

▶ Seat Belt Wearing Baseline Attitudinal Assessment

Deliverable 2: Seat Belt Compliancy Study

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NAMIBIA reference map. The regional centres where the questionnaires were administered in this study are shown underlined in red.

EXECUTIVE SUMMARY

A Seat Belt Compliance Assessment was conducted in Namibia between January and March 2009, in order to determine:

- The level of awareness amongst various segments of the population and the police about the risk of injury in the event of a crash and the level of protection from injury wearing a seat belt can provide.
- The main stereotypes determining the population's attitude to the road safety issues of seat belt wearing and road safety in general - the potentially effective communication channels and required information for reaching different target audiences
- The motivations of the target audiences to improve wearing rates.
- Police attitudes and activities with respect to enforcing seat belt wearing.

The output (deliverables) of the assessment are two reports that will be used to inform the implementation phase of a Namibia Seat Belt Campaign.

Deliverable 1: Namibia Police attitudinal study

Deliverable 2: Seat Belt Wearing Baseline Attitudinal Assessment (**This report**)

Since the fatality rates and casualty rates per crash, are reasonably similar in each region of Namibia, it was decided to undertake a proportionate stratified sample based upon Crash rates per region. Data were obtained using questionnaires administered by a survey team. 1203 questionnaires were completed, comprising 799 responses from passengers and 404 from drivers.

A major finding in this study is how well Namibians understand the need for seat belt wearing and that they agree that it is beneficial. It is also noted that while agreement with seat belt wearing is high, in practice, the observed compliance is often more than half of the self-reported compliance. The issue in Namibia with regard to seat belt usage is perhaps, not, "how to get people to believe the issue", it is "how to align the belief with the practice". Public acceptance of the benefits should in theory, make enforcement activities a relatively straight forward procedure.

This study has identified a number of focus areas for campaigning:

- Child restraints and seating a child in a vehicle
- The importance of both front and rear seat belt wearing
- The importance of wearing on short journeys
- Fitting and wearing seat belts
- Injuries resulting from non-wearing of seat belts
- Contributory negligence and financial implications to victims (MVA)
- Information on the legal requirements, standards and suppliers of seat belts.

In addition Police enforcement is a key factor in increasing compliance and as has been shown in the Police Study (Deliverable 1), there is a need for more investment in equipment and human resources to enable a higher detection rate of offences and increase the chances of drivers being caught.

It is difficult to understand why drivers should react negatively to any campaign that aims to protect both their lives and those of their passengers, however, developing an attitudinal shift is not easy. In Costa Rica the central human and emotional message of their seat belt campaign was based around the concept of love and responsibility. The campaign icon featured a traffic sign with a heart secured by a seat belt. The campaign slogan "Por Amor Use el Cinturón" (For love use your seat belt) deliberately did not demand that Costa Ricans "obey an order", something which had proved so disastrous in the past, but asked them to make the choice to wear a seat belt for the sake of family and friends. Namibia may wish to adopt a similar approach.

Seat Belt Wearing Baseline Attitudinal Assessment

Deliverable 2: Seat Belt Compliancy Study

1. INTRODUCTION

1.1 CRASH SITUATION IN NAMIBIA

Wearing a seat belt is the single most effective technical road safety measure a car occupant can take. It is estimated that 300,000 lives have been saved and 9 million injuries prevented by seat belts in the industrialized world since 1980. In low and middle income countries, however, the use of injury prevention devices such as seat belts, child restraints and motorcycle helmets is very low. It is in these countries that 80% of the estimated 1.2 million people killed on the roads worldwide each year die, including many car occupants.

Measures to increase their use by means of legislation, information, enforcement and vehicle technology such as smart audible seat-belt reminders are central to improving the safety of car occupants. The fitting of anchorages and seat-belts are covered by various technical standards worldwide and in most countries these standards are mandatory for cars. However, there is anecdotal evidence that a half or more of all vehicles in lower-income countries may lack functioning seat-belts.

In Namibia, fatalities continue to increase (Figure 1) and it is suggested that a major contributory factor is the failure to wear a seat belt. When used, seat-belts have been found to reduce the risk of serious and fatal injury by between 40% and 65%.

FIGURE 1. NAMIBIA FATALITIES WITH TRENDLINE



Roll-over crashes which constitute 8 per cent of crashes in Namibia will result in severe injuries especially if the occupants are ejected as a result of not being restrained.

A seat-belt wearing survey was conducted by GRSP Namibia (GRSPN) "A study of seat-belt compliance in The Republic of Namibia" (R van Rooyen and M Winnett: 2007). The results of the survey (Figure 2) indicated that driver compliance, that is, wearing rates, were better in the Khomas region which bounds the capital city Windhoek but deteriorated in the more distant regions with

wearing rates varying from 14% to 73% Nationally. Whether these differences were due to poor education on the subject and/or lack of police enforcement was not understood at the time.

The study tentatively indicated the linkage between seat-belt wearing and injury severity in the regions and there is also international evidence to support that low compliance clearly leads to higher injury severity. It is also clear that there are potentially large benefits in injury severity reduction if compliance is increased.

FIGURE 1. SEAT BELT WEARING SITES SURVEYED



Station	Driver Percentage wearing
Oshakati	14.21%
Ondangwa	14.51%
Gobabis	36.09%
Rehoboth	38.93%
Keetmanshoop	39.39%
Otjiwarongo	40.83%
Swakopmund	41.75%
Walvis Bay	46.88%
Windhoek	61.91%
Mariental	73.18%

Compliance ○ Low ○ Medium ○ High

The current study was initiated to determine in more detail the underlying factors contributing to the lack of seat belt compliance

1.2 STUDY BACKGROUND

1.2.1 DELIVERABLE 1

A “**Namibia Police attitudinal study**” was conducted as one of the deliverables for this GRSPN Seat Belt Compliancy Study. The report examined police attitudes towards enforcement in Namibia and the difficulties that police face when conducting their duties and upholding traffic law.

The information in this report was gathered from two sources during a road safety workshop held in Windhoek on the 9th February 2009.

- A self-completion questionnaire and
- Focus discussion groups

Without an effective police force, road safety campaigns will have a minimal impact on driver compliance. The Global Road Safety Partnership acknowledges that the Police play the most important part in road safety campaigns and since the GRSPN is considering conducting seat belts campaigns, an assessment of police capacity and capability formed part of the baseline assessment.

1.2.2 DELIVERABLE 2

This document “**Seat Belt Wearing Baseline Attitudinal Assessment**” is the second deliverable for the compliancy study. The questionnaire survey was conducted in Namibia between January and March 2009, in order to determine:

- The level of awareness amongst various segments of the population about the risk of injury in the event of a crash and the level of protection from injury wearing a seat belt can provide.
- The main stereotypes determining the population’s attitude to the road safety issues of seat belt wearing and road safety in general - the potentially effective communication channels and required information for reaching different target audiences
- The motivations of the target audiences to improve wearing rates.

The assessment was project managed by GRSPN in association with the GRSP Country Advisor, and implemented through a series of surveys conducted by GRSPN.

2. STUDY BACKGROUND

2.1 SAMPLING METHODOLOGY

Selecting a sample size that is representative of a population is often a compromise between accuracy, time available and cost. Stratified sampling offers several advantages over simple random sampling. A stratified sample can provide greater precision than a simple random sample of the same size and because it provides greater precision, a stratified sample often requires a smaller sample, which saves money.

A stratified sample can guard against an "unrepresentative" sample (e.g., an all-male sample from a mixed-gender population) and it is possible to obtain sufficient sample points to support a separate analysis of any subgroup. The main disadvantage of a stratified sample is that it may require more administrative effort than a simple random sample.

A number of variables were considered when developing a stratified sampling methodology. Table 1 shows the regional statistics for Population, Vehicle ownership and Crashes. Over 60 per cent of the crash totals occur in the Erongo and Khomas region (over half of the National crashes).

TABLE 1. NATIONAL POPULATION AND CRASH STATISTICS

Region	Crash Totals (2006 data)	Crash totals as a % of Total	Regional population	Regional Vehicle population	% of Crashes per regional population	% of vehicles per regional population
Caprivi	105	1.01%	79,826	1953	0.13%	2.45%
Erongo	1105	10.64%	107,663	24328	1.03%	22.60%
Hardap	385	3.71%	68,249	8262	0.56%	12.11%
Karas	411	3.96%	69,329	11442	0.59%	16.50%
Kavango	363	3.50%	202,694	3612	0.18%	1.78%
Khomas	5649	54.41%	250,262	93761	2.26%	37.47%
Kunene	139	1.34%	68,735	3309	0.20%	4.81%
Ohangwena	132	1.27%	228,384	1692	0.06%	0.74%
Omaheke	145	1.40%	68,039	5494	0.21%	8.07%
Omusati	248	2.39%	228,842	2588	0.11%	1.13%
Oshana	653	6.29%	161,916	16408	0.40%	10.13%
Oshikoto	156	1.50%	161,007	4296	0.10%	2.67%
Otjozondjupa	892	8.59%	135,384	15176	0.66%	11.21%

Sampling considerations:

1. It can be seen that for regions with low vehicle ownership (e.g. Ohangwena, Caprivi) the percentage of crashes per population is also low compared with other regions in Namibia. This may be due to a lower exposure to risk and different travel patterns such as walking as opposed to public and personal transport. Sampling on the basis of population would lead to over representation in some regions.
2. Regions with high vehicle ownership (e.g. Erongo, covering Walvish Bay and Swakopmund and Khomas, covering Windhoek and Rehoboth) have much higher crash rates per vehicle possibly due to exposure, transport modes and road condition (faster roads).
3. The primary goal of the study is examining attitudes and behaviour in respect of seat belt compliance, this covers drivers and passengers. Pedestrians who do not use motorised transport are screened out of the study.
4. The secondary goal of the study is to reduce casualty rates, post-study, through road safety campaigns and enforcement. Since the fatality rates and casualty rates per crash, are reasonably similar in each region, it was decided to undertake a proportionate stratified sample based upon Crash rates per region.
5. Based upon costs and logistics, a total sample of approximately 1300 questionnaires was selected. This would give a sample error of +/-2.7% (for a random sample).

Sampling assumptions:

1. That the behavioural characteristics of the driver/passenger population are homogenous.
2. That crashes generally occur to vehicles in the region where they are kept.
3. That the official transport, crash and population statistics are accurate.
4. That the crash data, especially fatalities, are not weighted by large numbers of casualties arising from a single or two vehicle crash.

2.2 QUESTIONNAIRE STUDIES

The questionnaire used in this survey is a composite of those used in other countries including one from Sakhalin, where an extremely successful seat belt programme was conducted.

The survey team travelled to a number of regional centres in Namibia in order to administer the questionnaires. The respondents were asked to participate and answer a series of questions (Appendix 2. Questionnaire). The survey team entered the responses onto the questionnaire. The questionnaires took approximately 8 minutes to complete.

The dates and times of each survey are given in Table 2. Public holidays and national days were avoided.

An addition to the locations surveyed in the first assessment, Tsumeb the capital of the Oshikoto region was added in order to improve the regional coverage.

TABLE 2. SURVEY TIMETABLE

Survey town	Sample size	Start date for survey	End date for survey	Start time for survey	End time for survey	Location in town 1st	Location in town 2nd	Location in town 3rd	Location in town 4th
Gobabis	39	13 March 2009	13 March 2009	11:00 AM	2:00 PM	Town Centre	Different Shops		
Keetmanshoop	40	12 March 2009	12 March 2009	9:00 AM	12:00 PM	Town Centre	Different Shops		
Mariental	43	11 March 2009	11 March 2009	9:00 AM	11:00 AM	Town Centre	Different Shops		
Ondangwa	60	25 March 2009	26 March 2009	12:00 AM	5:00 PM	Town Centre	Different Shops	Service Stations	
Oshakati	60	25 March 2009	25 March 2009	9:00 AM	11:00 AM	Town Centre	Different Shops		
Otjiwarongo	60	27 March 2009	27 March 2009	11:30 AM	2:00 PM	Town Centre	Service Stations	Shopping Centre	
Rehoboth	41	10 March 2009	10 March 2009	9:00 AM	11:00 AM	Town Centre	Service Stations	Different Shops	
Tsumeb	30	26 March 2009	26 March 2009	2:00 PM	5:00 PM	Town Centre	Shopping Centres	Service Stations	Hotel
Swakopmund	122	19 March 2009	20 March 2009	9:00 AM	5:00 PM	Town Centre	Shopping Centres	Service Stations	
Walvish B	160	17 March 2009	18 March 2009	9:00 AM	5:00 PM	Town Centre	Industrial Area	Shopping Centres	Service Stations
Windhoek	548	30 March 2009	24 April 2009	9:00 AM	5:00 PM	City Centre	Katutura	Khomasdal	Klein Windhoek

3. RESULTS

3.1 SUMMARY STATISTICS

1203 questionnaires were completed, comprising 799 responses from passengers and 404 from drivers. A small number of questionnaires were not fully completed due to uncertainty on behalf of the respondent regarding how to answer or an omission error by the administrator.

The aggregate data extracted from the questionnaires is given in the tables below. The tables show the **total** number of responses to each series of questions (**Response total in RED**) which is the number of completed entries for that specific question. In some cases the questions allowed multiple responses. The responses are also shown as a **percentage response**.

Table 3 gives some general statistics of the population that were interviewed. The sample was evenly distributed between male and female. The average ages of males and females were reasonable well matched. A majority of the respondents were in employment and had received at least a basic education.

TABLE 3. AGE, EDUCATION, OCCUPATION AND EMPLOYMENT

15. Gender (Response total)	1162	Percentage Response
1. Male	561	48.3%
2. Female	601	51.7%
16. Average Age	Years	
1. Male	32.6	
2. Female	31.4	
17. Education (Response total)	1173	Percentage Response
1. Incomplete secondary	272	23.2%
2. Secondary	679	57.9%
3. Vocational	45	3.8%
4. Incomplete higher	54	4.6%
5. Higher	123	10.5%
18. What is your occupation? (Response total)	1193	Percentage Response
1. Pensioner	20	1.7%
2. Qualified labourer	485	40.7%
3. Unqualified labourer	207	17.4%
4. Manager level	68	5.7%
5. Supervisor level	58	4.9%
6. Individual entrepreneur	86	7.2%
7. Worker with higher education degree	50	4.2%
8. Worker without higher education degree	38	3.2%
9. Student	107	9.0%
10. Unemployed	55	4.6%
11. Stay-at-home carer	19	1.6%
12. Other (please specify)		
19. Is your employing company partially or fully owned by a foreign company? (Response total)	982	Percentage Response
1. Yes	53	5.4%
2. No	929	94.6%

Table 4 shows the split between professional and non-professional drivers (ordinary members of the public). 84 per cent of all drivers surveyed were non-professional drivers.

TABLE 4: TYPE OF VEHICLE DRIVEN

2. If a driver, what type of vehicles do you drive? (more than one answer is possible)		
Professional driver (Response total)	74	Percentage Response
1. passenger car	26	35.1%
2. taxi	10	13.5%
3. truck	17	23.0%
4. minibus	9	12.2%
5. large bus	0	0.0%
6. four-wheel drive	11	14.9%
7. other	1	1.4%
Non-professional driver (Response total)	391	Percentage Response
1. passenger car	252	64.5%
2. minibus	25	6.4%
3. four-wheel drive	103	26.3%
4. motorbike	3	0.8%
5. truck with possible capacity up to 3.5 tons	8	2.0%
6. other	0	0.0%

Table 5 illustrates that taxis predominate as the passenger transport in Namibia but this perhaps reflects the general lack of public service vehicles available to the communities and the travellers.

TABLE 5. PASSENGER TRAVEL

3. If a passenger, what type of vehicles do you travel in? (more than one answer is possible) Type of Transport		
1. private vehicle (Response total)	175	Percentage Response
1. car	135	77.1%
2. four-wheel drive	28	16.0%
3. minibus	11	6.3%
4. motorbike	1	0.6%
5. truck with possible capacity up to 3.5 tons	0	0.0%
6. other (specify)	0	0.0%
2. company vehicle (Response total)	58	Percentage Response
1. car	37	63.8%
2. four-wheel drive	3	5.2%
3. truck	5	8.6%
4. minibus	10	17.2%
5. bus	3	5.2%
6. other (specify)	0	0.0%
3. taxi (Response total)	641	Percentage Response
1. car	605	94.4%
2. four-wheel drive	4	0.6%
3. minibus	32	5.0%
4. other (specify)	0	0.0%
4. public transport (Response total)	74	Percentage Response
1. minibus	60	81.1%
2. bus	14	18.9%

The perception of passengers is interesting especially since in answer to the question “Do you believe that it is beneficial to always wear a seat belt when travelling in a vehicle?” 98% of the passenger respondents answered the question in the affirmative - YES. Such agreement with the benefits of seat belts are however undermined by perceptions (Table 6) such as sitting in the rear of a car is safe (103 responses), wearing a seat belt is uncomfortable (89 responses) and it is not needed on short distances (64 responses). The idea that the rear seat is safer, is shown in the response to wearing rates as a front seat passenger (39 per cent) and the much lower wearing rate as a rear seat passenger (4 per cent).

There is also a strong perception that vehicles are not equipped with seat belts (145 responses). This may reflect the observation that many taxis do not have functioning seat belts.

The validity of the self-reported responses to seat belt wearing will be examined in the Discussion (Chapter 4 of this report).

TABLE 6. SEAT BELT WEARING

4. Do you wear a seat belt when travelling in a vehicle? (more than one answer is possible) (Response total)	1204	Percentage Response
1. Always	779	64.7%
2. Sometimes	367	30.5%
3. Never	58	4.8%
5. If sometimes, then in what cases do you wear a seat belt? (up to three answers possible) (Do not give options) (Response total)	584	Percentage Response
1. as a driver	35	6.0%
2. as a passenger (in the front seat)	229	39.2%
3. as a passenger (in the back seat)	23	3.9%
4. in all vehicles equipped with seat belts	99	17.0%
5. only in a car or a four-wheel drive	4	0.7%
6. only on business trips during working hours	0	0.0%
7. only on trips out of town	32	5.5%
8. only in town	30	5.1%
9. only on short trips	14	2.4%
10. only on long trips	62	10.6%
11. only when there is a threat to be stopped by police	56	9.6%
12. other (specify)		
6. If sometimes or never, please explain when or why you do not use a seat belt. (Do not give options) (up to three answers possible) (Response total)	468	Percentage Response
1. It is safe to sit in the back seat – I do not need to wear my seat belt.	103	22.0%
2. No one else wears seat belts.	18	3.8%
3. I travel only at low speed – I can brace myself for impact.	7	1.5%
4. I travel only in town.	14	3.0%
5. Wearing a seat belt is uncomfortable.	89	19.0%
6. It is safer not to wear a seat belt / wearing a seat belt can be dangerous.	17	3.6%
7. I travel only on short distances.	64	13.7%
8. A vehicle is not equipped with seat belts.	145	31.0%
9. Insufficient police enforcement/unreasonably low fines	6	1.3%
10. I trust the driver's skills	3	0.6%
11. A vehicle is equipped with air bags, so there is no need to wear a seat belt.	2	0.4%
12. Other (specify)	0	0.0%

Table 7 show some of the reasons for wearing seat belts. There is a suggestion that improved enforcement (27.4 per cent response) might increase compliance as well as seat belts being fitted to vehicles (23.7 per cent response).

The main reasons given for wearing a seat belt were the recognition that crashes kill and injure (39.8 per cent) and that seat belts save lives (44.1 per cent). It would appear that while recognising this truth, the risk is outweighed by lesser considerations of comfort, ease of use and information on usage.

TABLE 7. REASONS FOR WEARING SEAT BELT

7. If sometimes or never, what might compel you to wear a seat belt? (Do not give options) (up to three answers possible) (Response total)	507	Percentage Response
1. Proper enforcement/greater fines.	139	27.4%
2. More information on seat belt use.	68	13.4%
3. Seat belts easier to use.	73	14.4%
4. Seat belts more comfortable to wear.	86	17.0%
5. If a vehicle is fully equipped with seat belts.	120	23.7%
6. If other people use seat belts.	21	4.1%
7. Other (specify)	2	0.4%
8. If sometimes or always, please explain why you wear a seat belt. (Do not give options) (up to three answers possible) (Response total)	2107	Percentage Response
1. Heard/ saw seat belt ads.	14	0.7%
2. At the request of family or friends.	31	1.5%
3. A car crash can kill or injure me.	838	39.8%
4. Seat belts can save life.	930	44.1%
5. It is a law – I do not want to be stopped or fined.	277	13.1%
6. It is one of the requirements of my employer.	16	0.8%
7. Other	1	0.0%
9. Have you seen/heard any seat belt information/ads? (one answer only) (Response total)	1181	
1. Yes	978	82.8%
2. No	203	17.2%

Table 8 reports on whether the respondents discussed published and broadcast information on seat belts and injuries and whether the media information had improved the understanding of the dangers. The responses suggest that road safety is a topic of discussion between family and friends and that the information has been of benefit in understanding the dangers (93.1 per cent). The dissemination channels are discussed in more detail in the next section (3.2 Media influence).

TABLE 8. INFLUENCE OF MEDIA

13. Did you discuss this information with anyone? (more than one answer is possible) (Response total)	1104	Percentage Response
1. Yes, with my family	430	38.9%
2. Yes, with my friends with anyone	150	13.6%
3. Yes, with my colleagues	40	3.6%
4. Yes, with other people	86	7.8%
5. No, did not discuss	398	36.1%
14. Has it helped you to understand the danger of injury in case of road accidents and why wearing a seat belt can save your life? (Response total)	970	Percentage Response
1. Yes	903	93.1%
2. No	67	6.9%

Half of the respondents (49.9 per cent) had children under 12 years of age (Table 9). The answers to question 21 show the combined passenger and driver responses. Table 10 shows the disaggregated data and gives the results for passengers and drivers separately for those with children under 12 years and allows multiple responses to questions.

TABLE 9. CHILD USAGE OF SEAT BELTS

20. Do you have children under the age of 12? (Response total)	1067	Percentage Response
1. Yes	532	49.9%
2. No	535	50.1%
21. If yes, when travelling in a vehicle, your child is: (Response total)	673	Percentage Response
1. always placed in a baby car seat, suitable for he child's weight and age	37	5.5%
2. always buckled up	144	21.4%
3. placed on an adult's lap	142	21.1%
4. in the back seat	292	43.4%
5. in the front seat	19	2.8%
6. never buckled up	39	5.8%
22. Do you believe that it is beneficial to always wear a seat belt when travelling in a vehicle? (Response total)	1157	Percentage Response
1. Yes	1139	98.4%
2. No	18	1.6%

In Table 10 it is noted that both drivers and passengers consider it more important that children wear seat belts (41.9 per cent for passenger's children and 46 per cent for driver's children) in the rear than adults (3.9 per cent - compare with Table 6 results). There is a consensus between both passenger parents (95 per cent) and driver parents (95.6 per cent) that seat belt wearing is beneficial, but in practice the self-reported compliance is much lower, for example a very low percentage of children are "always buckled up".

It is also observed that the hazardous practice of carrying a child on the lap (29.5 per cent for passengers compared with 5.9 per cent for drivers) occurs. This may be a reflection of crowded occupancy for passengers, when travelling in, for example, taxis, as well as a lack of understanding of the danger.

TABLE 10. CHILD USAGE DISAGGREGATED PASSENGERS AND DRIVERS

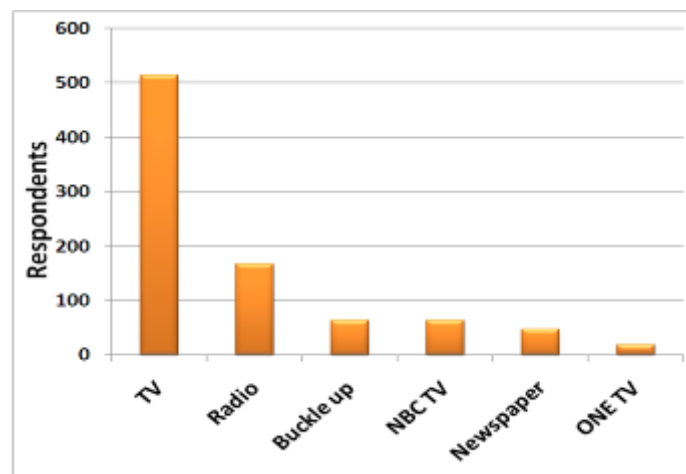
When travelling in a vehicle, your child is:	Passenger	Percentage Response	Driver	Percentage
Response total	437		237	
1. always placed in a baby car seat, suitable for he child's weight and age	12	2.7%	25	10.5%
2. always buckled up	81	18.5%	63	26.6%
3. placed on an adult's lap	129	29.5%	14	5.9%
4. in the back seat	183	41.9%	109	46.0%
5. in the front seat	5	1.1%	14	5.9%
6. never buckled up	27	6.2%	12	5.1%
Do you believe that seat belt wearing is beneficial?	Passenger	Percentage Response	Driver	Percentage
Response total	358		180	
Yes	340	95.0%	172	95.6%
No	18	5.0%	8	4.4%

3.2 MEDIA INFLUENCE

Knowledge and information exchange are influential in creating awareness of road safety issues in the mind of the public. To explore this a number of specific questions were developed

- Have you seen/heard any seat belt information/advertisements?
- If yes, what and have you seen/heard and where?
- If on radio, TV or in a newspaper, please specify which radio station, TV channel or newspaper.
- If on radio or TV, please specify when (morning / daytime / evening).

FIGURE 2. MEDIA RESPONSES



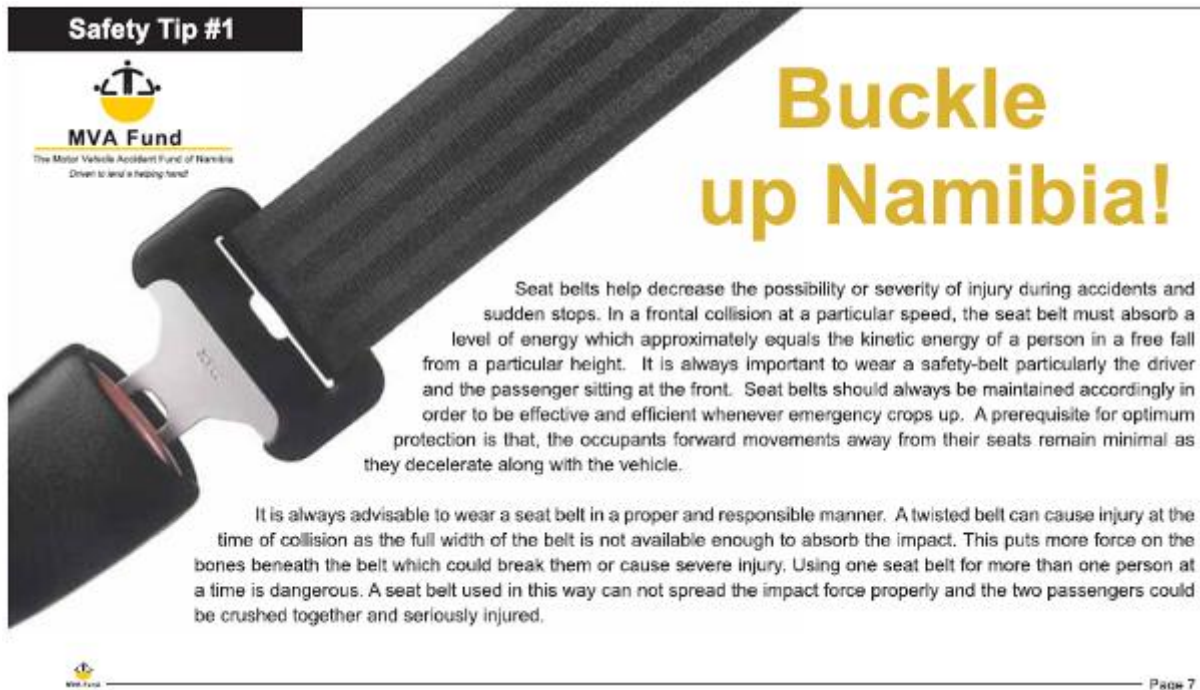
More than 150 different media combinations, such as tv/radio or billboards/newspaper, were recalled by the respondents in the questionnaire surveys as having presented seat belt information. Figure 3 shows the responses to the media questions, where there were more than 15 responses for a particular media type. Television is clearly the most remembered information source followed by Radio.

The most mentioned newspapers were the Republikein, the Namibian and the Informante

The time of day when the particular information was presented on Television and Radio was not clearly remembered. Specific campaigns were recalled, such as “Buckle up”, which appears to have been given wide coverage, especially on bill boards.

The local road safety organisations have been successful in placing messages relating to seat belts wearing. For example the Motor Vehicle Accident Fund (MVA) has been involved in their own “Buckle up” campaign (Figure 4).

FIGURE 3. MVA SAFETY ADVERTISEMENT



The MVA statement is clear and concise and covers the major technical issues relating to good practice. The Namibia legislation in support of this good practice is given in Appendix 1.

From the media responses it was calculated that 81 per cent of the respondents were aware of seat belt advertisements and had access to media.

3.3 REGIONAL VARIATIONS

The results were reasonable consistent across the regional centres in Namibia with a few exceptions. Some centres reported a lower likelihood of seeing or hearing information on seat belts (Table 11). The reasons for this require further detailed investigation.

TABLE 11. I HAVE NOT SEEN/HEARD INFORMATION/ADVERTISEMENTS

Gobabis	Keetmanshoop	Mariental	Ondangwa	Oshakati	Otjiwarongo	Rehoboth	Tsumeb	Swakopmund	Walvis B	Windhoek
46.2%	32.5%	27.9%	1.7%	16.7%	10.0%	51.2%	3.3%	18.0%	13.1%	14.2%

Tables 12 and 13 suggest, for example in Ondangwa, that there is a lower probability of vehicles being fitted with seat belts. A further study could investigate the number of vehicles in a region fitted with working seat belts.

TABLE 12.1 WILL WEAR IF VEHICLE IS EQUIPPED WITH SEAT BELT

Gobabis	Keetmanshoop	Mariental	Ondangwa	Oshakati	Otjiwarongo	Rehoboth	Tsumeb	Swakopmund	Walvis B	Windhoek
12.8%	7.5%	7.0%	16.7%	5.0%	11.7%	14.6%	10.0%	4.1%	6.3%	11.9%

TABLE 13. I DO NOT WEAR A SEAT BELT BECAUSE VEHICLE IS NOT EQUIPPED

Gobabis	Keetmanshoop	Mariental	Ondangwa	Oshakati	Otjiwarongo	Rehoboth	Tsumeb	Swakopmund	Walvis B	Windhoek
7.7%	7.5%	7.0%	18.3%	6.7%	20.0%	22.0%	10.0%	6.6%	10.6%	13.1%

The regional centres indicating that seat belts are *sometimes* worn are shown in Table 14. It is not clear whether this reflects a local culture of compliance to rules or if it reflects a lack of local enforcement.

TABLE 14. I SOMETIMES WEAR A SEAT BELT WHEN TRAVELLING IN A VEHICLE

Gobabis	Keetmanshoop	Mariental	Ondangwa	Oshakati	Otjiwarongo	Rehoboth	Tsumeb	Swakopmund	Walvis B	Windhoek
33.3%	20.0%	23.3%	33.3%	15.0%	15.0%	39.0%	20.0%	20.5%	21.3%	39.6%

4. DISCUSSION

4.1 BELIEF AND PRACTICE

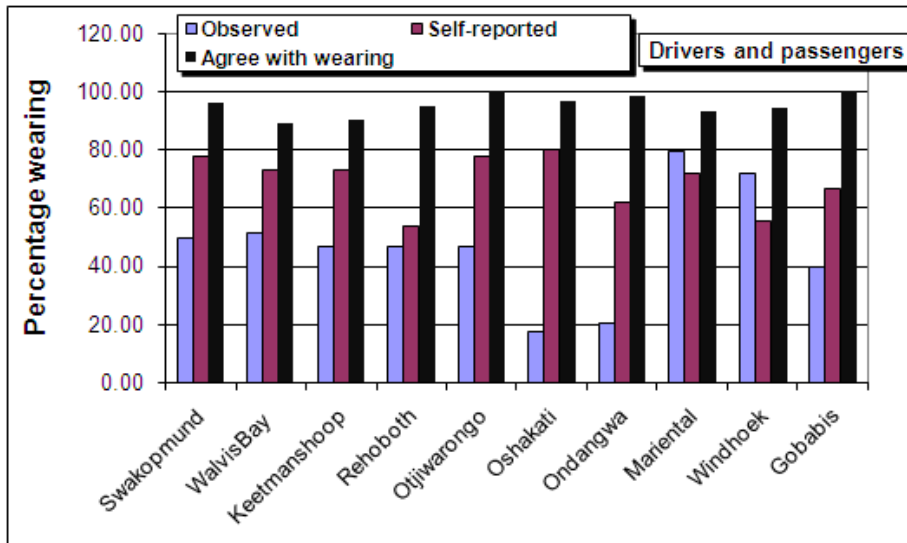
This study suggests that the awareness of the importance of using seat belts is extremely high in Namibia. It is also clear that as a principle, “**it is beneficial to wear a seat belt when traveling in a vehicle**” (98.4 per cent), however, the self-reported wearing rates and the observed wearing rates suggest that a large number of the population, as far as application is concerned, are either ignoring the facts or are impeded from complying by lack of seat belts fitted in vehicles.

Figure 5 has combined data from the previous GRSPN study on seat belt wearing (see CHAPTER 1 Figure 2) with the current data. The previous study data is referred to as **observed wearing rates**. An assumption has been made that wearing rates have at least remained the same since the first study was conducted in 2007, which would be supported by the fact that there were no intensive seat belt campaigns in the intervening period. It is also possible however, that the observed wearing rates have declined due to the lack of regular enforcement and campaigns.

The self-reported rates are much higher than the observed rates (Figure 5). It is possible that while people agree with the principle of seat belt wearing, in practice they do not always get around to wearing them for reasons cited in Table 5 above. A similar phenomenon may be observed with alcohol and driving, where the evidence and opinion is firmly against drinking and driving. However people who agree that it is wrong will often take the risk of drinking and driving.

A problem with road user behaviour is the variability of behaviour within the individual, dependent upon their current situation and circumstances. While most drivers would agree that excessive speed puts both themselves and other road users at risk of serious injury and that driving at the speed limit constitutes safe practice, research has shown that as many as 70 per cent of drivers exceed the 30mph posted limit in urban areas in the UK. Risks are taken because the perceived benefits (e.g. journey time saving) outweigh the likelihood of a collision or detection by enforcement.

FIGURE 4. OBSERVED AND SELF-REPORTED WEARING RATES



The same has been shown in the current study. Drivers are unanimous in acknowledging the benefit of wearing a seat belt on a journey but a much lower percentage say that they actually wear a seat belt when traveling. The observed wearing rates are even lower than the self-reported wearing rates. The risk taken by **not** wearing a seat belt, is low in the mind of the road users and clearly outweighs the likelihood of a collision, injury or death. This attitude to risk, called “utility”, can be seen in the following illustration of street selling. The necessity to earn a living overrides the constraints of safe behaviour (Figure 6).

FIGURE 5. WEST AFRICAN STREET SELLERS



4.2 PUBLIC ACCEPTABILITY OF INCREASED ENFORCEMENT

The study shows that the majority of drivers and passengers (98.4 per cent) believe that it is beneficial to wear a seat belt when travelling in a vehicle. This is a very high level of public acceptance and provided that the next steps to increase compliance are sensitively managed, the likelihood of alienating the public from supporting improvements should be low.

The Costa Rica model (**Por Amor** (For Love) Costa Rica’s Seat Belt Campaign) illustrates the benefits of primary “soft” enforcement, educating and encouraging compliance ahead of a rigorous enforcement campaign.

The traffic police were enthusiastic partners in the campaign, developing their positive relationship with motorists through ‘soft’ enforcement advice stops where they encouraged car occupants to wear their seat belt and handed them campaign advice literature. The seat belt campaign was also seen as an excellent opportunity, through ‘soft’ enforcement of the seat belt message and through TV advertising, to present a more positive image of the police. Table 15 shows the results from the programme.

TABLE 15. COSTA RICA IMPROVED COMPLIANCE

	July 2003 %	August 2003 %	Increase %
Drivers	24	82	+58
Front seat passengers	16	76	+60
Back seat passengers	10	48	+38
Child seats	8	37	+29

As the previous deliverable “**Namibia Police attitudinal study**” Deliverable 1 of this Seat Belt Compliancy Study suggested, more traffic police resources are required in order to improve road safety in Namibia. The results of this study indicated that the police in Namibia are self-motivated, capable but underfunded and under-resourced. They also lack the support structures that enable effective policing to be undertaken. Some of the issues which impede performance are:

- Traffic police are under-resourced with only 100 men. The recommended compliment should be between 400 and 500 officers. This would have a major impact on activities and detection rates.
- Traffic courts operate part time, that is for only 2 days per week. It was suggested that the police need their own court to process offenders operating 5 days a week. The costs of the courts could be funded through hypothecating (taking a percentage of) fines. Reducing the time to process offenders would enable a higher ticketing rate and consequently increasing the pressure on motorists to improve their behaviour.
- Respect for the police as upholders of the law requires a review. In some countries, verbal abuse may lead to a caution and subsequent arrest. Respect for law must accompany respect for the upholders of the law. The public perception of the police requires improvement and this can be achieved through improved community policing.
- Legislation appears inadequate to address the issues on the ground. Traffic fines are too low.

4.3 VEHICLE STANDARDS

The respondents indicated that a lack of seat belts in vehicles was a reason for non-compliance (32 per cent). The lack of regular vehicle testing (other than at change of ownership) does not encourage vehicle maintenance.

Seat belt standards exist and drivers and fleet operators can be made aware of this requirement especially as some recent high profile cases in Namibia have shown that operators may be held liable in law.

A simple checklist to help the police identify if a seat belt is functional or damaged could help to identify the scale of the problem.

4.4 PENALTIES FOR NON-COMPLIANCE

The new MVA fund act has introduced sanctions against negligent claimants.

“when a person claiming for benefits was injured when he/she was not, at the time of the accident, utilizing a seat belt fitted to the vehicle for use by a person; in the case of the claimant, the monetary benefits otherwise payable is reduced by 25%;

if a person was injured when he/she was being conveyed otherwise than in or on a seat not properly constructed and affixed to the vehicle for the purpose of the conveyance of persons, in such case the monetary benefits otherwise payable is reduced by up to 50%;

It is not clear how well this information is understood among the population and it could be used as part of an awareness campaign dealing with the consequences of a crash.

If the passenger is not wearing a seat belt in Namibia the driver can be fined even if he is wearing his belt. However the current fine for not wearing a seat belt is 300N\$ (\$35USd) and may be an insufficient deterrent. Consideration could be given to a review of penalties for non-wearing of seat belts as has recently taken place with regard to speeding.

60 KM/H ZONE

*71-74km/h = R250.00	*75 - 79km/h - R500.00
*80-84km/h = R750.00	*85-89km/h = R1000.00
*90-94km/h = R1500.00	*95-99km/h = R2500.00
*100km/h and over no fine payable have to appear in court	

The current lack of police resources may also play a factor since the probability of being detected and penalised is low.

4.5 ARE CAMPAIGNS NEEDED?

The fact that the message “Buckle Up” is so well understood, raises the question, firstly, as to whether a seat belt campaign employing large scale advertising would have any further effect on current wearing rates and secondly, if such a campaign were considered appropriate, what material and imagery would be effective?

While considerable expenditure is made on education and publicity campaigns it has been suggested that there is no simple correlation between the staging of a campaign, or other actions to reduce collisions and its effect on the road casualty toll. This is probably because many factors influence safe road use and these cannot be controlled while a campaign takes place. Collisions can also rise or fall through normal fluctuations, sometimes by significant amounts.

Research in Australia indicates that awareness levels for specific advertisements fluctuate but generally exceed 70 per cent (some have exceeded 90 per cent). Additionally the combination of extensive enforcement and supporting publicity have been associated with significant reductions in the extent of excessive speeding and drink driving since 1989. Other issues remain in dispute, such as:

- Whether emotional shock tactics in advertising are more effective than alternative approaches
- The relative importance of advertising style versus the level of exposure to advertising, and their respective impact on the viewer
- The extent to which advertising in itself influences the road casualty toll, independent of police enforcement
- Appropriate research methods, in particular statistical analysis techniques to achieve conclusive results.

The key to success is appropriate campaigning coupled with sustained police enforcement. This study has identified a number of focus areas for campaigning:

- Child restraints and seating a child in a vehicle
- The importance of both front and rear seat belt wearing
- The importance of wearing on short journeys
- Fitting and wearing seat belts
- Injuries resulting from non-wearing of seat belts
- Contributory negligence and financial implications to victims(MVA)
- Information on the legal requirements, standards and suppliers of seat belts.

5. CONCLUSIONS

A major finding in this study is how well Namibians understand the need for seat belt wearing and that they agree that it is beneficial. It is also noted that while agreement with seat belt wearing is high, in practice, the observed compliance is often more than half of the self-reported compliance. The issue in Namibia with regard to seat belt usage is perhaps, not, “how to get people to believe the issue”, it is “how to align the belief with the practice”.

A number of areas have been identified where more detailed information on specific safety related issues is needed, for example, “the dangers of not wearing a seat belt on short journeys” or “child restraints”. This provides an area where more public information can be provided and targeted at specific groups, e.g. parents.

Police enforcement is a key factor in increasing compliance and as has been shown in the Police Study (deliverable 1), there is a need for more investment in equipment and human resources to enable a higher detection rate of offences and increase the chances of drivers being caught.

An approach not dissimilar to the Costa Rica programme could prove very effective as it also created a positive relationship with the driver by initially adopting a “soft” approach, leading to penalty enforcement.

It is difficult to understand why drivers should react negatively to any campaign that aims to protect both their lives and those of their passengers, however, developing an attitudinal shift is not easy. In Costa Rica the central human and emotional message of the campaign was based around the concept of love and responsibility, with a campaign icon featuring a traffic sign with a heart secured by a seat belt. The campaign slogan “Por Amor Use el Cinturón” (For love use your seat belt) deliberately did not demand that Costa Ricans “obey an order”, something which had proved so disastrous in the past, but asked them to make the choice to wear a seat belt for the sake of family and friends. Namibia may wish to adopt a similar approach.

APPENDIX 1 SEAT BELT LEGISLATION

MINISTRY OF WORKS, TRANSPORT AND COMMUNICATION No. 53 2001

232. (1) For the purpose of this regulation -
- (a) an adult is a person over the age of 14 years or taller than one comma five metres; and
 - (b) a child is a person between the age of three years and 14 years, except where that person is taller than one comma five metres.
- (2) Any reference to a seat belt in these regulations must be construed as a reference to a safety belt.
- (3) (a) Motor vehicles which are required to be fitted with seatbelts in terms of any compulsory specification with regard to the manufacturing of motor vehicles must be fitted with seatbelts that comply with those specifications.
- (b) In addition to the requirements of paragraph (a), a person may not operate a minibus with a gross vehicle mass which exceeds 2 500 kilograms, unless seatbelts are fitted to the space on the front seat occupied by the driver, and if the front seat has seating accommodation for passengers, unless seatbelts are fitted for the driver and at least one passenger.
- (c) A person may not operate a motor vehicle on a public road unless the seatbelts fitted to the motor vehicle are in good working order.
- (d) Seatbelts fitted to a motor vehicle may only be removed for repair or replacement purposes and the motor vehicle may not be used on a public road while the seatbelts are being repaired or replaced.
- (4) No adult may occupy a seat in a motor vehicle operated on a public road which is fitted with a seatbelt unless that adult wears the seatbelt, but this regulation does not apply while reversing or moving in or out of a parking bay or area.
- (5) No adult may occupy a seat on a row of seats in a motor vehicle operated on a public road which is not fitted with a seatbelt, unless all other seats on that row which are fitted with seatbelts, are already occupied.
- (6) The driver of a motor vehicle being operated on a public road must ensure that -
- (a) every adult being conveyed in that motor vehicle complies with subregulations (4) and (5); and
 - (b) every child seated on a seat of that motor vehicle –
 - (i) uses an appropriate child restraint, if available in that motor vehicle; or
 - (ii) wears, in the instance where no child restraint is available, a seatbelt if an unoccupied seat fitted with a seatbelt is available.

Subregulation (6) subst by Gov/N 205/04

(7) If no seat equipped with a seatbelt is available in a motor vehicle, the driver of the motor vehicle operated on a public road must ensure that a child, if that motor vehicle is equipped with a rear seat, is seated on the rear seat.

(8) (a) A seatbelt must comply with the Standard Specification SABS 1080:1983 - Restraining devices for occupants of adult build in motor vehicles published by the South African Government Notice No. R.264 of 17 February 1984 and bear a certification mark as defined in regulation 1.

(b) A child restraint must comply with the Standard Specification: SABS 1340:1985 "Child restraining devices in motor vehicles" published by the South African Government Notice No. R. 1364 of 23 August 1996 and bear a certification mark as defined in regulation 1.

(9) The Minister may exempt a person from this regulation on such medical grounds and under such conditions, as he or she may consider expedient.

(10) An exemption to wear a seatbelt in another country is deemed to be an exemption in terms of subregulation (9) for the period of validity thereof.

APPENDIX 2 SEAT BELT QUESTIONNAIRE NAMIBIA 2009

Location _____ Interviewer _____ Date _____

1. Do you ever drive or do you travel as a passenger in any kind of vehicle? (one answer only)

1. Yes, as professional driver Driving experience ____ years	2. Yes, as a driver Driving experience ____ years	3. Yes, as a passenger	4. No (if chosen, stop the interview)
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2. If a driver, what type of vehicles do you drive? (more than one answer is possible)

Professional driver		Non-professional driver	
1. passenger car		1. passenger car	
2. taxi		2. minibus	
3. truck		3. four-wheel drive	
4. minibus		4. motorbike	
5. large bus		5. truck with possible capacity up to 3.5 tons	
6. four-wheel drive		6. other	
7. other			

3. If a passenger, what type of vehicles do you travel in? (more than one answer is possible)

	Type of transport	
	1. private vehicle	
Type of a vehicle	1. car	
	2. four-wheel drive	
	3. minibus	
	4. motorbike	
	5. truck with possible capacity up to 3.5 tons	
	6. other (specify)	
	2. company vehicle	
Type of a vehicle	1. car	
	2. four-wheel drive	
	3. truck	
	4. minibus	
	5. bus	
	6. other (specify)	
	3. taxi	
Type of a vehicle	1. car	
	2. four-wheel drive	
	3. minibus	
	4. other (specify)	
	4. public transport	
Type of a vehicle	1. minibus	
	2. bus	

4. Do you wear a seat belt when travelling in a vehicle? (more than one answer is possible)

1. always 2. sometimes 3. Never

5. If sometimes, then in what cases do you wear a seat belt? (up to three answers possible)
(Do not give options)

1. as a driver	7. only on trips out of town
2. as a passenger (in the front seat)	8. only in town
3. as a passenger (in the back seat)	9. only on short trips
4. in all vehicles equipped with seat belts	10. only on long trips
5. only in a car or a four-wheel drive	11. only when there is a treat to be stopped by the police
6. only on business trips during working hours	12. other (specify)

6. If sometimes or never, please explain when or why you do not use a seat belt. (Do not give options) (up to three answers possible)

1. It is safe to sit in the back seat – I do not need to wear my seat belt.	7. I travel only on short distances.
2. No one else wears seat belts.	8. A vehicle is not equipped with seat belts.
3. I travel only at low speed – I can brace myself for impact.	9. Insufficient police enforcement/unreasonably low fines
4. I travel only in town.	10. I trust the driver's skills
5. Wearing a seat belt is uncomfortable.	11. A vehicle is equipped with air bags, so there is no need to wear a seat belt.
6. It is safer not to wear a seat belt / wearing a seat belt can be dangerous.	12. Other (specify)

7. If sometimes or never, what might compel you to wear a seat belt? (Do not give options) (up to three answers possible)

1. Proper enforcement/greater fines.	5. If a vehicle is fully equipped with seat belts.
2. More information on seat belt use.	6. If other people use seat belts.
3. Seat belts easier to use.	7. Other (specify)
4. Seat belts more comfortable to wear.	

8. If sometimes or always, please explain why you wear a seat belt. (Do not give options) (up to three answers possible)

1. Heard/ saw seat belt ads.	5. It is a law – I do not want to be stopped or fined.
2. At the request of family or friends.	6. It is one of the requirements of my employer.
3. A car crash can kill or injure me.	7. Other
4. Seat belts can save life.	

9. Have you seen/heard any seat belt information/ads? (one answer only)

1. Yes 2. No

10. If yes, what and have you seen/heard and where? (more than one answer is possible)

11. If on radio, TV or in a newspaper, please specify which radio station, TV channel or paper. (more than one answer is possible)

12. If on radio or TV, please specify when (morning / daytime / evening). (up to two answers possible)

Source	Specify the source	When
1. Bill boards		
2. Radio		m d e n
3. TV		m d e n
4. Ads on minibuses		
5. Newspapers		
6. Other		
7. Do not remember		

13. Did you discuss this information with anyone? (more than one answer is possible)

1. Yes, with my family 2. Yes, with my friends 3. Yes, with my colleagues 4. Yes, with other people
5. No, did not discuss with anyone

14. Has it helped you to understand the danger of injury in case of road accidents and why wearing a seat belt can save your life?

1. Yes 2. No

15. Gender

1. Male 2. Female

16. Age _____

17. Education

1. Incomplete secondary	2. Secondary	3. Vocational	4. Incomplete higher	5. Higher
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18. What is your occupation?

1. Pensioner	7. Worker with higher education degree
2. Qualified labourer	8. Worker without higher education degree
3. Unqualified labourer	9. Student
4. Manager level	10. Unemployed
5. Supervisor level	11. Stay-at-home carer
6. Individual entrepreneur	12. Other (please specify)

19. Is your employing company partially or fully owned by a foreign company?

1. Yes 2. No

20. Do you have children under the age of 12?

1. Yes 2. No

21. If yes, when travelling in a vehicle, your child is:

1. always placed in a baby car seat, suitable for the child's weight and age	3. placed on an adult's lap	5. in the front seat
2. always buckled up	4. in the back seat	6. never buckled up

22. Do you believe that it is beneficial to always wear a seat belt when travelling in a vehicle?

1. Yes 2. No