6% ^a	22.0% ^c	27.0% ^{a,c}	29.1% ^{a,c}			
at least once (2-5)	68.3% ^a	70.8% ^a		at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	3.77	1	0.052	Chi-Square	100.88	5	0.000					
Cramer's V	0.027			Cramer's V	0.140							
America3				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	50.6% ^a	47.2% ^a		52.7% ^a	45.9% ^a	41.9% ^a	47.2% ^a	53.5% ^a	56.7% ^a			
at least once (2-5)	49.4% ^a	52.8% ^a		at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	0.91	1	0.341	Chi-Square	8.17	5	0.147					
Cramer's V	0.034			Cramer's V	0.101							
Africa12				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	49.5% ^b	37.3% ^a		36.8% ^a	41.5% ^{a,c}	50.6% ^b	40.7% ^{a,c}	48.6% ^{b,c}	43.5% ^{a,b}			
at least once (2-5)	50.5% ^b	62.7% ^a		at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)	at least once (2-5)
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	64.36	1	0.000	Chi-Square	43.63	5	0.000					
Cramer's V	0.120			Cramer's V	0.099							

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A6.3. Over the last 30 days, how often did you as a CYCLIST cycle while listening to music through headphones?

* gender				* age group									
Europe23(a)				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	73.6% ^b	67.8% ^a		43.9% ^a	57.6% ^b	66.8% ^c	77.1% ^d	85.4% ^e	88.5% ^f				
at least once (2-5)	26.4% ^b	32.2% ^a		56.1% ^a	42.4% ^b	33.2% ^c	22.9% ^d	14.6% ^e	11.5% ^f				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	40.90	1	0.000	Chi-Square	1064.72	5	0.000						
Cramer's V	0.064			Cramer's V	0.324								
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	57.4% ^a	56.8% ^a		55.1% ^a	56.4% ^{a,b}	57.1% ^{a,b}	59.9% ^{a,b}	64.6% ^b	60.9% ^{a,b}				
at least once (2-5)	42.6% ^a	43.2% ^a		44.9% ^a	43.6% ^{a,b}	42.9% ^{a,b}	40.1% ^{a,b}	35.4% ^b	40.1% ^{a,b}				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	0.25	1	0.621	Chi-Square	11.11	5	0.049						
Cramer's V	0.007			Cramer's V	0.046								
America3				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	59.6% ^a	63.0% ^a		59.1% ^{a,b}	50.3% ^a	47.8% ^a	70.9% ^{b,c}	77.2% ^c	78.6% ^{c,d}				
at least once (2-5)	40.4% ^a	37.0% ^a		40.9% ^{a,b}	49.7% ^a	52.2% ^a	29.1% ^{b,c}	22.8% ^c	21.4% ^{c,d}				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	0.94	1	0.332	Chi-Square	51.87	5	0.000						
Cramer's V	0.035			Cramer's V	0.256								
Africa12				18-24	25-34	35-44	45-54	55-64	65+				
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	
	56.0% ^b	49.0% ^a		46.1% ^a	51.5% ^{b,d}	57.2% ^b	54.9% ^b	72.2% ^c	45.5% ^{a,d}				
at least once (2-5)	44.0% ^b	51.0% ^a		53.9% ^a	48.5% ^{b,d}	42.8% ^b	45.1% ^b	27.8% ^c	54.5% ^{a,d}				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	20.37	1	0.000	Chi-Square	75.65	5	0.000						
Cramer's V	0.068			Cramer's V	0.131								

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A6.4. Over the last 30 days, how often did you as a CYCLIST read a text message/email or check social media (e.g. Facebook, twitter, etc.) while cycling?

* gender				* age group								
Europe23(a)				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	83.9% ^b	78.7% ^a		57.2% ^a	70.8% ^b	79.5% ^c	87.7% ^d	92.9% ^e	94.6% ^e			
at least once (2-5)	16.1% ^b	21.3% ^a		42.8% ^a	29.2% ^b	20.5% ^c	12.3% ^d	7.1% ^e	5.4% ^e			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	44.93	1	0.000	Chi-Square	993.77	5	0.000					
Cramer's V	0.067			Cramer's V	0.313							
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	71.7% ^b	66.9% ^a		65.7% ^a	68.1% ^a	67.1% ^a	76.4% ^b	82.1% ^b	79.1% ^b			
at least once (2-5)	28.3% ^b	33.1% ^a		34.3% ^a	31.9% ^a	32.9% ^a	23.6% ^b	17.9% ^b	20.9% ^b			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	14.02	1	0.000	Chi-Square	53.18	5	0.000					
Cramer's V	0.052			Cramer's V	0.101							
America3				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	80.7% ^a	76.2% ^a		73.6% ^{a,b}	66.3% ^a	71.7% ^{a,b}	81.9% ^{b,d}	93.0% ^c	91.2% ^{c,d}			
at least once (2-5)	19.3% ^a	23.8% ^a		26.4% ^{a,b}	33.7% ^a	28.3% ^{a,b}	18.1% ^{b,d}	7.0% ^c	8.8% ^{c,d}			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	2.23	1	0.135	Chi-Square	45.76	5	0.000					
Cramer's V	0.053			Cramer's V	0.240							
Africa12				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)	never (1)
	73.4% ^b	68.1% ^a		67.0% ^a	68.1% ^a	75.0% ^b	79.3% ^{b,c}	85.5% ^c	59.0% ^d			
at least once (2-5)	26.6% ^b	31.9% ^a		33.0% ^a	31.9% ^a	25.0% ^b	20.7% ^{b,c}	14.5% ^c	41.0% ^d			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	14.05	1	0.000	Chi-Square	83.19	5	0.000					
Cramer's V	0.056			Cramer's V	0.137							

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A6.5. Over the last 30 days, how often did you as a CYCLIST cycle on the road next to the cycle lane?

* gender				* age group								
Europe23(a)				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)								
	67.4%b	55.7%a		49.8%a	56.4%b	57.1%b	65.4%c	66.2%c,d	69.5%d			
at least once (2-5)	32.6%b	44.3%a		at least once (2-5)								
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	143.14	1	0.000	Chi-Square	181.15	5	0.000					
Cramer's V	0.119			Cramer's V	0.134							
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)								
	44.3%a	43.0%a		40.2%a	46.0%b	45.1%a,b	45.4%a,b	43.0%a,b	37.0%a,b			
at least once (2-5)	55.7%a	57.0%a		at least once (2-5)								
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	0.94	1	0.333	Chi-Square	16.29	5	0.006					
Cramer's V	0.014			Cramer's V	0.056							
America3				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)								
	64.3%a	58.5%a		59.5%a,b,c	52.6%a	55.7%a,b	63.3%a,b,c	68.9%b,c	72.1%c			
at least once (2-5)	35.7%a	41.5%a		at least once (2-5)								
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	2.71	1	0.100	Chi-Square	15.75	5	0.008					
Cramer's V	0.059			Cramer's V	0.141							
Africa12				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)								
	54.5%b	45.7%a		47.6%a	46.7%a	55.2%b	50.8%a,b	44.4%a	51.2%a,b			
at least once (2-5)	45.5%b	54.3%a		at least once (2-5)								
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	32.53	1	0.000	Chi-Square	18.72	5	0.002					
Cramer's V	0.086			Cramer's V	0.065							

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A6.6. Over the last 30 days, how often did you as a PEDESTRIAN listen to music through headphones as a pedestrian while walking in the streets?

* gender				* age group								
Europe24				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)								
	69.1%b	63.2%a		24.7%a	45.3%b	58.6%c	71.1%d	82.3%e	90.0%f			
at least once (2-5)	30.9%b	36.8%a		at least once (2-5)								
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	84.88	1	0.000	Chi-Square	4240.50	5	0.000					
Cramer's V	0.062			Cramer's V	0.437							
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)								
	53.8%a	53.9%a		46.2%a	51.4%b	55.4%b	61.0%c	64.3%c	73.1%d			
at least once (2-5)	46.2%a	46.1%a		at least once (2-5)								
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	0.00	1	0.950	Chi-Square	164.69	5	0.000					
Cramer's V	0.001			Cramer's V	0.143							
America3				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)								
	63.8%b	57.9%a		37.6%a	47.9%b	44.7%a,b	59.1%c	77.3%d	90.4%e			
at least once (2-5)	36.2%b	42.1%a		at least once (2-5)								
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	8.74	1	0.003	Chi-Square	350.93	5	0.000					
Cramer's V	0.061			Cramer's V	0.386							
Africa12				18-24	25-34	35-44	45-54	55-64	65+			
never (1)	female	male		never (1)								
	45.1%b	41.1%a		26.5%a	38.1%b	52.6%c	56.6%c	68.0%d	50.7%c			
at least once (2-5)	54.9%b	58.9%a		at least once (2-5)								
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value					
Chi-Square	17.26	1	0.000	Chi-Square	742.60	5	0.000					
Cramer's V	0.040			Cramer's V	0.264							

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A6.7. Over the last 30 days, how often did you as a PEDESTRIAN read a text message/email or check social media (e.g. Facebook, Twitter, etc.) while walking in the streets?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
never (1)	42.5% ^b	39.7% ^a		never (1)	14.8% ^a	22.3% ^b	28.6% ^c	40.6% ^d	55.0% ^e	66.1% ^f
at least once (2-5)	57.5% ^b	60.3% ^a		at least once (2-5)	85.2% ^a	77.7% ^b	71.4% ^c	59.4% ^d	45.0% ^e	33.9% ^f
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	18.61	1	0.000	Chi-Square	2992.39	5	0.000			
Cramer's V	0.029			Cramer's V	0.367					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	44.9% ^b	42.6% ^a		never (1)	38.6% ^a	42.2% ^{a,b}	42.9% ^b	48.4% ^c	49.7% ^c	63.3% ^d
at least once (2-5)	55.1% ^b	57.4% ^a		at least once (2-5)	61.4% ^a	57.8% ^{a,b}	57.1% ^b	51.6% ^c	50.3% ^c	36.7% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	4.10	1	0.043	Chi-Square	109.03	5	0.000			
Cramer's V	0.023			Cramer's V	0.116					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	46.7% ^a	47.9% ^a		never (1)	29.5% ^a	30.0% ^a	31.2% ^a	50.4% ^b	63.0% ^c	74.7% ^d
at least once (2-5)	53.3% ^a	52.1% ^a		at least once (2-5)	70.5% ^a	70.0% ^a	68.8% ^a	49.6% ^b	37.0% ^c	25.3% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	0.37	1	0.543	Chi-Square	305.71	5	0.000			
Cramer's V	0.013			Cramer's V	0.360					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	30.8% ^b	29.0% ^a		never (1)	23.1% ^a	24.1% ^a	33.7% ^b	38.1% ^c	47.4% ^d	36.5% ^{b,c}
at least once (2-5)	69.2% ^b	71.0% ^a		at least once (2-5)	76.9% ^a	75.9% ^a	66.3% ^b	61.9% ^c	52.6% ^d	63.5% ^{b,c}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	4.12	1	0.042	Chi-Square	297.28	5	0.000			
Cramer's V	0.020			Cramer's V	0.167					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A6.8. Over the last 30 days, how often did you as a PEDESTRIAN cross the road when a pedestrian light is red?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
never (1)	53.2% ^b	43.5% ^a		never (1)	32.8% ^a	40.2% ^b	48.1% ^c	49.9% ^{c,d}	52.4% ^d	57.6% ^e
at least once (2-5)	46.8% ^b	56.5% ^a		at least once (2-5)	67.2% ^a	59.8% ^b	51.9% ^c	50.1% ^{c,d}	47.6% ^d	42.4% ^e
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	209.60	1	0.000	Chi-Square	512.05	5	0.000			
Cramer's V	0.097			Cramer's V	0.152					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
never (1)	60.6% ^b	58.1% ^a		never (1)	56.4% ^a	59.8% ^{a,b}	58.8% ^{a,b}	58.6% ^{a,b}	62.6% ^b	72.6% ^c
at least once (2-5)	39.4% ^b	41.9% ^a		at least once (2-5)	43.6% ^a	40.2% ^{a,b}	41.2% ^{a,b}	41.4% ^{a,b}	37.4% ^b	27.4% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	5.05	1	0.025	Chi-Square	42.18	5	0.000			
Cramer's V	0.025			Cramer's V	0.072					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
never (1)	62.3% ^b	51.3% ^a		never (1)	48.0% ^a	50.2% ^a	49.5% ^a	57.1% ^a	66.9% ^b	65.9% ^b
at least once (2-5)	37.7% ^b	48.7% ^a		at least once (2-5)	52.0% ^a	49.8% ^a	50.5% ^a	42.9% ^a	33.1% ^b	34.1% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	28.55	1	0.000	Chi-Square	57.02	5	0.000			
Cramer's V	0.110			Cramer's V	0.155					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
never (1)	54.9% ^b	50.9% ^a		never (1)	47.3% ^a	50.7% ^b	56.9% ^c	56.9% ^c	61.5% ^c	56.2% ^{b,c}
at least once (2-5)	45.1% ^b	49.1% ^a		at least once (2-5)	52.7% ^a	49.3% ^b	43.1% ^c	43.1% ^c	38.5% ^c	43.8% ^{b,c}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	17.87	1	0.000	Chi-Square	89.99	5	0.000			
Cramer's V	0.041			Cramer's V	0.092					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A6.9. Over the last 30 days, how often did you as a PEDESTRIAN cross the road at places other than at a nearby (distance less than 30m) pedestrian crossing?

* gender				* age group									
Europe24				Europe24									
	female	male		18-24	25-34	35-44	45-54	55-64	65+				
never (1)	28.0% ^b	23.8% ^a		17.2% ^a	22.8% ^b	26.5% ^c	28.1% ^c	28.9% ^c	27.9% ^c				
at least once (2-5)	72.0% ^b	76.2% ^a		82.8% ^a	77.2% ^b	73.5% ^c	71.9% ^c	71.1% ^c	72.1% ^c				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	48.82	1	0.000	Chi-Square	143.17	5	0.000						
Cramer's V	0.047			Cramer's V	0.080								
AsiaOceania9				AsiaOceania9									
	female	male		18-24	25-34	35-44	45-54	55-64	65+				
never (1)	31.8% ^a	29.9% ^a		26.9% ^a	34.6% ^b	29.0% ^{a,c}	29.9% ^{a,c}	33.9% ^{b,c}	31.6% ^{a,b}				
at least once (2-5)	68.2% ^a	70.1% ^a		73.1% ^a	65.4% ^b	71.0% ^{a,c}	70.1% ^{a,c}	66.1% ^{b,c}	68.4% ^{a,b}				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	3.47	1	0.062	Chi-Square	38.14	5	0.000						
Cramer's V	0.021			Cramer's V	0.069								
America3				America3									
	female	male		18-24	25-34	35-44	45-54	55-64	65+				
never (1)	37.6% ^a	34.5% ^a		25.9% ^a	30.0% ^a	32.3% ^{a,b}	38.6% ^{b,c}	43.2% ^c	42.7% ^{c,d}				
at least once (2-5)	62.4% ^a	65.5% ^a		74.1% ^a	70.0% ^a	67.7% ^{a,b}	61.4% ^{b,c}	56.8% ^c	57.3% ^{c,d}				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	2.45	1	0.118	Chi-Square	40.74	5	0.000						
Cramer's V	0.032			Cramer's V	0.131								
Africa12				Africa12									
	female	male		18-24	25-34	35-44	45-54	55-64	65+				
never (1)	26.0% ^a	26.2% ^a		25.7% ^a	25.0% ^a	29.2% ^b	24.1% ^a	27.6% ^{a,b}	25.9% ^{a,b}				
at least once (2-5)	74.0% ^a	73.8% ^a		74.3% ^a	75.0% ^a	70.8% ^b	75.9% ^a	72.4% ^{a,b}	74.1% ^{a,b}				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	0.04	1	0.847	Chi-Square	15.65	5	0.008						
Cramer's V	0.002			Cramer's V	0.038								

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Appendix 7: Gender and age results on experiences being checked

This appendix contains the results for statistical significance testing of gender and age differences. For the following list of questions results are presented in tables A7.1. and A7.2.

Question	Table number
Q21_1. In the past 12 months, how many times have you been checked by the police for using alcohol while DRIVING A CAR (i.e., being subjected to a Breathalyser test)?	A7.1
Q22_1. In the past 12 months, how many times have you been checked by the police for the use of drugs (other than medication) while DRIVING A CAR?	A7.2

Table A7.1. In the past 12 months, how many times have you been checked by the police for using alcohol while DRIVING A CAR (i.e., being subjected to a Breathalyser test)?

* gender				* age group									
Europe24				18-24	25-34	35-44	45-54	55-64	65+				
never	female	male		never	never	never	never	never	never	never	never	never	
	87.0% ^b	76.5% ^a		73.2% ^a	73.5% ^a	76.5% ^b	84.5% ^c	85.5% ^c	89.8% ^d				
at least once	13.0% ^b	23.5% ^a		26.8% ^a	26.5% ^a	23.5% ^b	15.5% ^c	14.5% ^c	10.2% ^d				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests				Value	df	p-value							
Chi-Square	344.91	1	0.000	523.00	5	0.000							
Cramer's V	0.135			0.166									
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+				
never	female	male		never	never	never	never	never	never	never	never	never	
	72.2% ^b	61.8% ^a		65.8% ^a	61.4% ^b	65.3% ^{a,b}	75.0% ^c	78.9% ^c	81.4% ^c				
at least once	27.8% ^b	38.2% ^a		34.2% ^a	38.6% ^b	34.7% ^{a,b}	25.0% ^c	21.1% ^c	18.6% ^c				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests				Value	df	p-value							
Chi-Square	79.28	1	0.000	112.93	5	0.000							
Cramer's V	0.110			0.131									
America3				18-24	25-34	35-44	45-54	55-64	65+				
never	female	male		never	never	never	never	never	never	never	never	never	
	96.6% ^b	93.4% ^a		94.8% ^{a,b}	92.1% ^{a,c}	91.6% ^a	97.0% ^{b,d}	96.2% ^{b,c,d}	98.2% ^d				
at least once	3.4% ^b	6.6% ^a		5.2% ^{a,b}	7.9% ^{a,c}	8.4% ^a	3.0% ^{b,d}	3.8% ^{b,c,d}	1.8% ^d				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests				Value	df	p-value							
Chi-Square	12.45	1	0.000	31.39	5	0.000							
Cramer's V	0.072			0.114									
Africa12				18-24	25-34	35-44	45-54	55-64	65+				
never	female	male		never	never	never	never	never	never	never	never	never	
	87.2% ^b	79.4% ^a		78.4% ^a	81.3% ^a	85.0% ^{b,d}	88.0% ^{b,c}	89.7% ^c	82.8% ^{a,d}				
at least once	12.8% ^b	20.6% ^a		21.6% ^a	18.7% ^a	15.0% ^{b,d}	12.0% ^{b,c}	10.3% ^c	17.2% ^{a,d}				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests				Value	df	p-value							
Chi-Square	85.01	1	0.000	74.80	5	0.000							
Cramer's V	0.104			0.098									

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A7.2. In the past 12 months, how many times have you been checked by the police for the use of drugs (other than medication) while DRIVING A CAR?

* gender				* age group								
Europe24				18-24	25-34	35-44	45-54	55-64	65+			
never	female	male		never	never	never	never	never	never	never	never	never
	97.3% ^b	94.6% ^a		91.0% ^a	93.1% ^b	94.7% ^c	97.4% ^d	97.8% ^d	98.6% ^e			
at least once	2.7% ^b	5.4% ^a		9.0% ^a	6.9% ^b	5.3% ^c	2.6% ^d	2.2% ^d	1.4% ^e			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests				Value	df	p-value						
Chi-Square	87.95	1	0.000	318.58	5	0.000						
Cramer's V	0.068			0.129								
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+			
never	female	male		never	never	never	never	never	never	never	never	never
	89.9% ^b	87.2% ^a		84.0% ^a	87.3% ^b	88.5% ^b	95.0% ^c	94.6% ^c	94.7% ^c			
at least once	10.1% ^b	12.8% ^a		16.0% ^a	12.7% ^b	11.5% ^b	5.0% ^c	5.4% ^c	5.3% ^c			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests				Value	df	p-value						
Chi-Square	12.18	1	0.000	93.98	5	0.000						
Cramer's V	0.043			0.120								
America3				18-24	25-34	35-44	45-54	55-64	65+			
never	female	male		never	never	never	never	never	never	never	never	never
	98.6% ^b	96.6% ^a		93.8% ^a	97.3% ^{a,b}	96.5% ^{a,b}	98.1% ^b	99.0% ^{b,c}	100.0%			
at least once	1.4% ^b	3.4% ^a		6.2% ^a	2.7% ^{a,b}	3.5% ^{a,b}	1.9% ^b	1.0% ^{b,c}	0.0%			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests				Value	df	p-value						
Chi-Square	10.63	1	0.001	36.54	5	0.000						
Cramer's V	0.066			0.123								
Africa12				18-24	25-34	35-44	45-54	55-64	65+			
never	female	male		never	never	never	never	never	never	never	never	never
	91.2% ^b	88.4% ^a		86.7% ^a	89.5% ^b	93.0% ^c	92.8% ^c	92.5% ^{b,c}	80.7% ^d			
at least once	8.8% ^b	11.6% ^a		13.3% ^a	10.5% ^b	7.0% ^c	7.2% ^c	7.5% ^{b,c}	19.3% ^d			
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests				Value	df	p-value						
Chi-Square	17.18	1	0.000	97.17	5	0.000						
Cramer's V	0.047			0.111								

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Appendix 8: Gender and age results on subjective likelihood of being checked

This appendix contains the results for statistical significance testing of gender and age differences. For the following list of questions results are presented in tables A8.1. to A8.5.

Question	Table number
Q20_1_1. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for alcohol, in other words, being subjected to a Breathalyser test?	A8.1.
Q20_1_2. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for the use of illegal drugs?	A8.2
Q20_1_3. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for respecting the speed limits?	A8.3.
Q20_1_4. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for wearing your seatbelt?	A8.4
Q20_1_5. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for the use of hand-held mobile phone to talk or text while driving?	A8.5

Table A8.1. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for alcohol, in other words, being subjected to a Breathalyser test?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
unlikely/neutral (1-4)	80.5% ^b	74.4% ^a		unlikely/neutral (1-4)	69.0% ^a	71.5% ^a	74.5% ^b	79.1% ^c	80.1% ^c	84.0% ^d
likely (5-7)	19.5% ^b	25.6% ^a		likely (5-7)	31.0% ^a	28.5% ^a	25.5% ^b	20.9% ^c	19.9% ^c	16.0% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	100.82	1	0.000	Chi-Square	276.50	5	0.000			
Cramer's V	0.073			Cramer's V	0.120					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
unlikely/neutral (1-4)	70.5% ^b	65.8% ^a		unlikely/neutral (1-4)	65.9% ^a	66.6% ^a	65.7% ^a	72.3% ^b	75.6% ^b	75.6% ^b
likely (5-7)	29.5% ^b	34.2% ^a		likely (5-7)	34.1% ^a	33.4% ^a	34.3% ^a	27.7% ^b	24.4% ^b	24.4% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	16.99	1	0.000	Chi-Square	34.44	5	0.000			
Cramer's V	0.051			Cramer's V	0.072					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
unlikely/neutral (1-4)	88.7% ^b	86.0% ^a		unlikely/neutral (1-4)	75.4% ^a	83.7% ^b	87.4% ^{b,c}	90.0% ^{c,d}	89.7% ^{b,c,d}	94.0% ^d
likely (5-7)	11.3% ^b	14.0% ^a		likely (5-7)	24.6% ^a	16.3% ^b	12.6% ^{b,c}	10.0% ^{c,d}	10.3% ^{b,c,d}	6.0% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	4.25	1	0.039	Chi-Square	67.44	5	0.000			
Cramer's V	0.042			Cramer's V	0.167					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
unlikely/neutral (1-4)	74.7% ^b	68.9% ^a		unlikely/neutral (1-4)	66.7% ^a	69.6% ^{a,b}	72.8% ^{b,c}	76.1% ^{c,e}	74.5% ^{b,c,d,e}	80.7% ^e
likely (5-7)	25.3% ^b	31.1% ^a		likely (5-7)	33.3% ^a	30.4% ^{a,b}	27.2% ^{b,c}	23.9% ^{c,e}	25.5% ^{b,c,d,e}	19.3% ^e
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	32.49	1	0.000	Chi-Square	61.94	5	0.000			
Cramer's V	0.064			Cramer's V	0.088					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A8.2. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for the use of illegal drugs?

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
unlikely/neutral (1-4)	87.8% ^b	83.5% ^a		unlikely/neutral (1-4)	78.5% ^a	82.1% ^b	84.0% ^b	87.5% ^c	87.1% ^c	89.8% ^d
likely (5-7)	12.2% ^b	16.5% ^a		likely (5-7)	21.5% ^a	17.9% ^b	16.0% ^b	12.5% ^c	12.9% ^c	10.2% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	73.78	1	0.000	Chi-Square	187.55	5	0.000			
Cramer's V	0.062			Cramer's V	0.099					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
unlikely/neutral (1-4)	78.1% ^b	74.2% ^a		unlikely/neutral (1-4)	73.2% ^a	73.6% ^a	75.0% ^a	81.3% ^b	84.3% ^b	86.8% ^b
likely (5-7)	21.9% ^b	25.8% ^a		likely (5-7)	26.8% ^a	26.4% ^a	25.0% ^a	18.7% ^b	15.7% ^b	13.2% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	13.80	1	0.000	Chi-Square	62.99	5	0.000			
Cramer's V	0.046			Cramer's V	0.098					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
unlikely/neutral (1-4)	90.6% ^a	88.5% ^a		unlikely/neutral (1-4)	79.2% ^a	86.2% ^{a,b}	90.0% ^{b,d}	90.6% ^{b,c,d}	92.7% ^{d,e}	95.4% ^e
likely (5-7)	9.4% ^a	11.5% ^a		likely (5-7)	20.8% ^a	13.8% ^{a,b}	10.0% ^{b,d}	9.4% ^{b,c,d}	7.3% ^{d,e}	4.6% ^e
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	2.91	1	0.088	Chi-Square	61.61	5	0.000			
Cramer's V	0.035			Cramer's V	0.159					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
unlikely/neutral (1-4)	77.8% ^b	74.1% ^a		unlikely/neutral (1-4)	68.4% ^a	76.4% ^b	75.8% ^b	79.1% ^b	85.7% ^c	81.0% ^{b,c}
likely (5-7)	22.2% ^b	25.9% ^a		likely (5-7)	31.6% ^a	23.6% ^b	24.2% ^b	20.9% ^b	14.3% ^c	19.0% ^{b,c}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	14.40	1	0.000	Chi-Square	98.94	5	0.000			
Cramer's V	0.043			Cramer's V	0.112					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A8.3. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for respecting the speed limits?

* gender				* age group						
Europe24		female	male							
unlikely/neutral (1-4)	65.0% ^b	60.4% ^a								
likely (5-7)	35.0% ^b	39.6% ^a								
	100.0%	100.0%								
Tests	Value	df	p-value							
Chi-Square	43.52	1	0.000							
Cramer's V	0.048									
Europe24		18-24	25-34	35-44	45-54	55-64	65+			
unlikely/neutral (1-4)	58.9% ^a	58.0% ^a	59.7% ^a	62.9% ^b	65.0% ^b	68.0% ^c				
likely (5-7)	41.1% ^a	42.0% ^a	40.3% ^a	37.1% ^b	35.0% ^b	32.0% ^c				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value							
Chi-Square	113.36	5	0.000							
Cramer's V	0.077									
AsiaOceania9		female	male							
unlikely/neutral (1-4)	67.2% ^b	60.3% ^a								
likely (5-7)	32.8% ^b	39.7% ^a								
	100.0%	100.0%								
Tests	Value	df	p-value							
Chi-Square	33.62	1	0.000							
Cramer's V	0.072									
AsiaOceania9		18-24	25-34	35-44	45-54	55-64	65+			
unlikely/neutral (1-4)	66.0% ^a	61.8% ^{b,c,d}	59.0% ^b	65.7% ^{a,c}	67.5% ^{b,d}	70.9% ^a				
likely (5-7)	34.0% ^a	38.2% ^{b,c,d}	41.0% ^b	34.3% ^{a,c}	32.5% ^{a,d}	29.1% ^a				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value							
Chi-Square	30.74	5	0.000							
Cramer's V	0.068									
America3		female	male							
unlikely/neutral (1-4)	71.9% ^a	68.4% ^a								
likely (5-7)	28.1% ^a	31.6% ^a								
	100.0%	100.0%								
Tests	Value	df	p-value							
Chi-Square	3.57	1	0.059							
Cramer's V	0.038									
America3		18-24	25-34	35-44	45-54	55-64	65+			
unlikely/neutral (1-4)	58.9% ^a	67.4% ^{a,b}	68.7% ^b	70.5% ^{b,c}	71.6% ^{b,d,e}	78.9% ^e				
likely (5-7)	41.1% ^a	32.6% ^{a,b}	31.3% ^b	29.5% ^{b,c}	28.4% ^{b,d,e}	21.1% ^e				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value							
Chi-Square	38.49	5	0.000							
Cramer's V	0.126									
Africa12		female	male							
unlikely/neutral (1-4)	57.1% ^b	51.4% ^a								
likely (5-7)	42.9% ^b	48.6% ^a								
	100.0%	100.0%								
Tests	Value	df	p-value							
Chi-Square	25.68	1	0.000							
Cramer's V	0.057									
Africa12		18-24	25-34	35-44	45-54	55-64	65+			
unlikely/neutral (1-4)	54.4% ^a	52.5% ^a	54.4% ^a	52.9% ^a	52.1% ^a	64.2% ^b				
likely (5-7)	45.6% ^a	47.5% ^a	45.6% ^a	47.1% ^a	47.9% ^a	35.8% ^b				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value							
Chi-Square	25.28	5	0.000							
Cramer's V	0.056									

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A8.4. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for wearing your seatbelt?

* gender				* age group						
Europe24		female	male							
unlikely/neutral (1-4)	75.1% ^b	72.0% ^a								
likely (5-7)	24.9% ^b	28.0% ^a								
	100.0%	100.0%								
Tests	Value	df	p-value							
Chi-Square	24.56	1	0.000							
Cramer's V	0.036									
Europe24		18-24	25-34	35-44	45-54	55-64	65+			
unlikely/neutral (1-4)	70.9% ^{a,b}	68.6% ^a	72.0% ^b	73.0% ^{b,c,d}	75.2% ^d	78.6% ^e				
likely (5-7)	29.1% ^{a,b}	31.4% ^a	28.0% ^b	27.0% ^{b,c,d}	24.8% ^d	21.4% ^e				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value							
Chi-Square	110.14	5	0.000							
Cramer's V	0.076									
AsiaOceania9		female	male							
unlikely/neutral (1-4)	66.6% ^b	61.3% ^a								
likely (5-7)	33.4% ^b	38.7% ^a								
	100.0%	100.0%								
Tests	Value	df	p-value							
Chi-Square	20.01	1	0.000							
Cramer's V	0.055									
AsiaOceania9		18-24	25-34	35-44	45-54	55-64	65+			
unlikely/neutral (1-4)	64.3% ^a	63.7% ^a	59.1% ^b	63.4% ^{a,b}	69.7% ^{a,c}	75.3% ^c				
likely (5-7)	35.7% ^a	36.3% ^a	40.9% ^b	36.6% ^{a,b}	30.3% ^{a,c}	24.7% ^c				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value							
Chi-Square	37.92	5	0.000							
Cramer's V	0.076									
America3		female	male							
unlikely/neutral (1-4)	79.0% ^b	70.3% ^a								
likely (5-7)	21.0% ^b	29.7% ^a								
	100.0%	100.0%								
Tests	Value	df	p-value							
Chi-Square	24.02	1	0.000							
Cramer's V	0.100									
America3		18-24	25-34	35-44	45-54	55-64	65+			
unlikely/neutral (1-4)	67.3% ^a	72.1% ^a	72.6% ^a	75.5% ^a	74.4% ^a	82.7% ^b				
likely (5-7)	32.7% ^a	27.9% ^a	27.4% ^a	24.5% ^a	25.6% ^a	17.3% ^b				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value							
Chi-Square	27.57	5	0.000							
Cramer's V	0.107									
Africa12		female	male							
unlikely/neutral (1-4)	56.7% ^b	51.6% ^a								
likely (5-7)	43.3% ^b	48.4% ^a								
	100.0%	100.0%								
Tests	Value	df	p-value							
Chi-Square	21.07	1	0.000							
Cramer's V	0.052									
Africa12		18-24	25-34	35-44	45-54	55-64	65+			
unlikely/neutral (1-4)	53.4% ^a	52.6% ^a	52.1% ^a	55.9% ^{a,b}	56.8% ^{a,b}	60.7% ^b				
likely (5-7)	46.6% ^a	47.4% ^a	47.9% ^a	44.1% ^{a,b}	43.2% ^{a,b}	39.3% ^b				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Tests	Value	df	p-value							
Chi-Square	17.32	5	0.004							
Cramer's V	0.047									

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A8.5. On a typical journey, how likely is it that you (as a CAR DRIVER) will be checked by the police for the use of hand-held mobile phone to talk or text while driving?

* gender				* age group						
Europe24		female	male	Europe24	18-24	25-34	35-44	45-54	55-64	65+
unlikely/neutral (1-4)	82.9% ^b	79.0% ^a		unlikely/neutral (1-4)	75.4% ^a	76.2% ^a	78.5% ^{a,b}	80.7% ^b	84.6% ^c	86.0% ^c
likely (5-7)	17.1% ^b	21.0% ^a		likely (5-7)	24.6% ^a	23.8% ^a	21.5% ^{a,b}	19.3% ^b	15.4% ^c	14.0% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	47.46	1	0.000	Chi-Square	188.91	5	0.000			
Cramer's V	0.050			Cramer's V	0.099					
AsiaOceania9		female	male	AsiaOceania9						
unlikely/neutral (1-4)	75.1% ^b	72.8% ^a		unlikely/neutral (1-4)	70.4% ^a	74.7% ^{b,c}	71.3% ^{a,b}	76.0% ^{b,c,d}	80.3% ^{c,d}	81.8% ^d
likely (5-7)	24.9% ^b	27.2% ^a		likely (5-7)	29.6% ^a	25.3% ^{b,c}	28.7% ^{a,b}	24.0% ^{b,c,d}	19.7% ^{c,d}	18.2% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	4.40	1	0.036	Chi-Square	36.37	5	0.000			
Cramer's V	0.026			Cramer's V	0.074					
America3		female	male	America3						
unlikely/neutral (1-4)	86.9% ^a	85.0% ^a		unlikely/neutral (1-4)	74.4% ^a	82.0% ^{a,b}	83.9% ^{b,d}	90.2% ^c	89.9% ^{c,d}	92.2% ^c
likely (5-7)	13.1% ^a	15.0% ^a		likely (5-7)	25.6% ^a	18.0% ^{a,b}	16.1% ^{b,d}	9.8% ^c	10.1% ^{c,d}	7.8% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	1.80	1	0.179	Chi-Square	66.22	5	0.000			
Cramer's V	0.027			Cramer's V	0.165					
Africa12		female	male	Africa12						
unlikely/neutral (1-4)	71.0% ^b	65.6% ^a		unlikely/neutral (1-4)	67.6% ^a	69.0% ^a	65.9% ^a	66.7% ^a	67.3% ^a	77.1% ^b
likely (5-7)	29.0% ^b	34.4% ^a		likely (5-7)	32.4% ^a	31.0% ^a	34.1% ^a	33.3% ^a	32.7% ^a	22.9% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	26.19	1	0.000	Chi-Square	25.27	5	0.000			
Cramer's V	0.057			Cramer's V	0.050					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Appendix 9: Gender and age results on opinions on strictness

This appendix contains the results for statistical significance testing of gender and age differences. For the following list of questions results are presented in tables A9.1. to A9.9.

Question	Table number
Q19_1_1. What do you think about the current traffic rules and penalties in your country for driving or riding under the influence of alcohol? The traffic rules should be stricter.	A9.1.
Q19_1_2. What do you think about the current traffic rules and penalties in your country for driving or riding under the influence of alcohol? The traffic rules are not being checked sufficiently.	A9.2.
Q19_1_3. What do you think about the current traffic rules and penalties in your country for driving or riding under the influence of alcohol? The penalties are too severe.	A9.3.
Q19_2_1. What do you think about the current traffic rules and penalties in your country for driving or riding faster than the speed limit? The traffic rules should be stricter.	A9.4.
Q19_2_2. What do you think about the current traffic rules and penalties in your country for driving or riding faster than the speed limit? The traffic rules are not being checked sufficiently.	A9.5.
Q19_2_3. What do you think about the current traffic rules and penalties in your country for driving or riding faster than the speed limit? The penalties are too severe.	A9.6.
Q19_3_1. What do you think about the current traffic rules and penalties in your country for using a mobile phone while driving or riding? The traffic rules should be stricter.	A9.7.
Q19_3_2. What do you think about the current traffic rules and penalties in your country for using a mobile phone while driving or riding? The traffic rules are not being checked sufficiently.	A9.8.
Q19_3_3. What do you think about the current traffic rules and penalties in your country for using a mobile phone while driving or riding? The penalties are too severe.	A9.9.

Table A9.1 What do you think about the current traffic rules and penalties in your country for driving or riding under the influence of alcohol? The traffic rules should be stricter.

* gender				* age group						
Europe24		female	male	Europe24	18-24	25-34	35-44	45-54	55-64	65+
disagree	20.3% ^b	30.9% ^a		disagree	32.1% ^a	28.7% ^b	24.9% ^c	25.1% ^c	25.7% ^c	20.7% ^d
agree	79.7% ^b	69.1% ^a		agree	67.9% ^a	71.3% ^b	75.1% ^c	74.9% ^c	74.3% ^c	79.3% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	352.56	1	0.000	Chi-Square	145.56	5	0.000			
Cramer's V	0.121			Cramer's V	0.078					
AsiaOceania9		female	male	AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
disagree	6.0% ^b	7.4% ^a		disagree	7.7% ^a	6.8% ^a	5.7% ^a	6.3% ^a	7.3% ^a	4.5% ^a
agree	94.0% ^b	92.6% ^a		agree	92.3% ^a	93.2% ^a	94.3% ^a	93.8% ^a	92.7% ^a	95.5% ^a
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	7.09	1	0.008	Chi-Square	10.80	5	0.056			
Cramer's V	0.028			Cramer's V	0.035					
America3		female	male	America3	18-24	25-34	35-44	45-54	55-64	65+
disagree	24.2% ^b	30.4% ^a		disagree	27.7% ^{a,c,e}	23.9% ^{a,b,f}	34.2% ^c	32.6% ^{c,d,e}	25.8% ^{b,e,f}	19.6% ^f
agree	75.8% ^b	69.6% ^a		agree	72.3% ^{a,c,e}	76.1% ^{a,b,f}	65.8% ^c	67.4% ^{c,d,e}	74.2% ^{b,e,f}	80.4% ^f
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	14.25	1	0.000	Chi-Square	41.30	5	0.000			
Cramer's V	0.069			Cramer's V	0.117					
Africa12		female	male	Africa12	18-24	25-34	35-44	45-54	55-64	65+
disagree	34.8% ^b	39.0% ^a		disagree	38.5% ^{a,b}	36.0% ^a	35.2% ^a	39.1% ^{a,b}	41.1% ^b	29.1% ^c
agree	65.2% ^b	61.0% ^a		agree	61.5% ^{a,b}	64.0% ^a	64.8% ^a	60.9% ^{a,b}	58.9% ^b	70.9% ^c
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	22.04	1	0.000	Chi-Square	36.79	5	0.000			
Cramer's V	0.043			Cramer's V	0.055					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A9.2. What do you think about the current traffic rules and penalties in your country for driving or riding under the influence of alcohol? The traffic rules are not being checked sufficiently.

* gender				* age group						
Europe24		female	male	Europe24	18-24	25-34	35-44	45-54	55-64	65+
disagree	20.7% ^b	24.7% ^a		disagree	30.2% ^a	27.6% ^a	24.6% ^b	22.9% ^b	20.4% ^c	15.8% ^d
agree	79.3% ^b	75.3% ^a		agree	69.8% ^a	72.4% ^a	75.4% ^b	77.1% ^b	79.6% ^c	84.2% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	56.75	1	0.000	Chi-Square	302.84	5	0.000			
Cramer's V	0.049			Cramer's V	0.112					
AsiaOceania9		female	male	AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
disagree	22.5% ^a	21.0% ^a		disagree	21.5% ^a	25.5% ^b	20.2% ^{a,c}	20.8% ^a	15.5% ^c	16.6% ^{a,c}
agree	77.5% ^a	79.0% ^a		agree	78.5% ^a	74.5% ^b	79.8% ^{a,c}	79.2% ^a	84.5% ^c	83.4% ^{a,c}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	2.79	1	0.095	Chi-Square	47.03	5	0.000			
Cramer's V	0.018			Cramer's V	0.072					
America3		female	male	America3	18-24	25-34	35-44	45-54	55-64	65+
disagree	25.8% ^b	30.8% ^a		disagree	32.7% ^a	27.5% ^a	34.5% ^a	31.4% ^a	28.4% ^a	18.3% ^b
agree	74.2% ^b	69.2% ^a		agree	67.3% ^a	72.5% ^a	65.5% ^a	68.6% ^a	71.6% ^a	81.7% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	9.14	1	0.003	Chi-Square	45.66	5	0.000			
Cramer's V	0.055			Cramer's V	0.123					
Africa12		female	male	Africa12	18-24	25-34	35-44	45-54	55-64	65+
disagree	33.5% ^b	36.7% ^a		disagree	36.0% ^a	35.2% ^{a,b}	34.5% ^{a,b}	33.9% ^{a,b}	38.2% ^a	30.9% ^b
agree	66.5% ^b	63.3% ^a		agree	64.0% ^a	64.8% ^{a,b}	65.5% ^{a,b}	66.1% ^{a,b}	61.8% ^a	69.1% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>	Tests	<i>Value</i>	<i>df</i>	<i>p-value</i>			
Chi-Square	13.94	1	0.000	Chi-Square	11.86	5	0.037			
Cramer's V	0.034			Cramer's V	0.031					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A9.3. What do you think about the current traffic rules and penalties in your country for driving or riding under the influence of alcohol? The penalties are too severe.

* gender				* age group									
Europe24				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		70.8%a	75.6%b	78.0%b,c	79.6%c,d	81.2%d	85.2%e				
agree	16.9%b	24.6%a		29.2%a	24.4%b	22.0%b,c	20.4%c,d	18.8%d	14.8%e				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	220.75	1	0.000	Chi-Square	269.05	5	0.000						
Cramer's V	0.096			Cramer's V	0.106								
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		59.8%a	60.7%a	67.2%b	71.1%b,c	76.0%c,d	77.7%d				
agree	32.6%b	37.4%a		40.2%a	39.3%a	32.8%b	28.9%b,c	24.0%c,d	22.3%d				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	22.21	1	0.000	Chi-Square	138.60	5	0.000						
Cramer's V	0.050			Cramer's V	0.124								
America3				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		76.4%a	78.3%a	76.8%a	84.6%b,c	79.6%a,b	86.9%c				
agree	15.6%b	22.8%a		23.6%a	21.7%a	23.2%a	15.4%b,c	20.4%a,b	13.1%c				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	25.33	1	0.000	Chi-Square	31.78	5	0.000						
Cramer's V	0.092			Cramer's V	0.103								
Africa12				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		63.3%a	65.8%a	64.7%a	64.6%a	65.9%a	57.3%b				
agree	35.0%a	36.5%a		36.7%a	34.2%a	35.3%a	35.4%a	34.1%a	42.7%b				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	2.93	1	0.087	Chi-Square	21.71	5	0.001						
Cramer's V	0.016			Cramer's V	0.043								

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A9.4. What do you think about the current traffic rules and penalties in your country for driving or riding faster than the speed limit? The traffic rules should be stricter.

* gender				* age group									
Europe24				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		49.1%a	45.7%a,c	42.6%b	42.9%b,c	41.0%b	37.7%d				
agree	62.1%b	52.7%a		50.9%a	54.3%a,c	57.4%b	57.1%b,c	59.0%b	62.3%d				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	216.07	1	0.000	Chi-Square	115.44	5	0.000						
Cramer's V	0.095			Cramer's V	0.069								
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		10.6%a	9.9%a	9.6%a	9.9%a	10.2%a	9.65%a				
agree	91.6%b	88.3%a		89.4%a	90.1%a	90.4%a	90.1%a	89.8%a	90.5%a				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	27.20	1	0.000	Chi-Square	1.52	5	0.910						
Cramer's V	0.055			Cramer's V	0.013								
America3				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		49.4%a,b	50.4%a,b	51.0%a,b	54.6%a	45.6%b	43.5%b,c				
agree	53.2%b	48.4%a		50.6%a,b	49.6%a,b	49.0%a,b	45.4%a	54.4%b	56.5%b,c				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	6.82	1	0.009	Chi-Square	17.51	5	0.004						
Cramer's V	0.048			Cramer's V	0.076								
Africa12				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		40.1%a,b	37.0%a,c	38.6%a,b,c	39.7%a,b,c	42.8%b	34.9%c				
agree	62.5%b	59.9%a		59.9%a,b	63.0%a,c	61.4%a,b,c	60.3%a,b,c	57.2%b	65.1%c				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	8.70	1	0.003	Chi-Square	18.02	5	0.003						
Cramer's V	0.027			Cramer's V	0.039								

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A9.5. What do you think about the current traffic rules and penalties in your country for driving or riding faster than the speed limit? The traffic rules are not being checked sufficiently.

* gender				* age group									
Europe24				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		41.0%a	37.7%b	33.9%c	31.8%c	27.8%d	23.8%e				
agree	70.6%b	66.1%a		59.0%a	62.3%b	66.1%c	68.2%c	72.2%d	76.2%e				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	56.94	1	0.000	Chi-Square	354.63	5	0.000						
Cramer's V	0.049			Cramer's V	0.122								
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		26.2%a	26.3%a	21.2%b	21.9%b	20.5%b	20.2%b				
agree	74.8%b	77.5%a		73.8%a	73.7%a	78.8%b	78.1%b	79.5%b	79.8%b				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	9.39	1	0.002	Chi-Square	32.47	5	0.000						
Cramer's V	0.032			Cramer's V	0.060								
America3				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		39.0%a,b	35.8%a,c	45.8%b	42.0%a,b	29.2%c,d	27.6%d				
agree	65.5%a	62.1%a		61.0%a,b	64.2%a,c	54.2%b	58.0%a,b	70.8%c,d	72.4%d				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	3.71	1	0.054	Chi-Square	58.60	5	0.000						
Cramer's V	0.035			Cramer's V	0.140								
Africa12				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		37.7%a	36.6%a,b	34.2%b	37.4%a,b	38.7%a,b	34.8%a,b				
agree	66.2%b	60.5%a		62.3%a	63.4%a,b	65.8%b	62.6%a,b	61.3%a,b	65.2%a,b				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	42.13	1	0.000	Chi-Square	10.68	5	0.058						
Cramer's V	0.059			Cramer's V	0.030								

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A9.6. What do you think about the current traffic rules and penalties in your country for driving or riding faster than the speed limit? The penalties are too severe.

* gender				* age group									
Europe24				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		59.7%a	65.8%b	69.2%c	69.9%c	69.6%c	72.8%d				
agree	27.8%b	35.0%a		40.3%a	34.2%b	30.8%c	30.1%c	30.4%c	27.2%d				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	141.87	1	0.000	Chi-Square	152.11	5	0.000						
Cramer's V	0.077			Cramer's V	0.080								
AsiaOceania9				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		61.9%a	54.6%b	67.2%c	71.1%c	72.9%c	72.7%c				
agree	34.5%b	38.8%a		38.1%a	45.4%b	32.8%c	28.9%c	27.1%c	27.3%c				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	17.24	1	0.000	Chi-Square	172.76	5	0.000						
Cramer's V	0.044			Cramer's V	0.139								
America3				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		62.3%a	66.9%a,b	73.3%b,c,d	74.6%c	67.1%a,d	77.1%c,e				
agree	23.2%b	35.7%a		37.7%a	33.1%a,b	26.7%b,c,d	25.4%c	32.9%a,d	22.9%c,e				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	55.49	1	0.000	Chi-Square	36.82	5	0.000						
Cramer's V	0.136			Cramer's V	0.111								
Africa12				18-24	25-34	35-44	45-54	55-64	65+				
disagree	female	male		59.9%a	62.6%a,b	62.8%a,b	64.4%b	66.9%b,c	57.8%a				
agree	36.9%b	38.8%a		40.1%a	37.4%a,b	37.2%a,b	35.6%b	33.1%b,c	42.2%a				
	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Tests	Value	df	p-value	Tests	Value	df	p-value						
Chi-Square	4.78	1	0.029	Chi-Square	25.47	5	0.000						
Cramer's V	0.020			Cramer's V	0.046								

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A9.7. What do you think about the current traffic rules and penalties in your country for using a mobile phone while driving or riding? The traffic rules should be stricter.

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
disagree	23.5% ^b	30.6% ^a		disagree	36.3% ^a	31.2% ^b	28.8% ^{b,c}	27.8% ^c	23.6% ^d	20.0% ^e
agree	76.5% ^b	69.4% ^a		agree	63.7% ^a	68.8% ^b	71.2% ^{b,c}	72.2% ^c	76.4% ^d	80.0% ^e
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	153.62	1	0.000	Chi-Square	307.39	5	0.000			
Cramer's V	0.080			Cramer's V	0.113					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
disagree	8.7% ^a	8.6% ^a		disagree	9.0% ^a	9.4% ^a	8.3% ^a	7.1% ^a	7.6% ^a	8.1% ^a
agree	91.3% ^a	91.4% ^a		agree	91.0% ^a	90.6% ^a	91.7% ^a	92.9% ^a	92.4% ^a	91.9% ^a
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	0.06	1	0.813	Chi-Square	6.73	5	0.242			
Cramer's V	0.002			Cramer's V	0.027					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
disagree	29.9% ^a	32.6% ^a		disagree	41.3% ^a	33.0% ^{a,b,c}	38.5% ^{a,b}	32.4% ^{b,c}	26.3% ^{c,d}	20.1% ^d
agree	70.1% ^a	67.4% ^a		agree	58.7% ^a	67.0% ^{a,b,c}	61.5% ^{a,b}	67.6% ^{b,c}	73.7% ^{c,d}	79.9% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	2.37	1	0.124	Chi-Square	71.06	5	0.000			
Cramer's V	0.028			Cramer's V	0.154					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
disagree	34.7% ^b	38.4% ^a		disagree	37.4% ^a	36.2% ^a	37.8% ^a	36.5% ^a	39.4% ^a	26.1% ^b
agree	65.3% ^b	61.6% ^a		agree	62.6% ^a	63.8% ^a	62.2% ^a	63.5% ^a	60.6% ^a	73.9% ^b
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	18.19	1	0.000	Chi-Square	40.67	5	0.000			
Cramer's V	0.039			Cramer's V	0.058					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A9.8. What do you think about the current traffic rules and penalties in your country for using a mobile phone while driving or riding? The traffic rules are not being checked sufficiently.

* gender				* age group						
Europe24	female	male		Europe24	18-24	25-34	35-44	45-54	55-64	65+
disagree	19.3% ^b	21.9% ^a		disagree	27.7% ^a	26.6% ^a	22.9% ^b	20.3% ^c	17.4% ^d	14.0% ^e
agree	80.7% ^b	78.1% ^a		agree	72.3% ^a	73.4% ^a	77.1% ^b	79.7% ^c	82.6% ^d	86.0% ^e
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	24.47	1	0.000	Chi-Square	341.39	5	0.000			
Cramer's V	0.032			Cramer's V	0.119					
AsiaOceania9	female	male		AsiaOceania9	18-24	25-34	35-44	45-54	55-64	65+
disagree	22.0% ^b	18.9% ^a		disagree	21.3% ^{a,c}	22.6% ^a	19.5% ^{a,b}	20.0% ^{a,b}	15.8% ^b	16.6% ^{b,c}
agree	78.0% ^b	81.1% ^a		agree	78.7% ^{a,c}	77.4% ^a	80.5% ^{a,b}	80.0% ^{a,b}	84.2% ^b	83.4% ^{b,c}
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	12.84	1	0.000	Chi-Square	22.45	5	0.000			
Cramer's V	0.038			Cramer's V	0.050					
America3	female	male		America3	18-24	25-34	35-44	45-54	55-64	65+
disagree	20.7% ^b	26.4% ^a		disagree	27.4% ^{a,b}	24.1% ^{a,c}	28.7% ^{a,b}	31.3% ^b	18.6% ^{c,d}	13.1% ^d
agree	79.3% ^b	73.6% ^a		agree	72.6% ^{a,b}	75.9% ^{a,c}	71.3% ^{a,b}	68.7% ^b	81.4% ^{c,d}	86.9% ^d
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	13.58	1	0.000	Chi-Square	72.26	5	0.000			
Cramer's V	0.067			Cramer's V	0.155					
Africa12	female	male		Africa12	18-24	25-34	35-44	45-54	55-64	65+
disagree	32.2% ^b	36.6% ^a		disagree	35.3% ^a	33.7% ^a	33.9% ^a	33.7% ^a	35.8% ^a	34.1% ^a
agree	67.8% ^b	63.4% ^a		agree	64.7% ^a	66.3% ^a	66.1% ^a	66.3% ^a	64.2% ^a	65.9% ^a
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tests	Value	df	p-value	Tests	Value	df	p-value			
Chi-Square	25.17	1	0.000	Chi-Square	3.25	5	0.661			
Cramer's V	0.046			Cramer's V	0.016					

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.

Table A9.9. What do you think about the current traffic rules and penalties in your country for using a mobile phone while driving or riding? The penalties are too severe.

* gender				* age group							
Europe24		female	male	Europe24		18-24	25-34	35-44	45-54	55-64	65+
disagree	80.5% ^b	74.1% ^a		disagree	69.3% ^a	73.3% ^b	75.9% ^c	76.9% ^c	80.4% ^d	83.3% ^e	
agree	19.5% ^b	25.9% ^a		agree	30.7% ^a	26.7% ^b	24.1% ^c	23.1% ^c	19.6% ^d	16.7% ^e	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests				Tests							
	<i>Value</i>	<i>df</i>	<i>p-value</i>		<i>Value</i>	<i>df</i>	<i>p-value</i>				
Chi-Square	139.98	1	0.000	Chi-Square	264.34	5	0.000				
Cramer's V	0.076			Cramer's V	0.105						
AsiaOceania9		female	male	AsiaOceania9		18-24	25-34	35-44	45-54	55-64	65+
disagree	67.3% ^b	63.5% ^a		disagree	60.9% ^a	61.3% ^a	69.0% ^b	70.7% ^{b,c}	74.0% ^{b,c}	75.3% ^c	
agree	32.7% ^b	36.5% ^a		agree	39.1% ^a	38.7% ^a	31.0% ^b	29.3% ^{b,c}	26.0% ^{b,c}	24.7% ^c	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests				Tests							
	<i>Value</i>	<i>df</i>	<i>p-value</i>		<i>Value</i>	<i>df</i>	<i>p-value</i>				
Chi-Square	14.09	1	0.000	Chi-Square	105.12	5	0.000				
Cramer's V	0.040			Cramer's V	0.108						
America3		female	male	America3		18-24	25-34	35-44	45-54	55-64	65+
disagree	83.2% ^b	75.1% ^a		disagree	72.3% ^a	75.7% ^a	77.4% ^a	84.2% ^b	78.4% ^{a,b}	84.2% ^b	
agree	16.8% ^b	24.9% ^a		agree	27.7% ^a	24.3% ^a	22.6% ^a	15.8% ^b	21.6% ^{a,b}	15.8% ^b	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests				Tests							
	<i>Value</i>	<i>df</i>	<i>p-value</i>		<i>Value</i>	<i>df</i>	<i>p-value</i>				
Chi-Square	30.05	1	0.000	Chi-Square	32.49	5	0.000				
Cramer's V	0.100			Cramer's V	0.104						
Africa12		female	male	Africa12		18-24	25-34	35-44	45-54	55-64	65+
disagree	62.5% ^a	61.9% ^a		disagree	60.1% ^a	62.8% ^{a,b}	64.2% ^b	64.9% ^{b,c}	64.8% ^{a,b}	54.0% ^d	
agree	37.5% ^a	38.1% ^a		agree	39.9% ^a	37.2% ^{a,b}	35.8% ^b	35.1% ^{b,c}	35.2% ^{a,b}	46.0% ^d	
	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Tests				Tests							
	<i>Value</i>	<i>df</i>	<i>p-value</i>		<i>Value</i>	<i>df</i>	<i>p-value</i>				
Chi-Square	0.45	1	0.501	Chi-Square	38.88	5	0.000				
Cramer's V	0.006			Cramer's V	0.057						

Each subscript letter denotes a subset of gender / age categories whose column proportions do not differ significantly from each other at the 0.01 level.



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