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APPENDIX METHODOLOGY & QUESTIONNAIRE

RESULTS OF THE BIVV/IBSR THREE-YEARLY ROAD SAFETY ATTITUDE SURVEY

Results of the BIVV/IBSR three-yearly road safety attitude survey

Appendix

Methodology & Questionnaire

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Introduction

Following the first States General for Road Safety (*Staten-Generaal van de Verkeersveiligheid*) in 2002, a major series of road safety indicators were defined that can be used as the basis for monitoring trends in road safety. These indicators can be divided into three categories: indicators related to accident statistics, indicators related to objective, measurable driver behaviour in traffic, and indicators related to the attitudes of Belgian drivers on road safety.

Official accident statistics are reported by the FPS Economy, SMEs, Self-Employed and Energy (Directorate-General for Statistics and Economic Information) and analysed in more detail by the BIVV/IBSR. Provisional figures that are available sooner - so-called quick indicators - are included in the road safety barometer (BIVV/IBSR Observatory). The BIVV/IBSR regularly organises large-scale observation studies (seatbelt, speed and driving under the influence[1]) to measure behavioural indicators. This makes it possible to monitor the extent to which Belgian drivers comply with the respective traffic regulations.

The indicators related to attitudes on road safety are measured using a large-scale survey every three years. The first attitude measurement survey was conducted in 2003, the second in 2006 and the third in 2009. In this report we discuss the results of the fourth attitude measurement survey, the fieldwork for which was conducted in the autumn of 2012. As in the SARTRE studies (Social Attitudes to Road Traffic Risk in Europe[2]) we adopt a broad definition of the term "attitude"[3]. It does not just relate to attitudes in the strict sense of the word but also perceptions, estimates and subjective assessments of other road safety aspects, such as road accidents, road safety measures and personal behaviour in traffic.

The 2012 attitude measurement survey results are presented in six reports (plus an appendix):

1. Driving under the influence of alcohol and drugs
2. Speed and speeding
3. Use of seat belts and child restraint systems
4. Fatigue and distraction by mobile phone use
5. Enforcement and public support for measures

Appendix Methodology & Questionnaire

This report describes the methodology and presents the questionnaire used in the 2012 attitude measurement survey.

[1] Cf. Riguelle, F. (2013), Roynard, M. (2012), Riguelle, F. (2012), Riguelle, F., & Dupont, E. (2012).
[2] Cf. SARTRE 1 (1994), SARTRE 2 (1998), SARTRE 3 (2004) and SARTRE 4 (2012). The fieldwork and surveys were conducted in 1991, 1996, 2002 and 2010 respectively.
[3] The SARTRE studies do not define the term "social attitude" in any of their publications. SARTRE briefly mentions that attitudes are understood to mean driver "opinions and self-reported behaviours".

1. Sampling

The target group for the attitude measurement survey consisted of drivers living in Belgium that had driven at least 1,500 km in the past six months in a car or van. Furthermore, they had to master French or Dutch at an adequate level to allow them to complete the questionnaire. To study this target group's attitudes to road safety a random representative sample of 1,500 respondents were interviewed (face-to-face). In order to make statistically meaningful comparisons between subgroups in each of the three regions (Flanders, Wallonia and the Brussels-Capital Region) it was decided not to select the respondents in proportion to the size of the regions' populations. To prevent the number of interviewees in the Brussels-Capital Region being too small to make comparisons between certain subgroups (e.g. men versus women, older drivers versus young drivers, etc.), a disproportional sample was chosen whereby 500 respondents each had to be surveyed in Flanders, Wallonia and the Brussels-Capital Region.

To obtain the sample we used a (disproportionate) stratified, two-stage cluster sample (cf. e.g. Thompson, 2002). The sample was drawn from files managed by the consultancy agency (Significant GfK) that include all addresses in Belgium. Each address includes the following information: the number of residents and their age and gender.

The first stage involved selecting 150 municipalities (primary sampling units) from which ten respondents had to be interviewed in each (1500/150). This was done to facilitate the fieldwork. The sample was drawn in three parts, namely per region. In accordance with the distribution across the three regions (500-500-500), fifty municipalities were used in Flanders and fifty in Wallonia. There are just nineteen municipalities in the Brussels-Capital Region, so twelve Brussels municipalities were selected three times and the remaining seven were selected twice. The selection method for the municipalities was based on the interval method[4]. The respondents were sorted per region according to their municipality (not according to their profile). The interval method was used to select fifty people. The municipalities where these people live form the fifty selected municipalities. Larger municipalities (in terms of population figures) therefore had a greater chance of being chosen than smaller municipalities. This working method (sampling per interval per region) also increased the chance that each province would be represented in the sample.

In a second phase, nine other respondents were randomly selected in each municipality (thus representatively) taking into account the defined quotas for age and gender. The quotas for age and gender are obtained at the regional level and not per municipality (Table 1). The distribution of the sample into five age groups was consistent with the 2003 attitude measurement survey (and therefore also with those from 2006 and 2009), which used the same age groups[5] (Silverans et al., 2005, p. 20).

The consultancy agency wanted to be sure that 1,500 interviews would be conducted and so used oversampling at the beginning of the fieldwork. It was decided that 520 people would be sampled per region, divided into groups of ten, which equates to sampling fifty-two municipalities (so two extra municipalities per region). Following this second phase we obtain a distribution (oversampling) of respondents according to region, gender and age group as shown in Table 2.

[4] The interval method means that one selects someone every x number of addresses. So to select for example fifty addresses from a database with 10,000, one decides to include every 200th address in the sample.

[5] The age groups were defined in 2003 in such a way that the total population (those in possession of a driving licence at the time) were divided into five age groups of equal size.

Table 1: Theoretical distribution of the sample according to gender, age and region

	Men						Women						
	18-29	**30-38**	**39-49**	**50-62**	**63-76**	**77+**	**18-29**	**30-38**	**39-49**	**50-62**	**63-76**	**77+**	**Total**
Flanders	50	50	50	50	38	12	50	50	50	50	38	12	**500**
Wallonia	50	50	50	50	38	12	50	50	50	50	38	12	**500**
Brussels-Capital Region	50	50	50	50	38	12	50	50	50	50	38	12	**500**
	150	**150**	**150**	**150**	**114**	**36**	**150**	**150**	**150**	**150**	**114**	**36**	**1,500**

Table 2: Distribution of the oversampled sample according to gender, age and region

	Men						Women						
	18-29	**30-38**	**39-49**	**50-62**	**63-76**	**77+**	**18-29**	**30-38**	**39-49**	**50-62**	**63-76**	**77+**	**Total**
Flanders	52	52	52	52	40	12	52	52	52	52	40	12	**520**
Wallonia	52	52	52	52	40	12	52	52	52	52	40	12	**520**
Brussels-Capital Region	52	52	52	52	40	12	52	52	52	52	40	12	**520**
	156	**156**	**156**	**156**	**120**	**36**	**156**	**156**	**156**	**156**	**120**	**36**	**1,560**

The third and final phase involved sampling the required spare addresses due to the known low response rate. In order to compensate for non-responses, eight addresses were provided to complete one interview (actually twelve in the BCR). For the oldest age group (77+) eleven replacement addresses were provided to complete one interview with a given respondent. The replacement addresses related to people with the same gender in the same age group as the respondent at the original address. Spare addresses were initially sought in the same street then in the same municipality for reasons of practicality.

2. Fieldwork

The fieldwork was conducted between 6 September 2012 and 29 October 2012. Each interviewer had to complete a cluster of 10 or 20 interviews (so in one or two municipalities) and to do so received eighty or one hundred and sixty addresses (or additional spare addresses in the case of BCR and age group 77+). He/she was obliged to return to the same eight or twelve addresses until he/she had effectively conducted an interview.

Before beginning the actual interview the interviewer had to ascertain whether the selected respondent fell within the study's quota. Respondents that did not possess a driving license or had not driven 1,500 km in the past 6 months were excluded. As an incentive for taking part respondents received a national lottery scratch card worth EUR 3.

On average it took twenty-nine minutes to conduct an interview. The average number of addresses for conducting one interview per contact sheet (set of eight or twelve addresses) amounted to approximately 3.5 (due to unusable addresses, for example by moving of respondent). The consultancy agency revealed that on average more addresses were required for conducting an interview with: men, respondents aged between 39 and 49 years, and among respondents living in Wallonia.

With regard to the number of contacts we see another trend: on average more contacts were necessary to conduct an interview with women, in the 18-29 age category, and in Brussels (examples of contacts with no possibility of conducting an interview: participation impossible, not meeting selection criteria, refusal…).

3. Non-response

Due to the system of replacement addresses for one respondent (set of eight addresses for Flanders and Wallonia or twelve for the Brussels-Capital Region and 77+ age group) a database was created with (991 x 8) + (569 x 12) = 14,756 addresses. Not all the addresses were used to obtain a final sample of 1,500 respondents. As soon as one respondent in a set of addresses was prepared to take part in the survey, the remaining addresses in the same set were discarded. Of the 14,756 addresses just 5,956 were actually used. There were 1,542 validated interviews conducted, two of which were rejected following a quality control. The most pessimistic estimate of the non-response rate reveals that just 26% of the initial selected addresses database was interviewed, which delivers a non-response rate of 74%.

Table 3: Reasons for non-response

Result per address	Absolute number	%
Address unusable (person moved, deceased, unknown)	229	3.84
No contact	1,773	29.77
Contact but participation impossible (language, mental, holiday, etc.)	164	2.75
Contact but does not meet the selection criteria	563	9.45
Contact but refusal (various reasons)	1,685	28.29
Interview conducted	1,542*	25.89
Total	**5,956**	**100.00**

* of which two interviews were discarded after quality control.

In Table 3 the non-responses are broken down further according to the various reasons for non-response. As in every survey, a number of addresses were unusable because the respondents had moved or died or as a result of administrative errors. In total this applied to 229 addresses. This meant that to effectively conduct 1,542 interviews, 5,956 - 229 = 5,727 actual contacts were possible. One can interpret the non-response rate in several ways. The possibilities are: according to the number of respondents that could effectively be contacted, according to the number of respondents that were eventually able to grant an interview, according to those from this last group that also met the selection criteria. Table 4 summarises the respective percentages for these different calculation methods.

Table 4: Different interpretations of non-response rates

Result per address	Absolute number	%
No contact	1,773	30.96
Contact but participation impossible (language, mental, holiday, etc.)	203	3.54
Contact but does not meet selection criteria	563	9.83
Contact but refusal (various reasons)	1,646	28.74
Interview conducted	1,542*	26.93
Total	**5,727**	**100.00**
Result per address	**Absolute number**	**%**
Contact but participation impossible (language, mental, holiday, etc.)	203	5.13
Contact but does not meet selection criteria	563	14.24
Contact but refusal (various reasons)	1,646	41.63
Interview conducted	1,542*	39.00
Total	**3,954**	**100.00**

Result per address	**Absolute number**	**%**
Contact but does not meet selection criteria	563	15.01
Contact but refusal (various reasons)	1,646	43.88
Interview conducted	1,542*	41.11
Total	**3,751**	**100.00**
Result per address	**Absolute number**	**%**
Contact but refusal (various reasons)	1,646	51.63
Interview conducted	1,542*	48.37
Total	**3,188**	**100.00**

* of which two interviews were discarded after quality control.

The procedure for contacting the respondents in Flanders and Wallonia was based on the fortuitous chance of the respondents being at home. The interviewers proceeded to the address of a potential respondent without an appointment but armed with a letter of introduction that described the objective and the content of the questionnaire. This could be produced as an additional resource to convince the respondent (letter of introduction featuring the BIVV/IBSR logo and contact person; in addition to business cards & identification and a free telephone number for the consultancy agency) or it could be left in the letterbox if there was nobody at home. This working method means that a large number of non-responses can be explained by the fact that the respondent was not at home. In the Brussels-Capital Region the list of addresses for potential respondents also included telephone numbers. In Brussels the interviewers were allowed to call and make a prior appointment by telephone. Table 4 shows that out of 1,773 addresses (1 in 3) there was no (telephone or personal) contact with the potential respondent. If we limit the non-response analysis to persons that the interviewers actually contacted (3,954 in total), the non-response rate decreases to 61% (100%-39%).

Among this new group 5% appear not to be able to participate in an interview due to linguistic issues or other (physical or mental) impediments. If we do not include these people in the analysis, we see that 44% of the 3,751 potential respondents refused to participate and 15% did not meet the selection criteria. This means that one in seven respondents did not possess a "B-type" driving license and/or had not driven enough (minimum 1,500 km) in the past six months.

Table 5 provides an overview of the characteristics of respondents that did not meet the selection criteria. There were more women than men, more persons aged between 18 and 29 years (followed by those aged between 63 and 74 years) than from other age categories and slightly more Flemish people than Walloon or Brussels residents. A number of potential respondents refused immediately to participate (without providing a clear reason). The consultancy agency only analysed this specific group of people who refused in more detail. A direct comparison produces the following results (Table 5): an equal number of men and women refused and those aged between 30 and 62 did so slightly more often than the youngest or oldest age categories. Those that immediately refused to participate are not distributed equally across the three regions. It is clear that more people refused in Brussels and fewer in Flanders. In 2009, the number of people who refused when approached appeared to be equally distributed across the three regions.

Table 5: Analysis of respondents that did not meet the selection criteria or immediately refused to participate

	Contact but refusal - without giving reason (1,538 respondents)		Contact but did not meet selection criteria (563 respondents)	
Gender	**Absolute**	**%**	**Absolute**	**%**
Man	770	50.07	212	37.66
Woman	768	49.93	351	62.34
Age	**Absolute**	**%**	**Absolute**	**%**
18-29	260	16.91	152	27.00
30-38	313	20.35	81	14.39
39-49	297	19.31	73	12.97
50-62	347	22.56	89	15.81
63-74	268	17.43	115	20.43
75+	53	3.45	53	9.41
Region	**Absolute**	**%**	**Absolute**	**%**
Flanders	219	14.24	228	40.50
Wallonia	425	27.63	173	30.73
Brussels-Capital Region	894	58.13	162	28.77

The last sub-table of Table 4 reveals that 48% of effectively contacted respondents that met the selection criteria were interviewed and 52% refused to participate (for various reasons). Since the most common measurement of response rates in interview research equates to the number of actual interviews divided by the sum of the refusals and actual interviews (cf. Van Den Steen & Van Den Bogaerde, 2006) we can conclude that we obtained a response rate of 48%. This response rate is clearly lower than those for 2006 and 2009 (each 65-66%). In comparison with other research we must assess this figure as a low response rate. The low response can also be explained by more refusals to participate in Brussels (2012: 58%; 2009: 34%). Table 6 provides an overview of the gender and age of the people in Brussels that did not meet the selection criteria or refused to take part in the interview. There are no categories that really stand out in this respect.

Table 6: Analysis of Brussels respondents that did not meet the selection criteria or immediately refused to participate

	Contact but refused - without giving a reason (894 respondents)		Contact but did not meet selection criteria (162 respondents)	
Gender	**Absolute**	**%**	**Absolute**	**%**
Man	434	48.55	81	50.00
Woman	460	51.45	81	50.00
Age	**Absolute**	**%**	**Absolute**	**%**
18-29	163	18.23	23	14.20
30-38	204	22.82	39	24.07
39-49	162	18.12	33	20.37
50-62	163	18.23	28	17.28
63-74	204	22.82	27	16.67
75+	162	18.12	12	7.41

4. Sample and analysis

The assignment involved interviewing 1,500 Belgian drivers taking into account the quotas defined in terms of region, gender and age (Table 1). The consultancy agency decided to use oversampling (Table 2). Given the expected lower response rate for certain target groups, 1,540 interviews were finally conducted. The actual distribution of respondents according to region, gender and age resulted as follows in Table 7.

Table 7: Actual distribution of respondents according to region, gender and age

	Men						Women						
	18-29	**30-38**	**39-49**	**50-62**	**63-76**	**77+**	**18-29**	**30-38**	**39-49**	**50-62**	**63-76**	**77+**	**Total**
Flanders	52	47	54	52	42	12	48	53	52	53	40	11	**516**
Wallonia	48	45	47	52	46	10	52	48	53	51	41	11	**504**
Brussels-Capital Region	47	59	55	48	40	13	54	45	49	56	40	14	**520**
Total	**147**	**151**	**156**	**152**	**128**	**35**	**154**	**146**	**154**	**160**	**121**	**36**	**1,540**

A similar division of the driving license database used for each attitude measurement survey[6] resulted in the distribution as shown in Table 8.

Table 8: Distribution of driving license database according to region, gender and age

	Men						Women						
	18-29	**30-38**	**39-49**	**50-62**	**63+**	**Subtotal**	**18-29**	**30-38**	**39-49**	**50-62**	**63+**	**Subtotal**	**Total**
Flanders	311 864	355 319	489 341	460 311	397 401	2 014 236	273 710	327 540	460 045	421 711	372 591	1 855 597	**3 869 833**
Wallonia	134 519	165 480	213 606	209 709	173 452	896 766	104 085	139 420	185 091	174 103	158 410	761 109	**1 657 875**
Brussels-Capital Region	36 695	58 939	79 779	80 323	88 789	344 525	22 593	41 639	61 081	63 169	70 717	259 199	**603 724**
Total	**483 078**	**579 738**	**782 726**	**750 343**	**659 642**	**3 255 527**	**400 388**	**508 599**	**706 217**	**658 983**	**601 718**	**2 875 905**	**6 131 432**

Table 9 provides the distribution (percentage) of respondents in the theoretical sample in the empirical sample and the population of the driving license database. The comparison of these three distributions clearly reveals that the theoretical sample and the population of the driving license database differ in several ways. A more detailed distribution of these differences makes it clear that the established disproportionality could be largely explained by the quota defined for the regions (see Table 1). This was intended to allow enough interviews to be conducted in the Brussels-Capital Region so that statistically meaningful comparisons could be made between the various subgroups (such as age groups) in this relatively small region.

[6] The driving license database was made available to the IBVV/IBSR for this study by the FPS Mobility and Transport in 2003.

Table 9: Comparison of proportions in theoretical sample, empirical sample and population of driving license database - according to region, age and gender

Theoretical	Men						Women						
	18-29	30-38	39-49	50-62	63+	subtotal	18-29	30-38	39-49	50-62	63+	subtotal	Total
Flanders	3.33	3.33	3.33	3.33	3.33	16.67	3.33	3.33	3.33	3.33	3.33	16.67	**33.33**
Wallonia	3.33	3.33	3.33	3.33	3.33	16.67	3.33	3.33	3.33	3.33	3.33	16.67	**33.33**
Brussels-Capital Region	3.33	3.33	3.33	3.33	3.33	16.67	3.33	3.33	3.33	3.33	3.33	16.67	**33.33**
Total	**10.00**	**10.00**	**10.00**	**10.00**	**10.00**	**50.00**	**10.00**	**10.00**	**10.00**	**10.00**	**10.00**	**50.00**	**100.00**

Empirical	Men						Women						
	18-29	30-38	39-49	50-62	63+	subtotal	18-29	30-38	39-49	50-62	63+	subtotal	Total
Flanders	3.38	3.05	3.51	3.38	3.51	16.82	3.12	3.44	3.38	3.44	3.31	16.69	**67.01**
Wallonia	3.12	2.92	3.05	3.38	3.64	16.10	3.38	3.12	3.44	3.31	3.38	16.62	**65.45**
Brussels-Capital Region	3.05	3.83	3.57	3.12	3.44	17.01	3.51	2.92	3.18	3.64	3.51	16.75	**67.53**
Total	**9.55**	**9.81**	**10.13**	**9.87**	**10.58**	**49.94**	**10.00**	**9.48**	**10.00**	**10.39**	**10.19**	**50.06**	**100.00**

Population	Men						Women						
	18-29	30-38	39-49	50-62	63+	Subtotal	18-29	30-38	39-49	50-62	63+	Subtotal	Total
Flanders	5.09	5.80	7.98	7.51	6.48	32.85	4.46	5.34	7.50	6.88	6.08	30.26	**63.11**
Wallonia	2.19	2.70	3.48	3.42	2.83	14.63	1.70	2.27	3.02	2.84	2.58	12.41	**27.04**
Brussels-Capital Region	0.60	0.96	1.30	1.31	1.45	5.62	0.37	0.68	1.00	1.03	1.15	4.23	**9.85**
Total	**7.88**	**9.46**	**12.77**	**12.24**	**10.76**	**53.10**	**6.53**	**8.29**	**11.52**	**10.75**	**9.81**	**46.90**	**100.00**

Often a sample is not a good reflection of the population from which it is drawn. The main reason for this is the non-response aspect. In the attitude measurement survey 2012 we also worked with quotas for region, age and gender. Thanks to the driving license database organised according to region, age and gender we know the percentage distribution in the population across the groups. For example with regard to Flemish men aged between 18 and 29 years: the sample includes 3% of young Flemish men, the population however includes 5% of young Flemish men that possess a driving license (Table 9). We can therefore conclude that the study is not representative in terms of region, age or gender.

To compensate for this discrepancy we must determine a weighting for each group.

In reality the ratio between the regions in the estimation is 63-27-10 respectively for Flanders, Wallonia and the Brussels-Capital Region. Naturally this is highly disproportionate compared with the corresponding 50-50-50 ratio in the sample. With regard to the distribution according to gender, overall we can establish that the 50-50 ratio between men and women in the sample is a fairly accurate reflection of the actual ratio in the population 53-47.

When analysing the data, the discrepancies between the population (based on the driving license database) and the sample of actual respondents were compensated by the inverse proportional weighting of the answers with the selection probability of respondents in a given unit for the breakdown of the population and the sample according to region, age group and gender. This can best be illustrated using an example: within the group (unit) of Flemish men aged 18 to 29 years, 52 respondents were interviewed. Since this group comprised a total of 311,864 people in possession of a driving licence, the answers provided by this group were also weighted with a coefficient of 1/ (52 / 311,864) = 5,997.4. These coefficients were calculated for each group (see Table 10). Due to the disproportionately large share of respondents in the Brussels-Capital Region, their answers are weighted less in the final results.

Table 10: Weighting factors for respondents according to region, gender and age (based on their proportion in the total population)

Weighting factor	Men					Women				
	18-29	**30-38**	**39-49**	**50-62**	**63+**	**18-29**	**30-38**	**39-49**	**50-62**	**63+**
Flanders	5,997	7,560	9,062	8,852	7,359	5,702	6,180	8,847	7,957	7,306
Wallonia	2,802	3,677	4,545	4,033	3,097	2,002	2,905	3,492	3,414	3,046
Brussels-Capital Region	781	999	1,451	1,673	1,675	418	925	1,247	1,128	1,310

The analysis took into account the stratification of the sample and the fact that the sample was drawn from a selection of primary sampling units (the proportional to their size selected municipalities). This is necessary in order to get to correct estimates of the confidence intervals (Thompson, 2002).

With regard to the effects of the sample design and weighting on the results we can state the following: the sample design had no effect on the value of averages, proportions and percentages while the weighting factor does have a major impact. The standard margin of error and confidence interval are strongly influenced by the sample design and the weighting.

The analyses were performed using the STATA 13.0 program. STATA offers the possibility to take into account the specific sample design.

5. Questionnaire

The questionnaire that was used for the attitude survey 2012 was based on the one used in 2009. Where possible the question formulation used in the previous attitude measurements and in the SARTRE studies was literally duplicated for the sake of comparison with the previous survey. The fieldwork and the analysis of the results from 2009 clearly revealed that a number of questions resulted in ambiguous answers to crucial research questions or were difficult to interpret. Therefore, several questions were thoroughly revised. Moreover, questions were added to include new themes (such as distracted driving), and to examine various detailed aspects of attitudes (determinants of planned behaviour, such as perceived social norms and behavioural control, etc..

The final versions of the questionnaire in NL and FR can be found in:

Meesmann, U., Boets, S. & Silverans, P. (2014) *Bijlage Methodologie & Vragenlijst. Resultaten van de driejaarlijkse attitudemeting over verkeersveiligheid van het BIVV*. Brussel, België: Belgisch Instituut voor de Verkeersveiligheid – Kenniscentrum Verkeersveiligheid.

Meesmann, U., Boets, S. & Silverans, P. (2014) *Annexe : Méthodologie et questionnaire. Résultats de la mesure d'attitudes en matière de sécurité routière menée tous les trois ans par l'IBSR*. Bruxelles, Belgique : Institut Belge pour la Sécurité Routière – Centre de connaissance Sécurité routière

References

Boets, S. & Meesmann, U. (2014) *Snelheid en te snel rijden. Resultaten van de driejaarlijkse attitudemeting over verkeersveiligheid van het BIVV*. Brussel, België: Belgisch Instituut voor de Verkeersveiligheid – Kenniscentrum Verkeersveiligheid.

Boets, S. & Meesmann, U. (2014) *Vitesse et vitesse excessive. Résultats de la mesure d'attitudes en matière de sécurité routière menée tous les trois ans par l'IBSR*. Bruxelles, Belgique: Institut Belge pour la Sécurité Routière – Centre de connaissance Sécurité Routière.

Meesmann, U. & Boets, S. (2014) *Rijden onder invloed van alcohol en drugs. Resultaten van de driejaarlijkse attitudemeting over verkeersveiligheid van het BIVV*. Brussel, België: Belgisch Instituut voor de Verkeersveiligheid – Kenniscentrum Verkeersveiligheid.

Meesmann, U. & Boets, S. (2014) *Conduite sous l'influence de l'alcool et de drogues. Résultats de la mesure d'attitudes en matière de sécurité routière menée tous les trois ans par l'IBSR*. Bruxelles, Belgique : Institut Belge pour la Sécurité Routière – Centre de connaissance Sécurité Routière.

Meesmann, U. & Boets, S. (2014) *Vermoeidheid en afleiding door gsm-gebruik. Resultaten van de driejaarlijkse attitudemeting over verkeersveiligheid van het BIVV*. Brussel, België: Belgisch Instituut voor de Verkeersveiligheid – Kenniscentrum Verkeersveiligheid.

Meesmann, U. & Boets, S. (2014) *Fatigue et distraction due à l'usage du GSM. Résultats de la mesure d'attitudes en matière de sécurité routière menée tous les trois ans par l'IBSR*. Bruxelles, Belgique : Institut Belge pour la Sécurité Routière – Centre de connaissance Sécurité Routière.

Meesmann, U. & Boets, S. (2014) *Gebruik van de veiligheidsgordel en kinderbevestigingssystemen. Resultaten van de driejaarlijkse attitudemeting over verkeersveiligheid van het BIVV*. Brussel, België: Belgisch Instituut voor de Verkeersveiligheid – Kenniscentrum Verkeersveiligheid.

Meesmann, U. & Boets, S. (2014) *Usage de la ceinture de sécurité et des dispositifs de retenue pour enfants. Résultats de la mesure d'attitudes en matière de sécurité routière menée tous les trois ans par l'IBSR*. Bruxelles, Belgique : Institut Belge pour la Sécurité Routière – Centre de connaissance Sécurité Routière.

Meesmann, U. & Boets, S. (2014) *Handhaving en draagvlak voor maatregelen. Resultaten van de driejaarlijkse attitudemeting over verkeersveiligheid van het BIVV*. Brussel, België: Belgisch Instituut voor de Verkeersveiligheid – Kenniscentrum Verkeersveiligheid.

Meesmann, U. & Boets, S. (2014) *Politique criminelle et adhésion sociale aux mesures. Résultats de la mesure d'attitudes en matière de sécurité routière menée tous les trois ans par l'IBSR*. Bruxelles, Belgique : Institut Belge pour la Sécurité Routière – Centre de connaissance Sécurité Routière.

Meesmann, U., Boets, S. & Silverans, P. (2014) *Bijlage Methodologie & Vragenlijst. Resultaten van de driejaarlijkse attitudemeting over verkeersveiligheid van het BIVV*. Brussel, België: Belgisch Instituut voor de Verkeersveiligheid – Kenniscentrum Verkeersveiligheid.

Meesmann, U., Boets, S. & Silverans, P. (2014) *Annexe : Méthodologie et questionnaire. Résultats de la mesure d'attitudes en matière de sécurité routière menée tous les trois ans par l'IBSR*. Bruxelles, Belgique : Institut Belge pour la Sécurité Routière – Centre de connaissance Sécurité routière

Thompson, S.K. (2002) *Sampling Second Edition. Wiley series in probability and statistics*. New York: John Wiley and Sons. p. 133.


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