Research Report

Risk profiles of young drivers

ICARUS
Inter-Cultural Approaches
for Road Users Safety

Edited by
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Inter - Cultural Approaches for Road Users Safety

ICARUS PROJECT

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ICARUS PROJECT

ICARUS Project, Inter - Cultural Approaches for Road Users Safety, is an action-research program developed in three broad areas.
The *first* area involved the setting up of a European network of national Institutions focusing on road safety promotion. These Institutions shared an assessment tool to be used to analyze the factors related to risky behaviors engaged in by young drivers.
The *second* area dealt with a study on a large sample of young drivers. The relevant results have been summarized in this report including the following: *i*) common and specific national risk factors; *ii*) individual variables predicting risky behaviors; and *iii*) the existence of groups of drivers at high risk of being involved in traffic accidents.
Based on these data, the *third* area envisions a training program, which is based on the common and specific national risk factors.

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Foreword

The ICARUS Project grew out of the consideration that the risks of traffic accidents have various origins, including the so-called "human factor", such as errors, distraction, code violations, and drivers' psycho-physiological conditions. From this premise, rises the importance of prevention and the need to design effective and scientifically validated training models.
In the framework of a road safety education campaign, the ICARO Project, sponsored by the National Police along with the Ministries of Infrastructure and Transport, Education and the ANIA Foundation, in Italy was conducted a research that led to the construction of an effective model of prevention intervention. The model was validated on a large sample of students of primary and secondary Schools, in various Cities.
The results of the research and of the training intervention in Italy, led to design a research and training intervention project that could be proposed to different Countries, with the following purposes:
1. Identify risk factors that influence young drivers;
2. Conceive a model of European training grounded on the identified risk factors.
In particular, the purposed and pursued objectives are:
1. Analyze the style and the habits related to the attitude toward the road in general and, in particular, to the conduct of driving, in different EU Countries (taking into account: error, law violations, risk taking, perception of internal or external control in the chance of an accident, aggressiveness, anxiety, etc.).
2. Provide the basic guidelines for the construction of a model of training useful for the prevention of road accidents, which could be applied jointly in different EU Countries but, at the same time, allow taking into account the specificities of different cultures and rules.

This Research Report is divided into several parts that explain the methodology used to conduct the research and the main results obtained.
In particular, data gathered through questionnaires led to the construction of risk profiles of young drivers in the 14 European countries that formed the ICARUS project network.
This significant activity, based on about 1000 questionnaires received from each Country, made possible to achieve the goal of a deeper understanding of the mechanisms underlying the risk conduct of young drivers.
We deeply believe that effective training models are evidence based. Indeed, training must be effective in developing careful driving behaviors, and this goal can be achieved only by targeting behavioral problems that generate risk assumption.
The research report that follows illustrates the details of the method and of the results, but also highlights the various aspects of risk profiles, which are the mile stones of the likelihood of designing a training model able to target the specific issues that support the risk driving.
The work was made possible thank to the intense activity of a research group composed by, in addition to the authors of this Report, Francesca Baralla, Stefano Sdoia, Emanuela Tizzani, Anna Di Norcia, Silvia Pepe Roberta Migliaccio, Annalisa Tega, Maria Teresa Valente, Stefania Lamanna, Lisa Maccari, Sabrina Fagioli.
The monitoring activity was carried out by Pierluigi Cordellieri.
Heartfelt thanks to the European Commission, to the Minister of the Interior, to the Chief of Police - General Director of Public Security, to the General Director of Traffic, Railways, Communications and Special Units of the Italian Police, and to the Director of the Traffic Police Service.

In particular, we want to sincerely thank the Delegates of the Police Forces and the Ministries of Education of the 14 Countries that took part in the project by conducting research in their home Countries, and all those who collaborated with them.
Thanks to all those who made possible the development of the project: in particular the staff of the Italian Traffic Police, active at every stage through a highly effective organizational action and coordination.
Finally a special thanks to all the juveniles of various Countries who participated in the research and made possible the work of the project and all the juveniles that will benefit the work of the project and receive an education to help prevent road accidents.

Anna Maria Giannini, Roberto Sgalla

Introduction

Road safety is one of the most relevant social problems in most of the industrialized Countries. Though, the overall average annual reduction in the number of deaths between 2000 and 2009 was higher than in the three preceding decades, albeit a large variability exists among the trends in different countries. It is noteworthy that while death rates have decreased in many Countries, the trend for injuries related to traffic crashes has been less steep (see for instance, the 2006 report from the European Conference of Ministers of Transport - ECMT).
Furthermore, the reduction has not followed the same trend for all the groups of drivers. For instance, in most Countries overall road deaths have fallen more quickly than motorcycle fatalities. The number of killed motorcyclists increased in 13 out of 29 Countries participating to the International Traffic Safety Data and Analysis Group (IRTAD, 2011) since the year 2000.
Road safety issues are especially relevant for young drivers. Indeed, it is well known that traffic crashes are the single most important cause of death among people aged 15-24 in most of world.
Within the OECD, young drivers typically represent between 18% and 30% of all killed drivers, although people in the same age group only represent between 9% and 13% of the total populations in their countries. National data from various countries indicate that crashes involving a young driver account for between 20% and 30% of total road traffic fatalities. Thus, young drivers play a disproportionate role in the overall public health problem of road traffic safety risk. Death rates for young drivers also have decreased in many countries in recent decades. However, these reductions have mirrored overall improvements in road safety, and death rates for young drivers typically remain more than double than those of older drivers. Thus, despite overall improvements in road safety, the specific problem of young driver risk is not being completely addressed.
A large number of studies have been focused upon the factors underlying risky driving behaviour of young drivers. Overall, a number of factors have been identified, and among them a relevant role is played by general biological and psychological aspects of young people, even not driving-related, acute impairments (*e.g.*: alcohol, drugs, fatigue, distraction); driving skills acquisition; motivation; and risk-enhancing circumstances.
Behavioural and psychological factors have been recognized as among the most important determinants of risky driving in young people (*e.g.*: Jonah *et al.*, 1986, 2001). For instance, young people are more likely to underestimate the risk of being involved in a crash, and to overestimate their own abilities as drivers (*e.g.:* Gregersen, Bjurulf, 1996; Maycock *et al.*, 1991; Browm, Groeger, 1988; Deery, 1999). Also, some authors stressed that the risky driving behaviour of young people should be seen as a part of a more general tendency of young individuals to being involved in risky behaviours (*e.g.*: Jessor, 1987).
Indeed, the Sensation Seeking personality trait, characterized by need for new experiences, excitement and danger, has been often associated with risky driving. Besides sensation seeking, also anger, impulsivity, emotional regulation, and norms perception have been associated with risky driving (*e.g.*: Ulleberg, Rudmo, 2003).
Investigating the relationship between single psychological factors and risky driving is of course paramount for our understanding of the risky driving phenomenon. From a prevention perspective, however, a more useful approach consists of describing the driving styles of young people (*e.g.*: Deery, Fildes, 1999), aiming at identifying what factors characterize them. This approach would allow to create specific training programs aimed not a modifying personality traits, for instance, but at modifying driving habits. This is the aim of the present study.

Part 1
The Research: Aims, methodology and overall analyses

Chapter 1

Aims and Methodology

1.1. Aims

The research project was aimed at identifying common and national-specific risk factors and driving styles. To this aim, a questionnaire was firstly created, capitalizing upon the international scientific literature data. The questionnaire was aimed at assessing attitudes toward road safety issues, personal features and opinions, driving habits and expertise from samples of young car drivers, scooter riders, and non drivers. Collected data were analyzed, separately for each group of respondents (car drivers, scooter riders, and non-drivers) in order to 1) confirm the psycho-social dimensions underlying the questionnaire structure; 2) identify groups of respondents with similar characteristics and their driving profiles. The analyses were run both separately for each participating Country and for the total sample (collapsing the data across the Countries). Thus, specific (national level) and common (European level) factors affecting young people driving styles in EU were identified.

The Questionnaire. Appendix 1 reports the complete study questionnaire. It is composed of three sections:

1. Concerning participants driving a car (even if they also drive a scooter)
2. Concerning participants driving a scooter (but not a car)
3. Concerning participants driving neither a car nor a scooter

The three sections were almost identical, with the exception that items were adapted for the specific group of respondents. Each section was composed of a number of scales:

SCALE A: An attitude scale measuring participants' road-safety attitudes related to driving. This scale, developed by Iversen and Rudmo (2004), measures attitudes towards rule violation and speeding, the careless driving of others and drinking and driving. All items were answered on six-point response scales ranging from "strongly disagree" (0) to "strongly agree"(5), with high scores indicating a negative attitude towards traffic safety (i.e., high preferences for risk-taking in traffic).
SCALE B: This scale measures the locus of control orientation in driving, assessed by the Driving Internality (DI) and Driving Externality (DE) Scales **(**Montag and Comrey, 1987). Montag and Comrey developed two separate scales to measure internal locus of control (e.g., "Accidents are only the result of mistakes made by the driver") and external locus of control, typically related to chance or "powerful others" (e.g., "Driving with no accidents is mainly a matter of luck"). Each scale consists of 15 items with 6 point response scales ranging from "strongly disagree" to "strongly agree".
SCALE C: it measures risk perception and social norms. Participants were asked to evaluate their likelihood of having a car accident relative to their peers, and to indicate their level of concern about this possibility. Furthermore participants were asked to

evaluate the peer and parents attitudes toward driving safety. Rating scales from (1) "very low" to (10) "very high" will be used for these questions.

SCALE D: it measures driving anger. The fourteen- item short version of the "Driving Anger Scale" (Deffenbacher et al., 1994) was used to measure the tendency to become irritable, frustrated and angry in various traffic situations. Subjects were asked to imagine that each situation described was actually happening to them and then to rate the amount of anger that would be provoked in them using 6- point Likert scales ranging from "I wouldn't get angry at all" (0) to "I would get very angry"(5).

SCALE E: Normlessness (i.e. the belief that socially unapproved behaviours are required to achieve certain goals) will be assessed with Kohn and Schooler's (1983) "Normlessness Scale" (scale D). This scale consists of four items that are answered on with 6 point response scales ranging from "strongly disagree" to "strongly agree".

SCALE F: Five general personality characteristics will be assessed using facets of the "NEO-Personality Inventory" (Costa and McCrae, 1992): sensation-seeking, aggression, anxiety, conscientiousness and altruism. Each facet consists of different items that are answered on with 6 point response scales ranging from "strongly disagree" to "strongly agree".

SCALES G and H: participants have been asked to estimate their weekly driving frequency and the number of kilometers traveled weekly over the past 3 months. Moreover, they were asked to indicate if, in the last year, they received tickets or were involved in accidents as the driver with vehicle damage and/or physical injury.

SCALE I: this is the Driver Behaviour Questionnaire (DBQ) (Reason et al., 1990), which has recently become one of the most widely used scales to examine self-reported driving behaviors (Lajunen et al., 2004). Respondents were required to indicate, on a six point scale from 0 = never to 5 = nearly all the time, how often in the past year they committed specific driving violations (12 items), errors (8 items) and lapses (8 items).

SCALE J requires to answer to the same questions as the Scale I, but in an hypothetical situation.

SCALES K and L evaluate attitudes, thoughts and behaviours regarding driving and drinking.

1.2. Methodology

The first step in the analysis process was to confirm the meaning of the different scales that were included in the questionnaire. This step was necessary as not all the scales are validated in all the participating Countries. The actual meaning and content of each scale was assessed, both separately for each Country and Section, and overall across all the Countries, through a series of factor analyses (using the Principal Axis method and the oblique Oblimin rotation). Factor scores were then computed (through a regression method) for each resulting factor, and used in the further analyses. It should be noted that while the general meaning of each scale is of course expected to be constant across Countries (and coherent with the theoretical basis of the scale), the specific details and dimensions are likely to change across Countries. Consequently, the specific, national-level analyses were run using the national-level defined dimensions, whereas the overall, European analyses were run using the overall defined dimensions.

The identification of the driving profiles was computed through two cluster analyses for each section of the questionnaire, for each Country, and across the Countries. The first analysis (using a hierarchical algorithm, squared Euclidean distance, complete link) was used to assess the number of groups of respondents; the second analysis (using the k-means method) was used to identify the groups. Notably, in all the Countries and Sections three separate groups of respondents were identified. Two groups were present in all the

Countries, and were composed of respondents we named Risky and Safe drivers. The features of the third group of respondents, instead, vary across the different Countries. It should be noted that for sake of clarity and comparison we used the same labels (i.e. drivers) also for people answering the Section 3 of the Questionnaire, though they were non-drivers. Of course these labels should be not intended as if respondents were actual drivers.

Finally, a series of discriminant analyses were performed in order to identify which dimensions are most important to describe the different groups of respondents. These analyses were only performed across the Countries.

All the analyses (factor analyses and cluster analyses) were performed separately on each Country (and Section), and then again across the Countries (global analyses). Of course this means that partially different results emerge from the two kinds of analyses. This was done on purpose, as in this way we have been able to analyze both the Country specific features concerning the attitude toward road safety issues and drivers' profiles, and the common (or European) features and drivers' profiles.

A final note concerns the sample size. As it usually happens in questionnaire-based research, the number of complete questionnaires collected does not coincide with the number of respondents. Thus, the analyses were performed only on the complete questionnaires. Unfortunately, a very small number of complete questionnaires was returned for some of the Countries, especially for scooter riders. As for these Countries the sample size was insufficient for getting meaningful results, they were only included in the global analyses. Also, as the sample size varies largely across the Countries, we selected randomly from the Countries with the larger sample sizes to avoid an excessive weight of the most represented Countries. Thus all the global analyses were run on a subset of the total sample.

A final note concerns the nature of the samples used in the present project. Indeed, whereas respondents have not been sampled randomly and thus results cannot be considered as representative of European profiles of young drivers, the nature of the analyses, the psycho-social variables investigated, and the sample size, ensure that the conclusions upon the risk factors and the drivers profiles that can be drawn upon them are reliable and strongly suggestive of likely intervention strategies.

Chapter 2

Results: Overall analyses

2.1. *Section 1* – Car drivers

Overall, 5024 respondents filled the questionnaire in (Table 1). However, as respondents from Bulgaria were over-represented, some of them were randomly excluded in order to get a more balanced sample. The detailed results of the statistical analyses are reported in the statistical appendix.

Country	Frequency	Percentage
Austria	302	6.01
Bulgaria	791	15.74
Cyprus	103	2.05
Estonia	382	7.60
France	53	1.05
Germany	416	8.28
Ireland	237	4.72
Italy	545	10.85
Latvia	174	3.46
Lithuania	463	9.22
Malta	111	2.21
Poland	571	11.37
Slovakia	338	6.73
Slovenia	538	10.71
Total	5024	100.00

Table A.1. Frequency of respondents to Section 1 of the questionnaire (car drivers) for each Country.

Analyses were performed on only the questionnaires that were completely filled in (see Table A.2).

Results showed three separate groups of respondents that are significantly different one from each other. Profiles of the three groups are presented in Figure A.1.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on obstacle-related rage, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on

sensation seeking and anxiety, and have more direct experiences of driving under the effect of alcohol.

2. OVERCONFIDENT DRIVERS. People in this group are characterized by being rather overconfident on their abilities as drivers. However, they are more tolerant toward violations of the traffic rules compared to safe drivers, but they show higher levels of rage, both violation- and obstacle-related than safe drivers. Similarly to the risky drivers, however, they show high scores on moral disengagement. They also seem to be aware of the negative effects of alcohol upon driving.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on internal Locus of Control, and show low levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and the overconfident drivers.
Risky drivers seem to be aware that their behaviour increases the risk of being involved in car accidents, as they rate their risk as higher compared to respondents in the other two groups (Figure A.2), though they are less worried than the people in the safe drivers group. Also, respondents in the risky drivers group consider their friends as supportive and even encouraging their reckless behaviour more than respondents in the other two groups, and overconfident drivers consider their friends as more supportive and encouraging than people in the safe drivers group (Figure A.3). The same pattern exists for the parents' reaction to reckless driving behaviour (Figure A.4).
Across the Countries, Risky drivers represent the less numerous group, followed by the Overconfident and the Safe drivers (Table A.2), though exceptions do exist. For instance, in Bulgaria, Cyprus, and Latvia people in the risky drivers group are over 30% of the total sample (Table A.2). People in the Overconfident drivers are also quite numerous in most of the Countries, over 30% in all the Countries but Bulgaria, Ireland, and France (Table A.2).

Results of the discriminant analysis showed that all the subscales of the questionnaire were relevant for discriminating among the three groups of drivers, but Violation-related rage and Anxiety. The three groups were distinguished upon two dimensions: the first one refers especially to driving errors (both slips/lapses and violations), aggressive driving, personal experiences with alcohol related issues, and alcohol positive effects. The second dimension, instead, refers especially to tolerance to violations, moral disengagement, obstacle-related rage, sensation seeking, usefulness of violations, and mistakes. Interestingly, with the exception of sensation seeking, personality traits do not have high correlations with the discriminant functions. Figure A.5 shows the scatterplot of respondents' discriminant scores on the space defined by the two dimensions. As it can be seen, Safe and Risky drivers scores are especially different on the first dimension, that is they differ especially in their driving style (aggressive) and in their attitude toward alcohol related issues. Overconfident drivers, instead, are especially different on the second dimension, and they seem to be characterized mainly by obstacle-related rage, sensation seeking, usefulness of violations, and mistakes.

Country	Safe Drivers	Risky Drivers	Overconfident Drivers	Total
Austria	106 53.27%	20 10.05%	73 36.68%	199
Bulgaria	183 40.67%	173 38.44%	94 20.89%	450
Cyprus	19 19.79%	33 34.38%	44 45.83%	96
Ireland	63 57.80%	21 19.27%	25 22.94%	109
Italy	258 57.85%	46 10.31%	142 31.84%	446
Latvia	26 25.49%	37 36.27%	39 38.24%	102
Lithuania	174 44.96%	53 13.70%	160 41.34%	387
Poland	215 43.43%	30 6.06%	250 50.51%	495
Slovakia	111 52.36%	14 6.60%	87 41.04%	212
Slovenia	145 44.75%	27 8.33%	152 46.91%	324
Malta	26 46.43%	2 3.57%	28 50.00%	56
Germany	122 43.11%	26 9.19%	135 47.70%	283
Estonia	170 51.05%	35 10.51%	128 38.44%	333
France	25 59.52%	9 21.43%	8 19.05%	42
Total	1643	526	1365	3534

Table A.2. Percentages of respondents in the Safe, Risky, and Overconfident drivers groups for each Country.

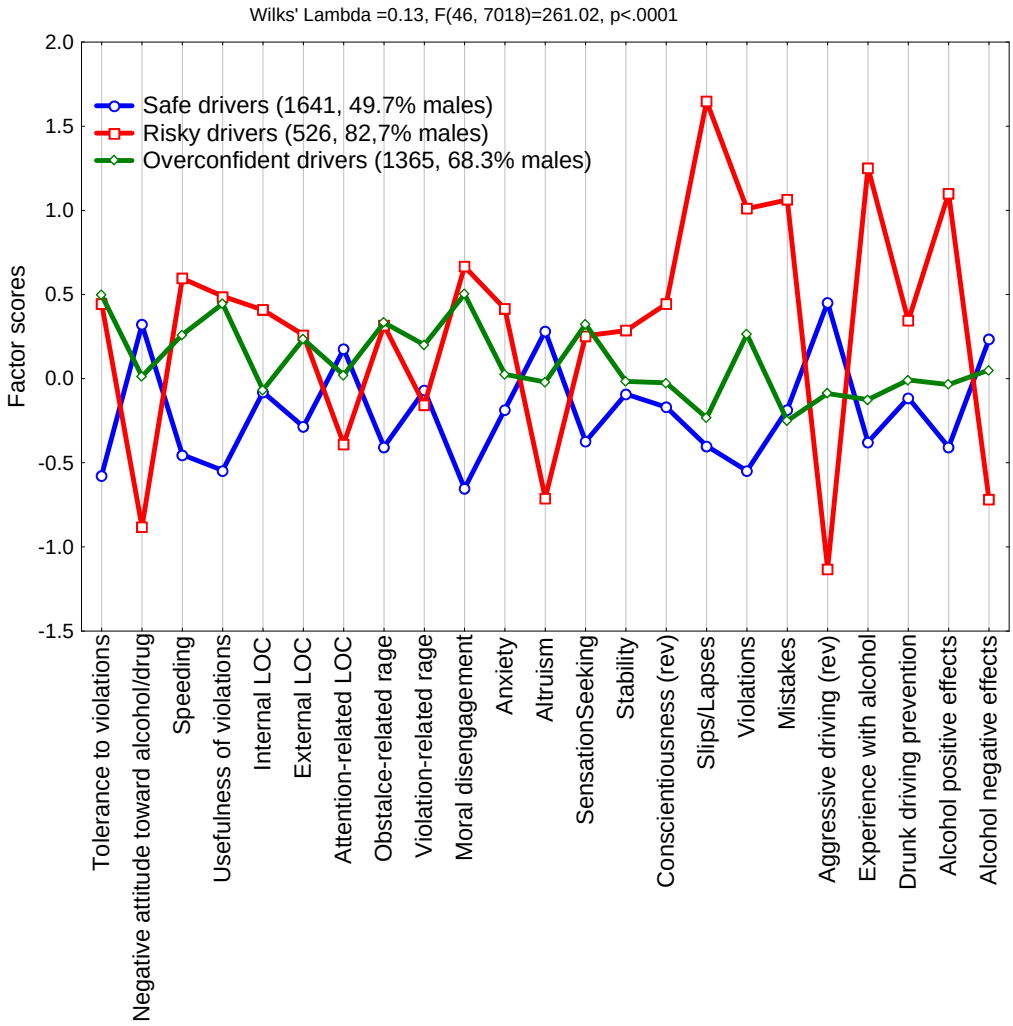


Figure A.1. Average scores for each group on the subscales of the questionnaire.

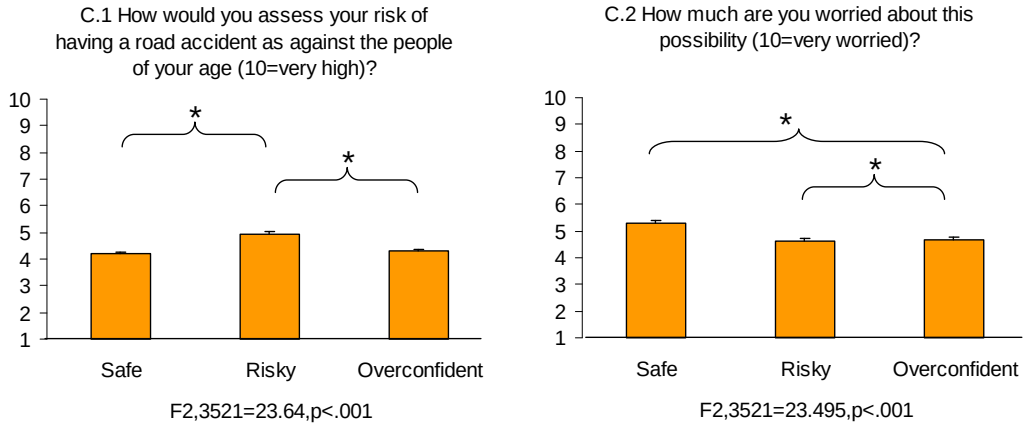


Figure A.2. Average scores for each group on items concerning risk perception (*p<.001).

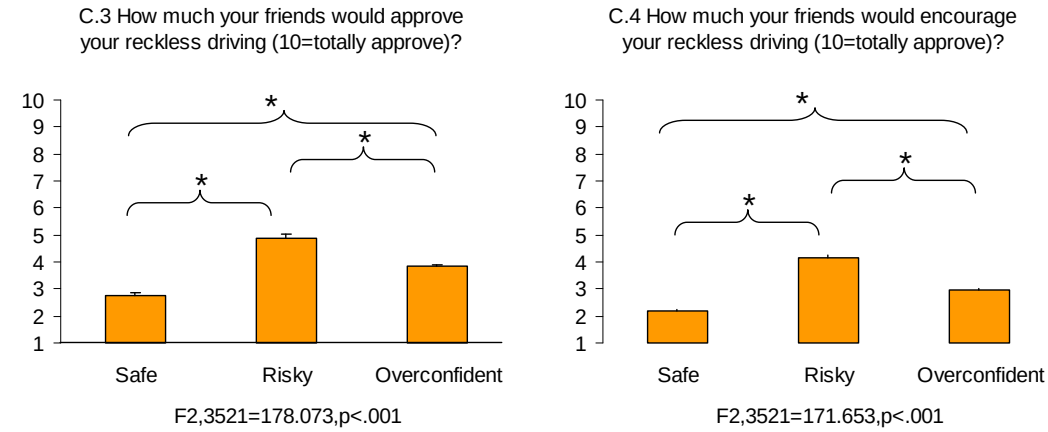


Figure A.3. Average scores for each group on items concerning friends' attitude (*p<.001).

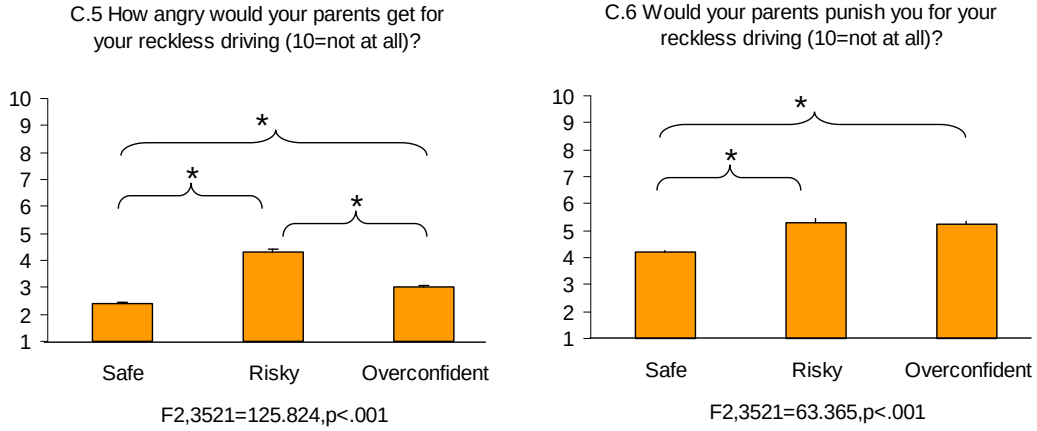


Figure A.4. Average scores for each group on items concerning parents' attitude (*p<.001).

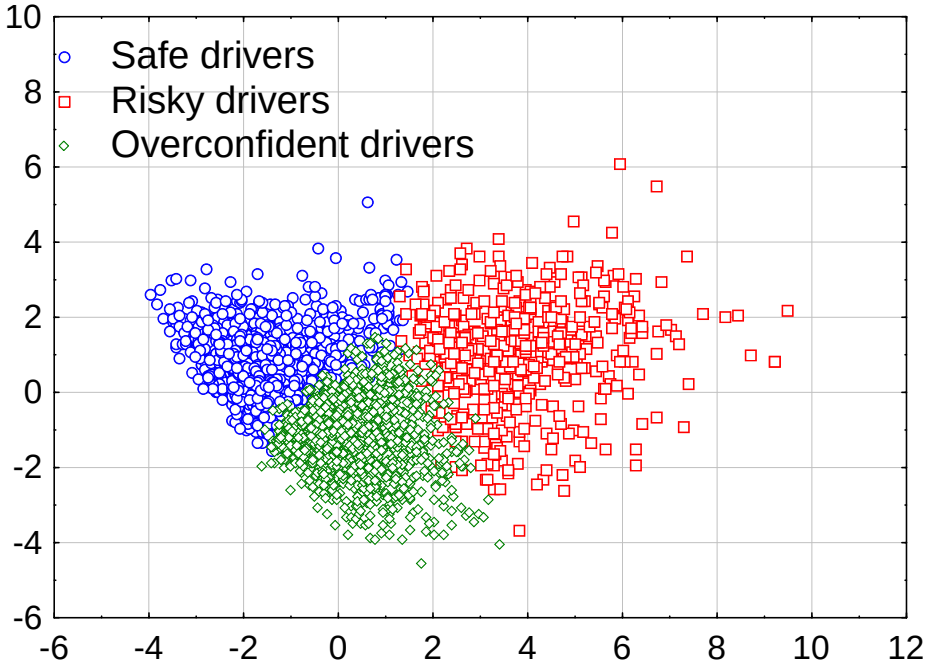


Figure A.5. Scatterplot of respondents' discriminant scores on the space defined by the two discriminant functions

2.2. *Section 2* – Scooter riders

Overall, 1479 respondents filled the questionnaire in (Table B.1). It should be noted that data are not available for some of the Countries, which were consequently not included in the analyses.

Country	Frequency	Percentage
Austria	151	10.21
Bulgaria	161	10.89
Cyprus	51	3.45
Germany	20	1.35
Ireland	4	0.27
Italy	346	23.39
Latvia	43	2.91
Lithuania	231	15.62
Malta	125	8.45
Poland	159	10.75
Slovenia	188	12.71
Total	1479	100.00

Table B.1. Frequency of respondents to Section 2 of the questionnaire (scooter riders) for each Country.

Analyses were performed on only the questionnaires that were completely filled in (see Table B.2). Results of the cluster analyses showed three separate groups of respondents that are significantly different one from each other. Profiles of the three groups are presented in Figure 3.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. ANGRY/ANXIOUS DRIVERS. People in this group are characterized by having high scores on the rage subscales, and on anxiety. With regards to these subscales, indeed, they are not that different from the risky drivers, whereas they differ from them on almost all the other subscales.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender.
The respondents in the risky drivers group consider their risk of being involved in an accident higher than respondents in the other two groups, but the three groups do not differ in terms of how much they worry about this possibility (Figure B.2). Also, people in the risky drivers group rate that their parents would be less angry for their reckless driving behaviour than people in the other two groups (Figure B.4). Similarly,, respondents in the risky drivers group feel more supported and encouraged in their reckless driving behaviour than respondents in the other groups (Figure B.3).
Across the Countries, Angry/anxious drivers represent the more numerous group, followed by the Risky and Safe drivers (Table B.2), though exceptions do exist. For instance, in Lithuania and Poland risky drivers are less frequent than safe drivers. Overall, however, risky and angry/anxious drivers represent the most frequent profile in the Countries included in the project (Table B.2).

Results of the discriminant analysis showed that all the subscales of the questionnaire were relevant for discriminating among the three groups of drivers, but Internal and External Locus of Control, and drunk driving prevention. The three groups were distinguished upon two dimensions: the first one refers especially to driving errors (both mistakes and violations), tolerance to violations, attitude toward alcohol related issues, alcohol positive effects, and moral disengagement driving, personal experiences with alcohol related issues, and alcohol positive effects. The second dimension, instead, refers especially to driving rage, obstacle-related, insult-related, and violation-related, and sensation seeking. Interestingly, with the exception of sensation seeking, and partially altruism, personality traits do not have high correlations with the discriminant functions. Figure B.5 shows the scatterplot of respondents' discriminant scores on the space defined by the two dimensions. As it can be seen, Safe and Risky drivers scores are especially different on the

first discriminant function, that is they differ especially in their tolerance toward violations and in their attitude toward alcohol related issues. Angry/anxious drivers, instead, are especially discriminated on the second discriminant function, and they seem to be characterized mainly by driving rage, and sensation seeking.

Country	Angry/Anxious Drivers	Risky Drivers	Safe Drivers	Total
Austria	43 47.25%	28 30.77%	20 21.98%	91
Bulgaria	52 37.68%	57 41.30%	29 21.01%	138
Cyprus	10 20.41%	38 77.55%	1 2.04%	49
Germany	5 45.45%	3 27.27%	3 27.27%	11
Italy	176 61.54%	68 23.78%	42 14.69%	286
Latvia	5 19.23%	16 61.54%	5 19.23%	26
Lithuania	98 45.16%	20 9.22%	99 45.62%	217
Poland	94 68.12%	21 15.22%	23 16.67%	138
Slovenia	54 50.00%	33 30.56%	21 19.44%	108
Malta	13 39.39%	14 42.42%	6 18.18%	33
Estonia	5 22.73%	15 68.18%	2 9.09%	22
France	7 43.75%	7 43.75%	2 12.50%	16
Total	562	320	253	1135

Table B.2. Percentages of respondents in the Safe, Risky, and Angry/anxious drivers groups for each Country.

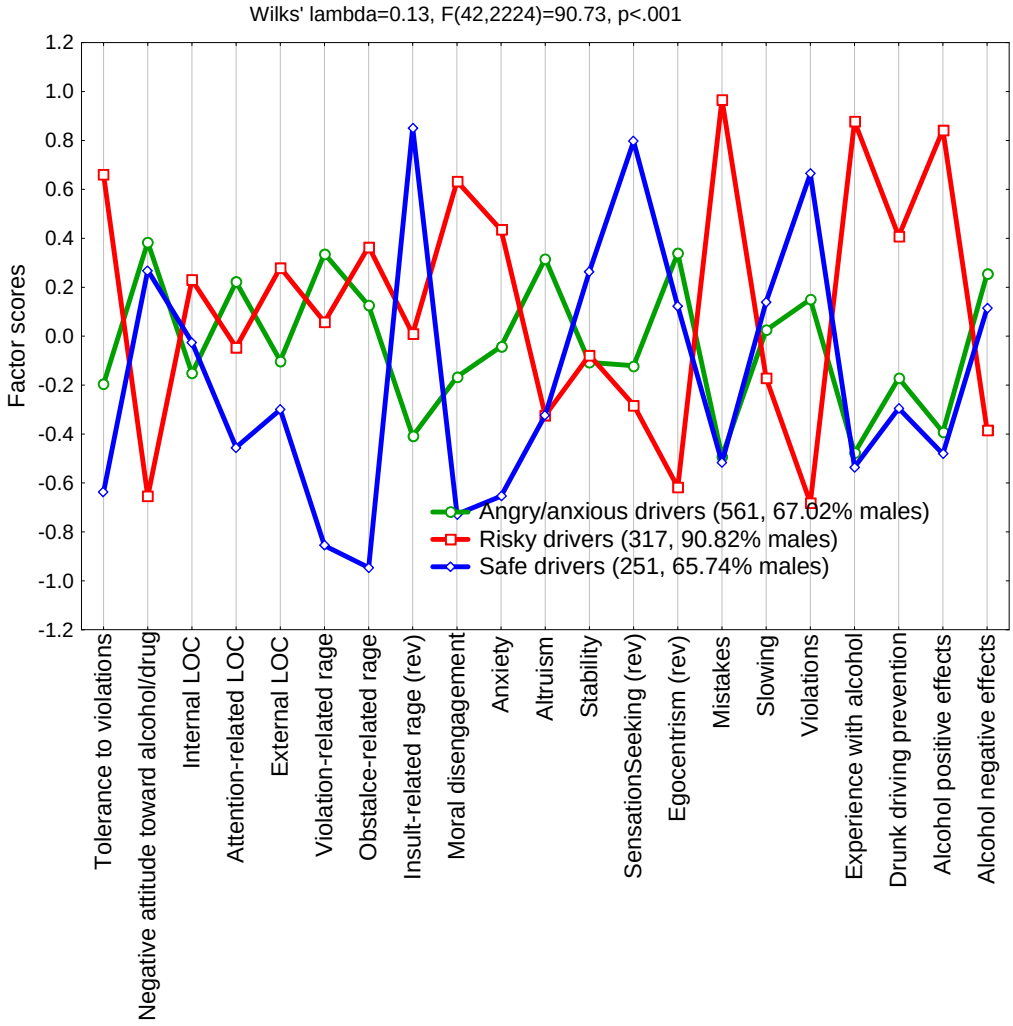


Figure B.1. Average scores for each group on the subscales of the questionnaire.

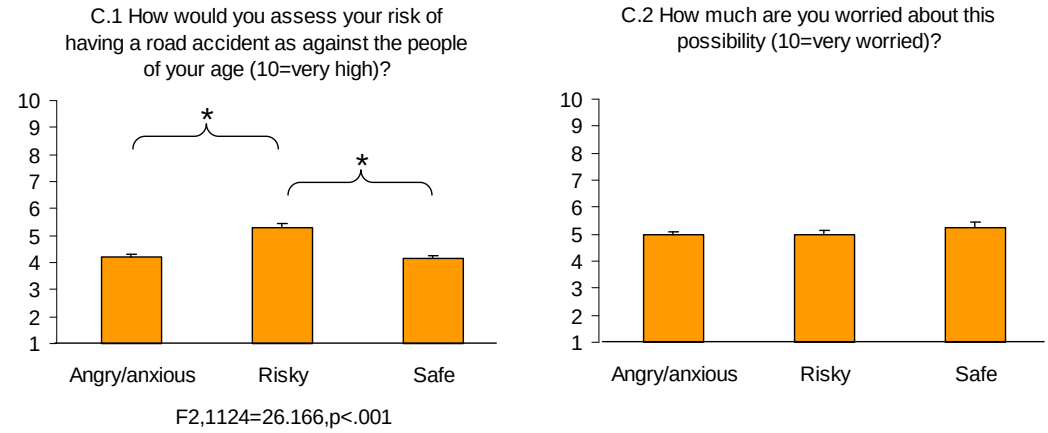


Figure B.2. Average scores for each group on items concerning risk perception (*p<.001).

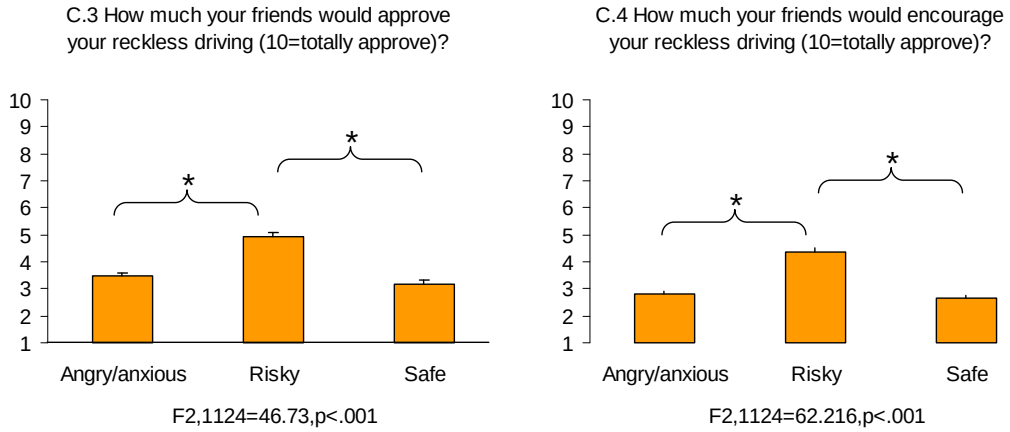


Figure B.3. Average scores for each group on items concerning friends' attitude (*p<.001).

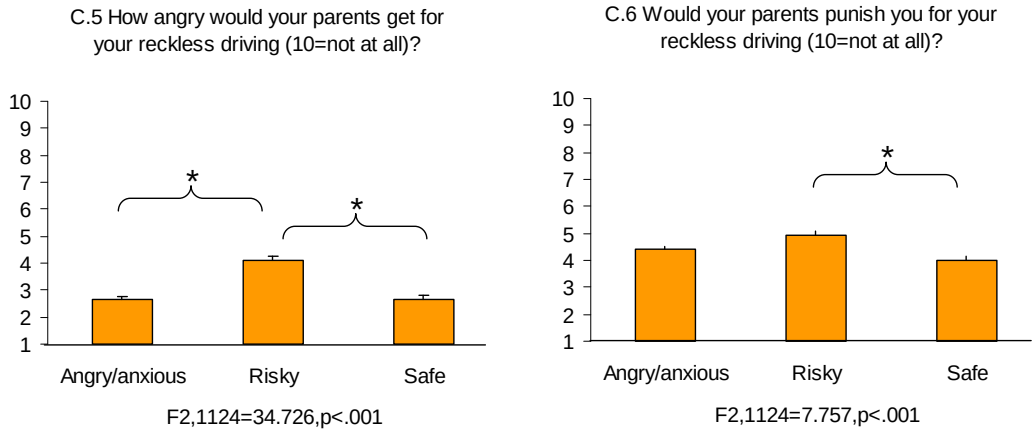


Figure B.4. Average scores for each group on items concerning parents' attitude (*p<.001).

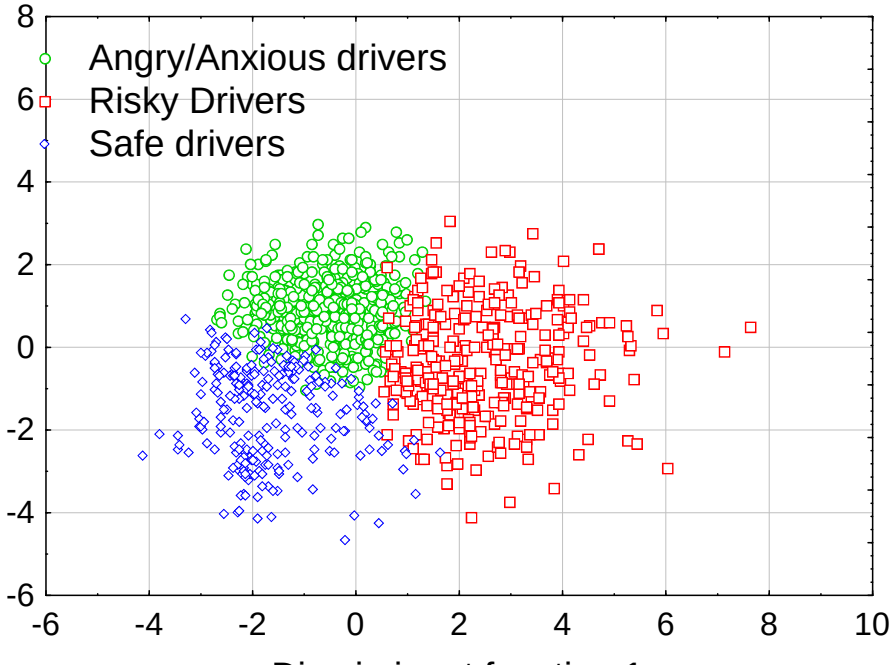


Figure B.5. Scatterplot of respondents' discriminant scores on the space defined by the two discriminant functions.

2.3. *Section 3* – Non drivers

Overall, 5180 respondents filled the questionnaire in (Table C.1).

Country	Frequency	Percentage
Austria	252	4.86
Bulgaria	1567	30.25
Cyprus	90	1.74
Estonia	170	3.28
France	113	2.18
Germany	260	5.02
Ireland	350	6.76
Italy	352	6.80
Latvia	789	15.23
Lithuania	225	4.34
Malta	169	3.26
Poland	216	4.17
Slovakia	323	6.24
Slovenia	304	5.87
Total	5180	100.00

Table C.1. Frequency of respondents to Section 1 of the questionnaire (car drivers) for each Country.

However, as respondents from Bulgaria and Latvia were over-represented, some of them were randomly excluded in order to get a more balanced sample. The detailed results of the statistical analyses are reported in the statistical appendix.
Analyses were performed on only the questionnaires that were completely filled in (see Table C.2). Results of the cluster analyses showed three separate groups of respondents that are significantly different one from each other. Profiles of the three groups are presented in Figure 3.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. AFFECTIVE DRIVERS. People in this group are characterized by having high scores on the rage subscales, on anxiety, and on Sensation Seeking. Furthermore, they show high scores also on moral disengagement and on tolerance to violations.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender.
The respondents in the risky drivers group consider their risk of being involved in an accident lower than respondents in the other two groups, and they are less worried about this evenience than the other two groups (Figure C.2). Also, people in the risky drivers group rate that their parents would be less angry for their reckless driving behaviour than people in the other two groups (Figure C.4). Similarly, respondents in the risky drivers group feel more supported and encouraged in their reckless driving behaviour than respondents in the other groups (Figure C.3).
Across the Countries, Safe drivers represent the more numerous group, followed by the Affective and Risky drivers (Table C.2), though exceptions do exist. For instance, in Bulgaria and Malta risky drivers are more frequent than drivers in the other two groups, whereas affective drivers are the larger group in Estonia. Overall, however, safe and affective drivers represent the most frequent profile in the Countries included in the project (Table C.2).

Results of the discriminant analysis showed that all the subscales of the questionnaire were relevant for discriminating among the three groups of drivers. The three groups were distinguished upon two dimensions: the first one refers especially to tolerance to violations, attitude toward alcohol related issues, alcohol positive effects, and moral disengagement. The second dimension, instead, refers especially to driving rage, moral disengagement, and sensation seeking. Interestingly, with the exception of sensation seeking personality traits do not have high correlations with the discriminant functions. Figure C.5 shows the scatterplot of respondents' discriminant scores on the space defined by the two dimensions. As it can be seen, Safe and Risky drivers scores are especially different on the first discriminant function, that is they differ especially in their tolerance

toward violations and in their attitude toward alcohol related issues. Affective drivers, instead, are especially discriminated on the second discriminant function, and they seem to be characterized mainly by driving rage, and sensation seeking.

Country	Risky Drivers	Safe Drivers	Affective Drivers	Total
AUSTRIA	33 18.33%	93 51.67%	54 30.00%	180
BULGARIA	167 40.73%	158 38.54%	85 20.73%	410
CYPRUS	13 17.81%	38 52.05%	22 30.14%	73
IRELAND	35 14.11%	138 55.65%	75 30.24%	248
ITALY	41 13.80%	176 59.26%	80 26.94%	297
LATVIA	81 24.62%	64 19.45%	184 55.93%	329
LITHUANIA	18 8.74%	145 70.39%	43 20.87%	206
POLAND	31 14.62%	92 43.40%	89 41.98%	212
SLOVENIA	23 10.04%	128 55.90%	78 34.06%	229
GERMANY	24 11.54%	126 60.58%	58 27.88%	208
ESTONIA	24 16.33%	53 36.05%	70 47.62%	147
SLOVAKIA	18 7.32%	160 65.04%	68 27.64%	246
MALTA	40 42.55%	33 35.11%	21 22.34%	94
FRANCE	13 14.44%	60 66.67%	17 18.89%	90
All Grps	561	1464	944	2969

Table C.2. Percentages of respondents in the Safe, Risky, and Overconfident drivers groups for each Country.

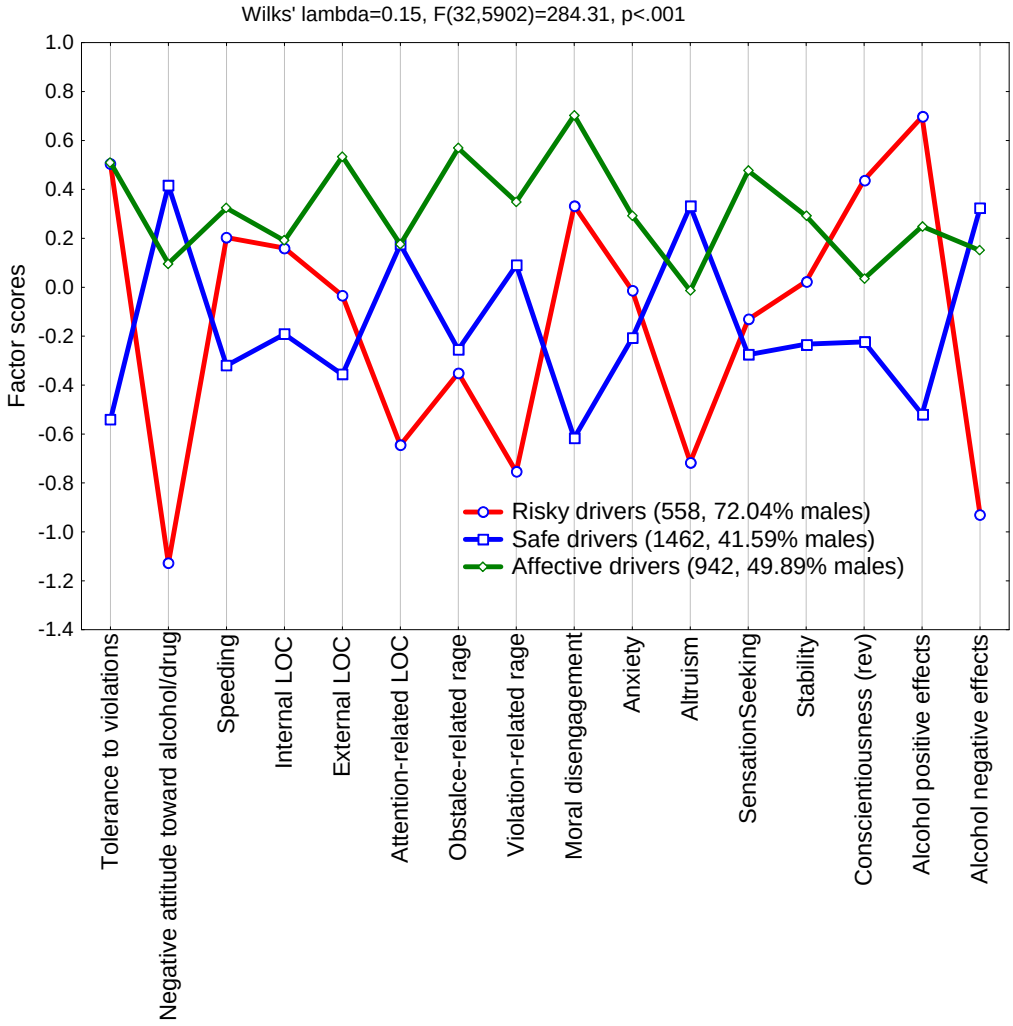


Figure C.1. Average scores for each group on the subscales of the questionnaire.

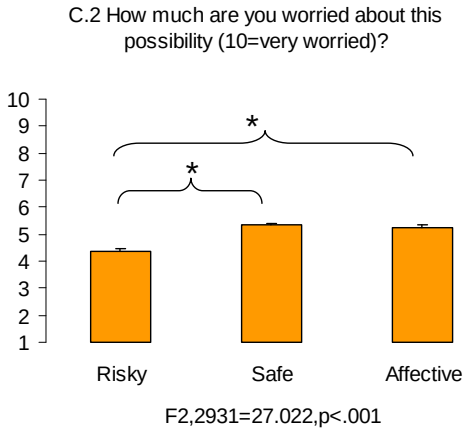
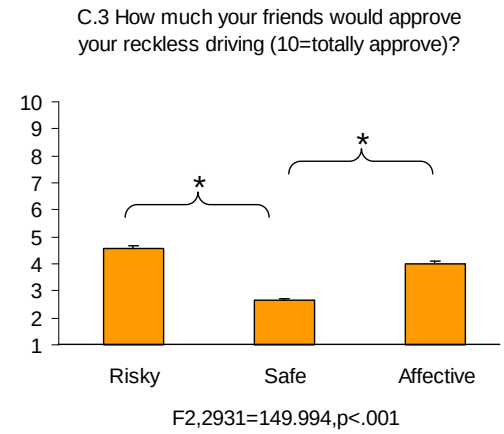


Figure C.2. Average scores for each group on items concerning risk perception (*p<.001).



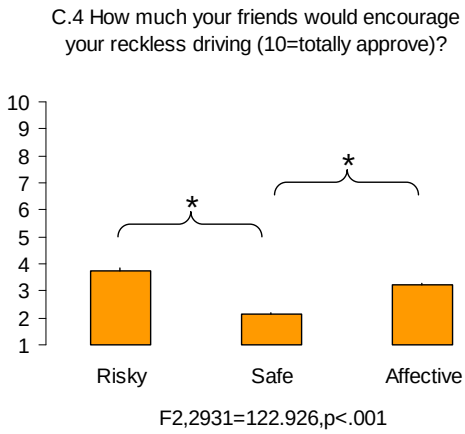
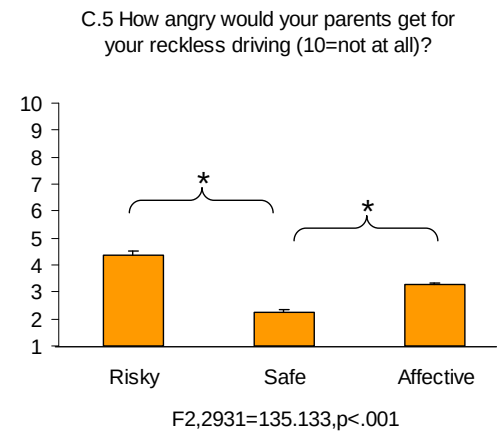


Figure C.3. Average scores for each group on items concerning friends' attitude (*p<.001).



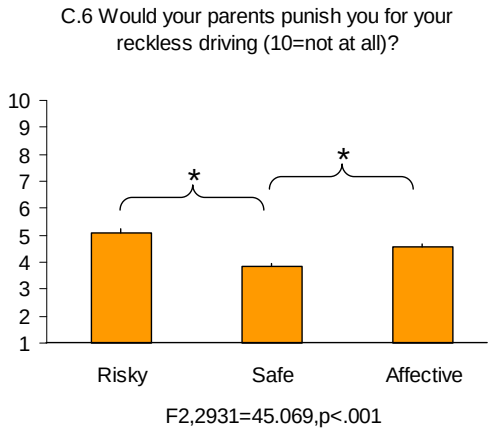


Figure C.4. Average scores for each group on items concerning parents' attitude (*p<.001).

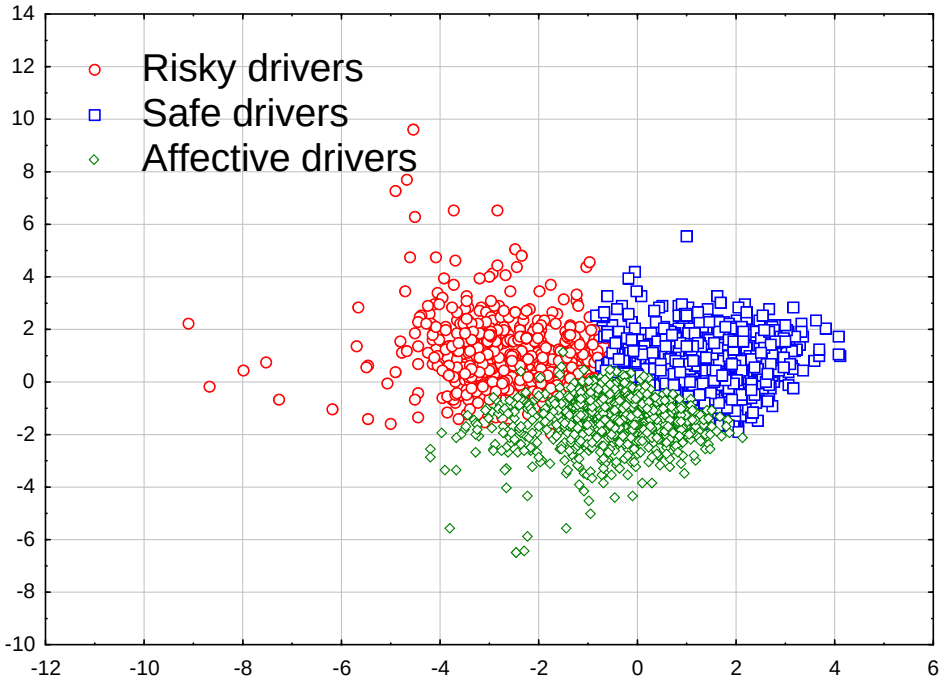


Figure C.5. Scatterplot of respondents' discriminant scores on the space defined by the two discriminant functions

Part 2
Results from Countries partner of the ICARUS Project

Chapter 1

Results from Austria

1.1. CAR DRIVERS

1.1.1. Sample description

A total of 302 people answered the Section 1 of the questionnaire. Males were 149 (49.3% of the total sample) and females were 153 (50.7% of the total sample). Their mean age was 19.77 years (standard deviation .44), ranging between 17 and 23 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

1.1.2. Driving habits

Tables D.1 to D.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Relatively few Austrian young drivers own a car (about 30% of the respondents), independently of the gender. They however refer to use a car on a regular basis (most of them drive everyday, again without a prevalence of one gender), and for relatively long trips (especially for male drivers). Both male and female drivers refer to drive after midnight relatively often (about 48% of them drive after midnight more than 2 times a week). Male drivers also refer to have received a traffic fine more often than female drivers, mostly for having parked where it was forbidden, and for speeding. Most of the respondents refer not to drive after having drunk alcohol (and it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol).
Summarizing, Austrian young drivers seem to be characterized by being frequent drivers, somehow experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	39 (26.17%)	110 (73.83%)
Females	51 (33.33%)	102 (66.67%)
Total	90 (29.8%)	212 (70.2%)

Table D. 1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	3	8	15	17	60	6
	(2.75%)	(7.34%)	(13.76%)	(15.6%)	(55.05%)	(5.5%)
Females	2	5	18	16	56	2
	(2.02%)	(5.05%)	(18.18%)	(16.16%)	(56.57%)	(2.02%)
Total	5	13	33	33	116	8
	(2.4%)	(6.25%)	(15.87%)	(15.87%)	(55.77%)	(3.85%)

Table D. 2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	5	12	20	18	54
	(4.59%)	(11.01%)	(18.35%)	(16.51%)	(49.54%)*
Females	3	8	25	28	35
	(3.03%)	(8.08%)	(25.25%)	(28.28%)*	(35.35%)
Total	8	20	45	46	89
	(3.85%)	(9.62%)	(21.63%)	(22.12%)	(42.79%)

Table D. 3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	22	38	30	19
	(20.18%)	(34.86%)	(27.52%)*	(17.43%)
Females	34	39	13	13
	(34.34%)*	(39.39%)	(13.13%)	(13.13%)
Total	56	77	43	32
	(26.92%)	(37.02%)	(20.67%)	(15.38%)

Table D. 4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	24	32	22	31
	(22.02%)	(29.36%)	(20.18%)	(28.44%)
Females	30	23	26	20
	(30.3%)	(23.23%)	(26.26%)	(20.2%)
Total	54	55	48	51
	(25.96%)	(26.44%)	(23.08%)	(24.52%)

Table D. 5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	No	Yes
Males	55	54
	(50.46%)	(49.54%)*
Females	68	31
	(68.69%)*	(31.31%)
Total	123	85
	(59.13%)	(40.87%)

Table D. 6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	23	10	33
	(15.44%)*	(6.54%)	(10.93%)
Running a red light	4	2	6
	(2.68%)	(1.31%)	(1.99%)
Running a stop sign	4	2	6
	(2.68%)	(1.31%)	(1.99%)
Speeding	46	18	64
	(30.87%)*	(11.76%)	(21.19%)
Drunk driving	3	1	4
	(2.01%)	(.65%)	(1.32%)
Lack of seatbelts use	7	4	11
	(4.7%)	(2.61%)	(3.64%)

Table D. 7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	84	8	6	1	4	6
	(77.06%)	(7.34%)	(5.5%)	(.92%)	(3.67%)	(5.5%)
Females	85	10	3			1
	(85.86%)	(10.1%)	(3.03%)	(.%)	(.%)	(1.01%)
Total	169	18	9	1	4	7
	(81.25%)	(8.65%)	(4.33%)	(.48%)	(1.92%)	(3.37%)

Table D. 8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	5 (3.36%)	3 (1.96%)	8 (2.65%)
You could hardly keep your head on straight	4 (2.68%)	3 (1.96%)	7 (2.32%)
You had muscle cramps	4 (2.68%)	2 (1.31%)	6 (1.99%)
You could hardly keep your eyes open	4 (2.68%)	5 (3.27%)	9 (2.98%)
You got stomach cramps	5 (3.36%)	3 (1.96%)	8 (2.65%)
You could not focus on the road	9 (6.04%)	5 (3.27%)	14 (4.64%)
Someone who was with you made you notice it	6 (4.03%)	3 (1.96%)	9 (2.98%)

Table D. 9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have direct experiences of driving under the effect of alcohol.
2. AGGRESSIVE DRIVERS. People in this group are especially characterized by high scores on aggressive/angry-related subscales, compared to safe drivers. They are tolerant toward traffic code violations, and have rather high scores on sensation seeking and egocentrism. Similarly to the risky drivers, they show high scores on moral disengagement. They also seem to be aware of the negative effects of alcohol upon driving, though are less involved in preventing behaviours.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Figure D.1 shows the profiles of the three groups of drivers on the subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure D.2). Also, the three groups do not differ in terms of how much angry their parents would be for their reckless driving (Figure D.4). However, respondents in the safe drivers group perceive their friends as less

supportive a reckless driving behaviour than respondents in the other two groups (Figure D.3).

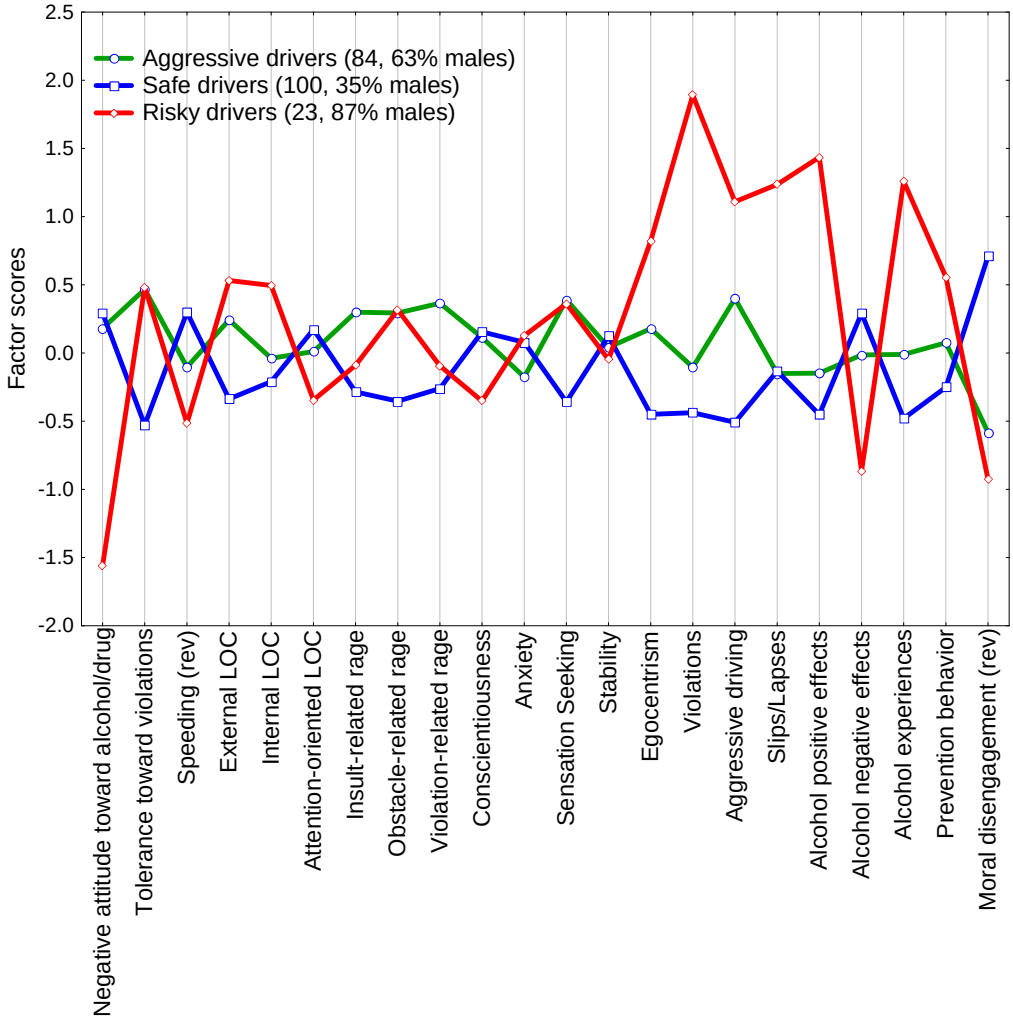


Figure D.1. Average scores for each group on subscales of the questionnaire.

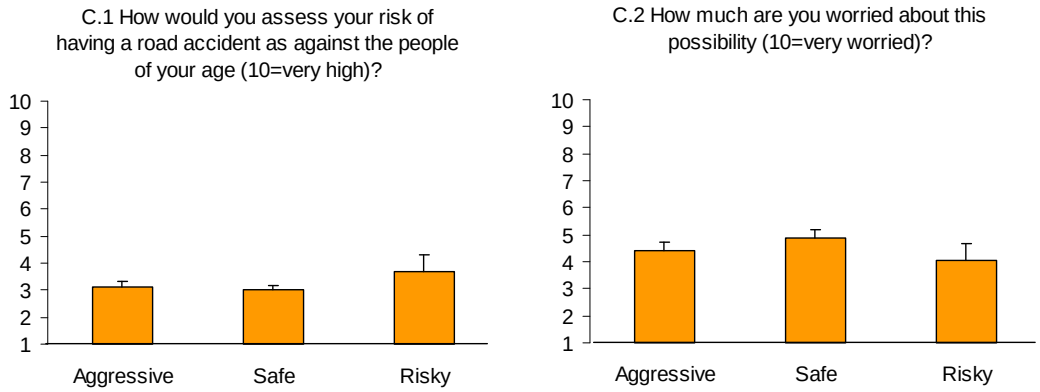


Figure D.2. Average scores for each group on items concerning risk perception (* p<.001).

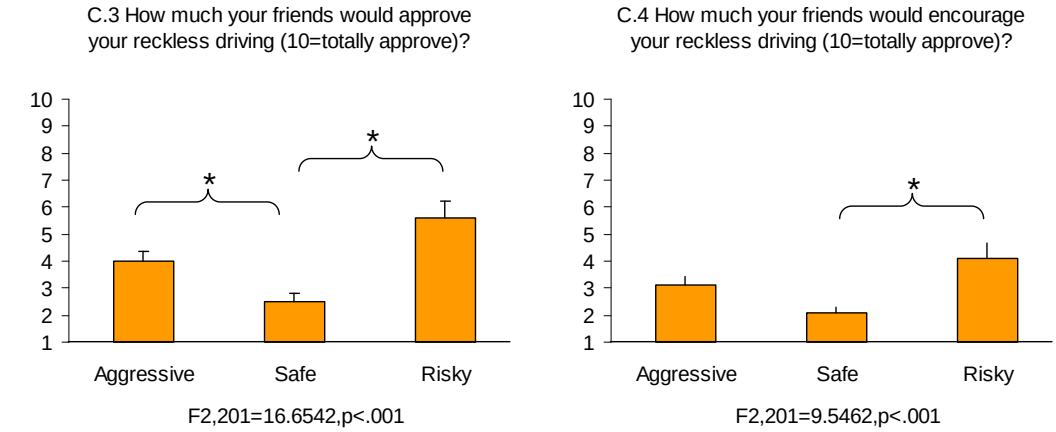


Figure D.3. Average scores for each group on items concerning friends' attitude (* p<.001).

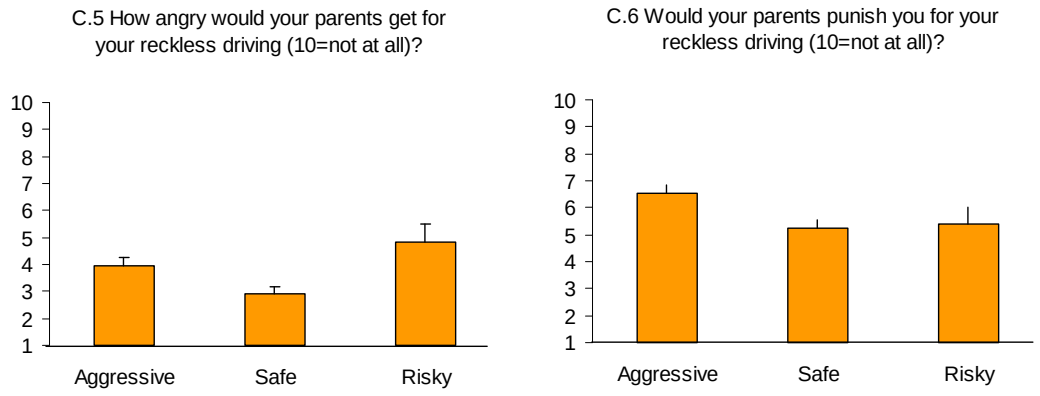


Figure D.4. Average scores for each group on items concerning parents' attitude (* p<.001).

1.2. SCOOTER RIDERS

1.2.1. Sample description

A total of 151 people answered the Section 2 of the questionnaire. Males were 109 (72.2% of the total sample) and females were 42 (27.8% of the total sample). Their mean age was 17.1 years (standard deviation 1.19), ranging between 15 and 26 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

1.2.2. Driving habits

Tables E.1 to E.13 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Most Austrian scooter drivers refer to use scooters or motorbikes on a fair regular basis (most of them drive a scooter more than 4 times a week, without a gender prevalence). Their use of scooters is characterized by being very variable in term of number of kilometres travelled, from only few to more than 100 kilometres. Interestingly, male drivers refer to drive after 11.00 pm relatively often (about 43% of them drive after 11:00 pm more than 2 times a week), where female drivers are far less likely to drive during night hours (about 54% of them do not drive after 11:00 pm at all). Austrian scooter drivers also are not normally used to go on as passengers. Male drivers also refer to have received a traffic fine more often than female drivers, mostly for speeding. Interestingly, scooter drivers refer not to have been involved in accidents both as drivers or passengers very often, and usually they refer to have had only material damages.
Less than half the sample (30% of the total sample, but mostly male drivers) states that they have driven after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol). However, very few of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially difficulties on keeping focused on the road and keeping eyes open. This might suggest that a consistent number of young drivers are rather unaware of the negative effects of driving under the effects of alcohol.
Summarizing, Austrian young scooter drivers seem to be characterized by being frequent drivers, somehow experienced of driving during night hours (especially male drivers), and not completely aware of the dangers associated with driving under the effects of alcohol.

	G1-6 How many times a week do you use a scooter?					
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	4	12	25	17	33	8
	(4.04%)	(12.12%)	(25.25%)	(17.17%)	(33.33%)	(8.08%)
Females	2	8	12	8	8	1
	(5.13%)	(20.51%)	(30.77%)	(20.51%)	(20.51%)	(2.56%)
Total	6	20	37	25	41	9
	(4.35%)	(14.49%)	(26.81%)	(18.12%)	(29.71%)	(6.52%)

Table E.1. Frequency distribution of respondents for item G1.6 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-7 How many kilometres do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	16 (16.16%)	27 (27.27%)	20 (20.2%)	22 (22.22%)*	14 (14.14%)
Females	10 (25.64%)	16 (41.03%)	6 (15.38%)	2 (5.13%)	5 (12.82%)
Total	26 (18.84%)	43 (31.16%)	26 (18.84%)	24 (17.39%)	19 (13.77%)

Table E.2. Frequency distribution of respondents for item G1.7 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-8 In the last three months, how many times have you driven after 11:00 pm?				
	Never	1-2 times	2-4 times	More than 4 times
Males	27 (27.27%)	29 (29.29%)	16 (16.16%)	27 (27.27%)
Females	21 (53.85%)*	10 (25.64%)	2 (5.13%)	6 (15.38%)
Total	48 (34.78%)	39 (28.26%)	18 (13.04%)	33 (23.91%)

Table E.3. Frequency distribution of respondents for item G1.8 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-9 How often in a week do you go on a scooter sitting behind?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the week end
Males	51 (51.52%)	32 (32.32%)	7 (7.07%)	3 (3.03%)	2 (2.02%)	4 (4.04%)
Females	19 (48.72%)	14 (35.9%)	4 (10.26%)	0	2 (5.13%)	0
Total	70 (50.72%)	46 (33.33%)	11 (7.97%)	3 (2.17%)	4 (2.9%)	4 (2.9%)

Table E.4. Frequency distribution of respondents for item G1.9 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-10 In the last three months how often you accepted a lift on a scooter after 11:00 pm?				
	Never	1-2 times a month	2-4 times in a month	More than 4 times in a month
Males	62 (62.63%)	22 (22.22%)	8 (8.08%)	7 (7.07%)
Females	26 (66.67%)	11 (28.21%)	0	2 (5.13%)
Total	88 (63.77%)	33 (23.91%)	8 (5.8%)	9 (6.52%)

Table E.5. Frequency distribution of respondents for item G1.10 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-11 Have you ever been fined?		
	Yes	No
Males	28 (28.28%)*	71 (71.72%)
Females	2 (5.13%)	37 (94.87%)*
Total	30 (21.74%)	108 (78.26%)

Table E.6. Frequency distribution of respondents for item G1.11 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
Running a stop sign	7 (6.48%)	1 (2.38%)	8 (5.33%)
Running a red light	8 (7.41%)	1 (2.38%)	9 (6.%)
No parking	7 (6.48%)	1 (2.38%)	8 (5.33%)
Passenger	5 (4.63%)	0	5 (3.33%)
Drunk driving	7 (6.48%)	1 (2.38%)	8 (5.33%)
Driving without the helmet	7 (6.48%)	1 (2.38%)	8 (5.33%)
Speeding	21 (19.44%)*	2 (4.76%)	23 (15.33%)

Table E.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-21 Have you ever been involved in an accident as a driver?			
	Yes	No	No but I was close to
Males	31 (31.31%)	56 (56.57%)	12 (12.12%)
Females	7 (17.95%)	29 (74.36%)	3 (7.69%)
Total	38 (27.54%)	85 (61.59%)	15 (10.87%)

Table E.8. Frequency distribution of respondents for item G1.21 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-23 What were the consequences?			
	Material damages	Personal injuries	Both
Males	27	3	12
	(64.29%)	(7.14%)	(28.57%)
Females	4	1	4
	(50.%)	(12.5%)	(50.%)
Total	31	4	16
	(62.%)	(8.%)	(32.%)

Table E.9. Frequency distribution of respondents for item G1.23 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-24 Have you ever been involved in an accident as a passenger?			
	Yes	No	No but I was close to
Males	25	71	3
	(25.25%)	(71.72%)	(3.03%)
Females	7	32	
	(17.95%)	(82.05%)	0
Total	32	103	3
	(23.19%)	(74.64%)	(2.17%)

Table E.10. Frequency distribution of respondents for item G1.24 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-26 What were the consequences?			
	Material damages	Personal injuries	Both
Males	31	4	4
	(79.49%)	(10.26%)	(10.26%)
Females	4	1	3
	(50.%)	(12.5%)	(37.5%)*
Total	35	5	7
	(74.47%)	(10.64%)	(14.89%)

Table E.11. Frequency distribution of respondents for item G1.26 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-27 Have you ever driven after drinking alcoholic drinks?		
	Yes	No
Males	39	60
	(39.39%)*	(60.61%)
Females	3	36
	(7.69%)	(92.31%)*
Total	42	96
	(30.43%)	(69.57%)

Table E.12. Frequency distribution of respondents for item G1.27 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the road	8 (7.41%)	1 (2.38%)	9 (6.%)
You could hardly keep your head on straight	7 (6.48%)	1 (2.38%)	8 (5.33%)
You had muscle cramps	5 (4.63%)	2 (4.76%)	7 (4.67%)
You could hardly keep your eyes open	9 (8.33%)	1 (2.38%)	10 (6.67%)
You got stomach cramps	5 (4.63%)	0	5 (3.33%)
You could not focus on the road	10 (9.26%)	0	10 (6.67%)
Someone who was with you made you notice it	10 (9.26%)	2 (4.76%)	12 (8.%)

Table E.13. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and anxiety, and have more direct experiences of driving under the effect of alcohol.
2. SPEEDING DRIVERS. People in this group are especially characterized by high scores on speeding subscales, compared to safe drivers. They are not tolerant toward traffic code violations, and have rather high scores on sensation seeking and egocentrism. Similarly to the safe drivers, they show low scores on moral disengagement. However, they also seem to be not aware of the negative effects of alcohol upon driving.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and speeding drivers.
Figure E.1 shows the profiles of the three groups of drivers on the subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure E.2). Also, the three groups do not differ in terms of how much angry their parents would be for their reckless driving (Figure E.4). Finally, respondents in three groups are not different in terms of their friends support to their reckless driving behaviour (Figure E.3).

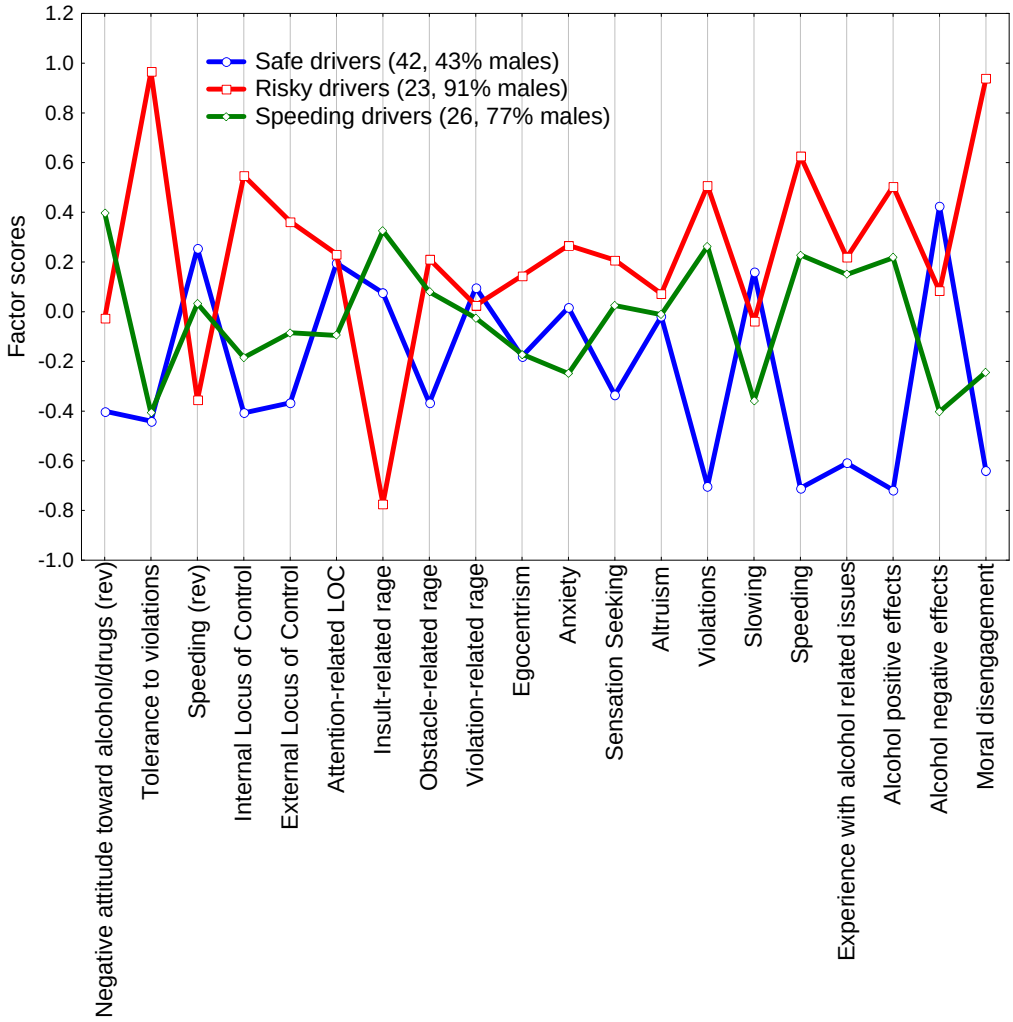


Figure E.1. Average scores for each group on the subscales of the questionnaire.

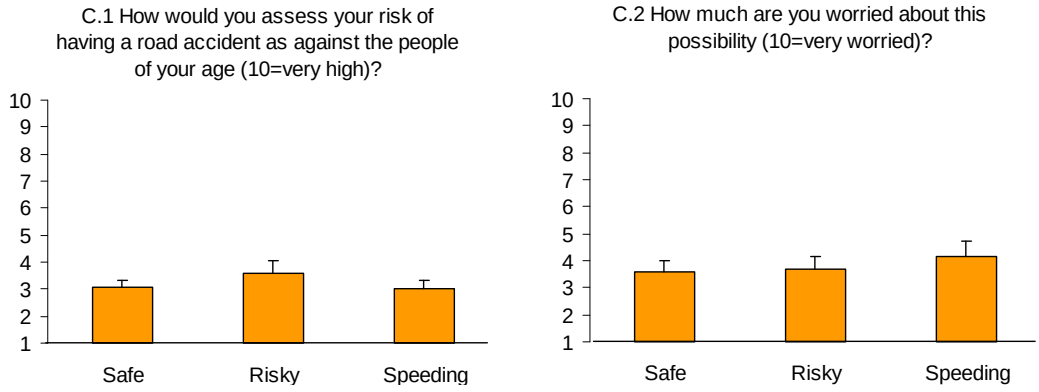


Figure E.2. Average scores for each group on items concerning risk perception (* p<.001).

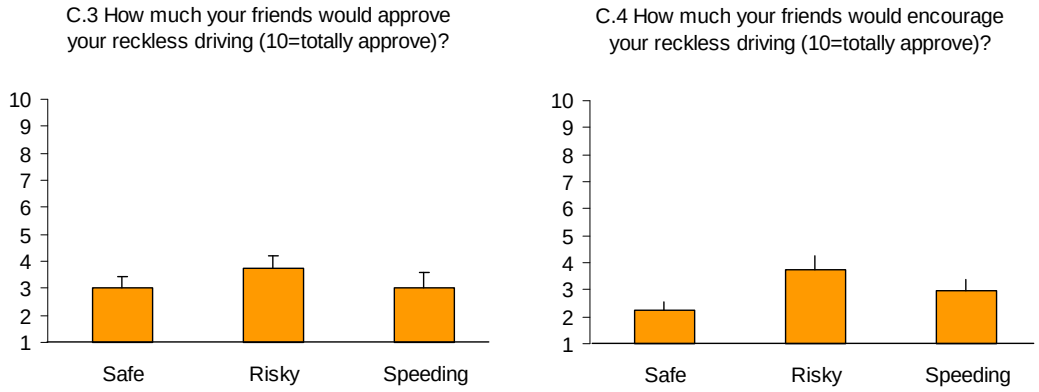


Figure E.3. Average scores for each group on items concerning friends' attitude (* p<.001).

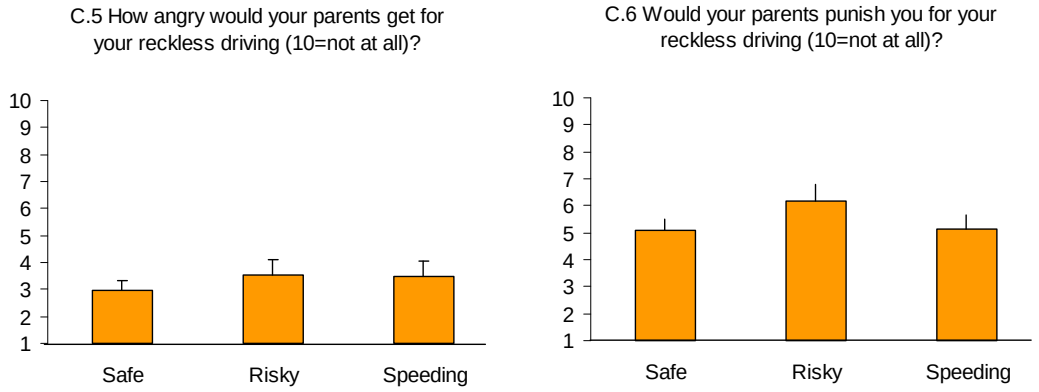


Figure E.4. Average scores for each group on items concerning parents' attitude (* p<.001).

1.3. NON DRIVERS

1.3.1. Sample description

A total of 252 people answered the Section 3 of the questionnaire. Males were 133 (52.8% of the total sample) and females were 119 (47.2% of the total sample). Their mean age was 17.3 years (standard deviation 1.50), ranging between 15 and 20 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and egocentrism.
2. ANGRY/ANXIOUS DRIVERS. People in this group have a similar profile as those in the risky drivers group, but seem to be especially characterized by rage reactions and anxiety.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and Angry/anxious drivers.
Figure F.1 shows the profiles of the three groups of drivers on the subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure F.2). However, respondents in the risky group feel to be supported and encouraged by their friends more than respondents in the other two groups (Figure F.3). The three groups do not differ as far as their parents' reaction is concerned (Figure F.4).

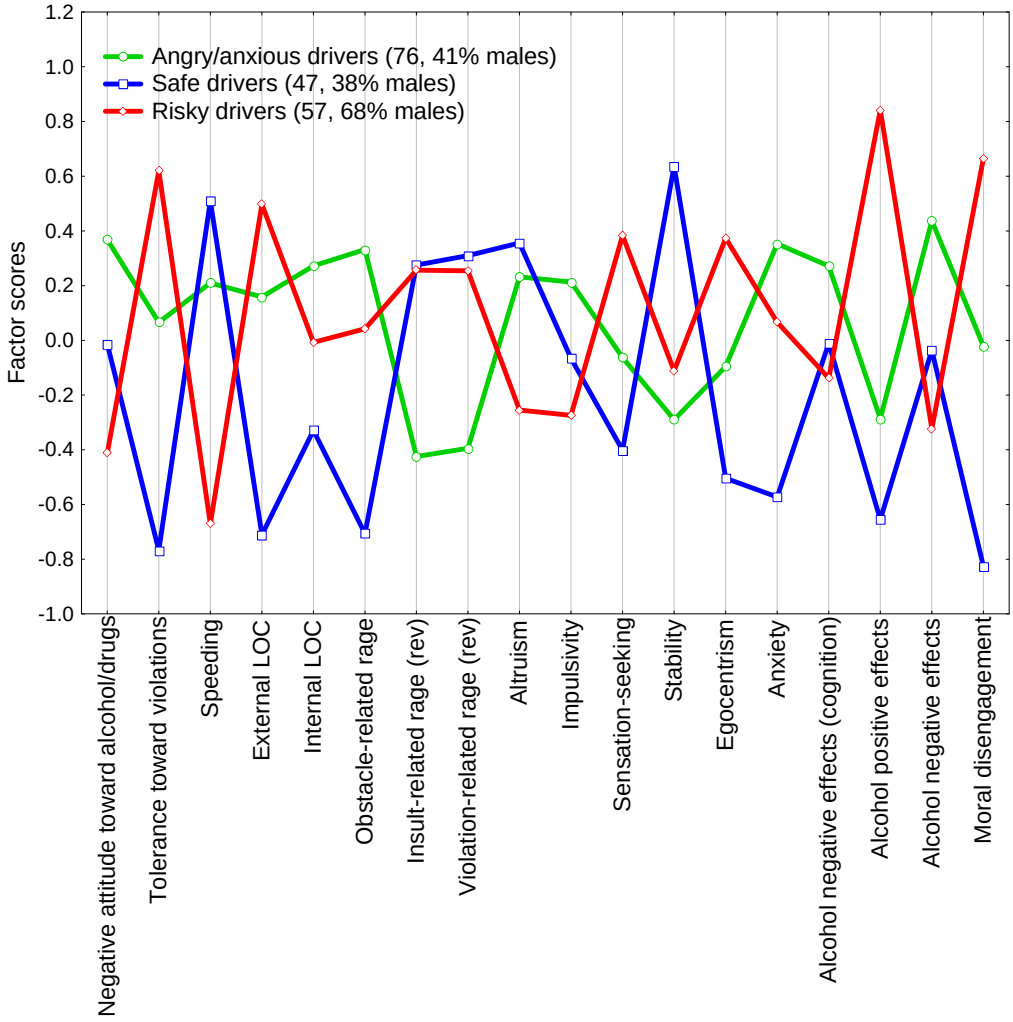


Figure F.1. Average scores for each group on the subscales of the questionnaire.

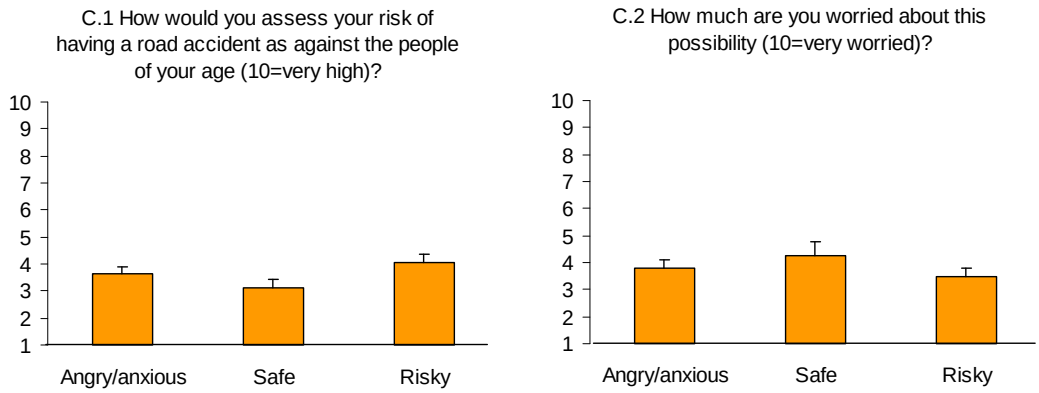


Figure F.2. Average scores for each group on items concerning risk perception (* p<.001).

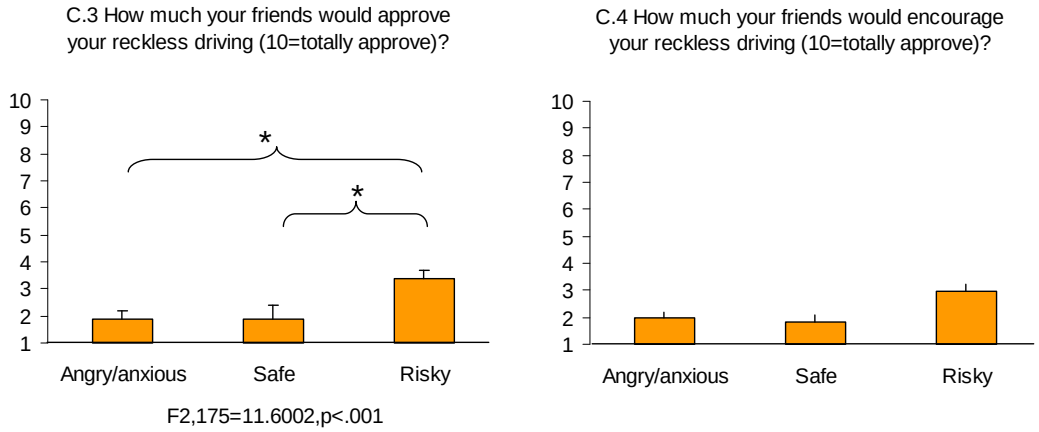


Figure F.3. Average scores for each group on items concerning friends' attitude (* p<.001).

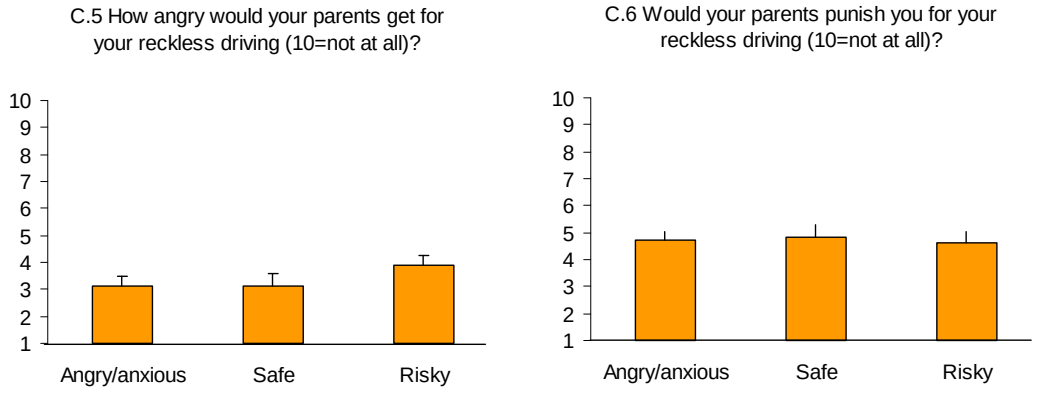


Figure F.4. Average scores for each group on items concerning parents' attitude (* p<.001).

Chapter 2

Results from Bulgaria

2.1. CAR DRIVERS

2.1.1. Sample description

A total of 775 people answered the Section 1 of the questionnaire. Males were 718 (90.8% of the total sample) and females were 57 (7.27% of the total sample). Their mean age was 19.07 years (standard error .11), ranging between 17 and 23 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

2.1.2. Driving habits

Tables G.1 to G.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Approximately half of the Austrian young respondents own a car, with a prevalence of female drivers (but it should be noted that females respondents are poorly represented in the present sample). They however refer to use a car on a regular basis (most of them drive everyday, without a prevalence of one gender), and for relatively long trips. Both male and female drivers refer to rarely drive after midnight (about 68% of them drive after midnight 2 times a week or less). Most respondents also refer not to have received a traffic fine and for those who have received a fine, the more common violation is for having parked where it was forbidden, and for speeding.

Most of the respondents refer not to drive after having drunk alcohol (and it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol).

Summarizing, Bulgarian young drivers seem to be characterized by being frequent drivers, not very experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	380 (52.92%)	338 (47.08%)*
Females	41 (71.93%)*	16 (28.07%)
Total	421 (54.32%)	354 (45.68%)

Table G.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	13	53	72	39	142	8
	(3.98%)	(16.21%)	(22.02%)	(11.93%)	(43.43%)	(2.45%)
Females	1	2	4	3	4	
	(7.14%)	(14.29%)	(28.57%)	(21.43%)	(28.57%)	0
Total	14	55	76	42	146	8
	(4.11%)	(16.13%)	(22.29%)	(12.32%)	(42.82%)	(2.35%)

Table G.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	30	40	58	86	113
	(9.17%)	(12.23%)	(17.74%)	(26.3%)	(34.56%)
Females	3	2	5	2	2
	(21.43%)	(14.29%)	(35.71%)	(14.29%)	(14.29%)
Total	33	42	63	88	115
	(9.68%)	(12.32%)	(18.48%)	(25.81%)	(33.72%)

Table G.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	65	126	65	71
	(19.88%)	(38.53%)	(19.88%)	(21.71%)
Females	4	7	1	2
	(28.57%)	(50.%)	(7.14%)	(14.29%)
Total	69	133	66	73
	(20.23%)	(39.%)	(19.35%)	(21.41%)

Table G.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	111	111	57	48
	(33.94%)	(33.94%)	(17.43%)	(14.68%)
Females	10	2	2	
	(71.43%)*	(14.29%)	(14.29%)	0
Total	121	113	59	48
	(35.48%)	(33.14%)	(17.3%)	(14.08%)

Table G.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

	H-9 Have you ever got a traffic fine?	
	No	Yes
Males	228 (69.72%)	99 (30.28%)
Females	9 (64.29%)	5 (35.71%)
Total	237 (69.5%)	104 (30.5%)

Table G.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	38 (5.29%)	3 (5.26%)	41 (5.29%)
Running a red light	22 (3.06%)	2 (3.51%)	24 (3.1%)
Running a stop sign	24 (3.34%)	0	24 (3.1%)
Speeding	37 (5.15%)	3 (5.26%)	40 (5.16%)
Drunk driving	15 (2.09%)	0	15 (1.94%)
Lack of seatbelts use	35 (4.87%)	1 (1.75%)	36 (4.65%)

Table G.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

	H-18 Have you ever driven after drinking alcoholic drink?					
	Never					Often
Males	250 (76.45%)	38 (11.62%)	22 (6.73%)	5 (1.53%)	6 (1.83%)	6 (1.83%)
Females	12 (85.71%)	2 (14.29%)	0	0	0	0
Total	262 (76.83%)	40 (11.73%)	22 (6.45%)	5 (1.47%)	6 (1.76%)	6 (1.76%)

Table G.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	27 (3.76%)	0	27 (3.48%)
You could hardly keep your head on straight	19 (2.65%)	0	19 (2.45%)
You had muscle cramps	13 (1.81%)	1 (1.75%)	14 (1.81%)
You could hardly keep your eyes open	12 (1.67%)	0	12 (1.55%)
You got stomach cramps	17 (2.37%)	0	17 (2.19%)
You could not focus on the road	13 (1.81%)	1 (1.75%)	14 (1.81%)
Someone who was with you made you notice it	24 (3.34%)	0	24 (3.1%)

Table G.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. OVERCONFINDENT DRIVERS. People in this group are especially characterized by very high scores on tolerance toward violations of the traffic code, on egocentrism subscale, and on moral disengagement. They have a clear internal Locus of Control, and consider alcohol as having positive effects also on driving behaviour. They are tolerant toward traffic code violations, and have rather high scores on sensation seeking and egocentrism. Similarly to the risky drivers, they show high scores on moral disengagement. They also seem to be aware of the negative effects of alcohol upon driving, though are less involved in preventing behaviours. Interestingly, they seem to be less affected by driving related rage compared to the other two groups of respondents.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender. However, it should be noted that the large majority of the sample is composed of male respondents.

Figure G.1 shows the profiles of the three groups of drivers on the subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure G.2). Instead, respondents in the overconfident group consider their friends as approving and encouraging their reckless driving behaviour more than respondents in the other two groups (Figure G.3). Finally, respondents in the safe drivers group refer their parents would be angry if they would adopt a risky driving behaviour more than respondents in the other two groups (Figure G.4).

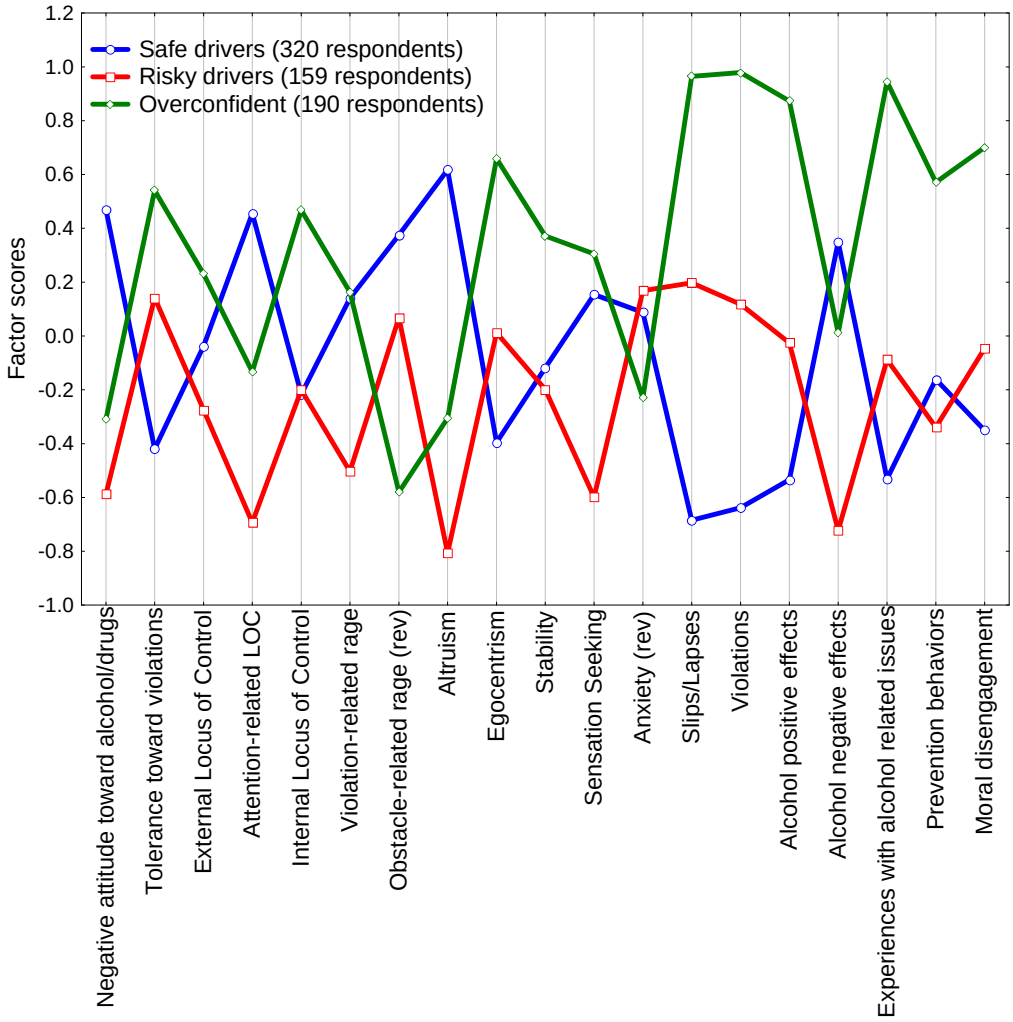
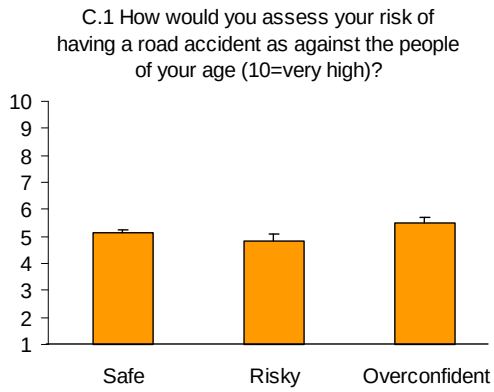


Figure G.1. Average scores for each group on subscales of the questionnaire.



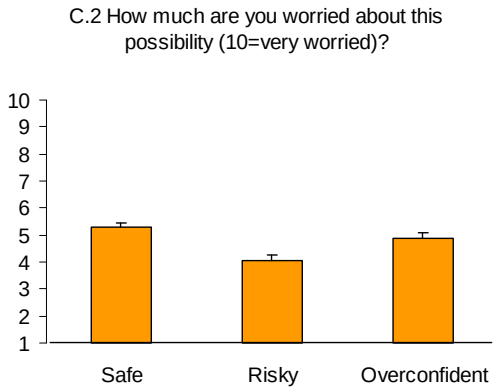
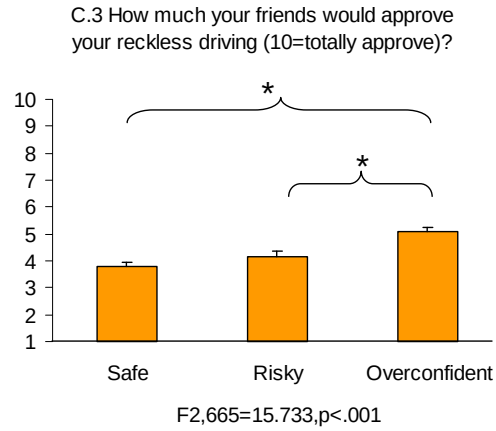


Figure G.2. Average scores for each group on items concerning risk perception (* p<.001).



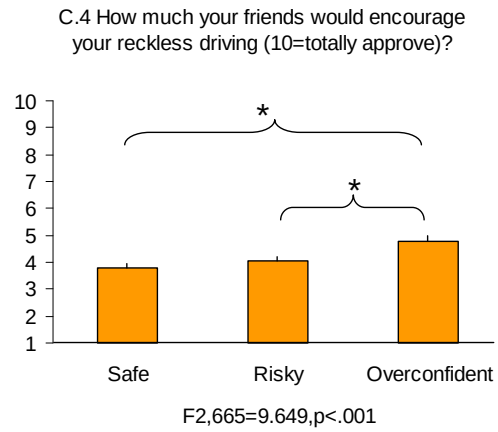
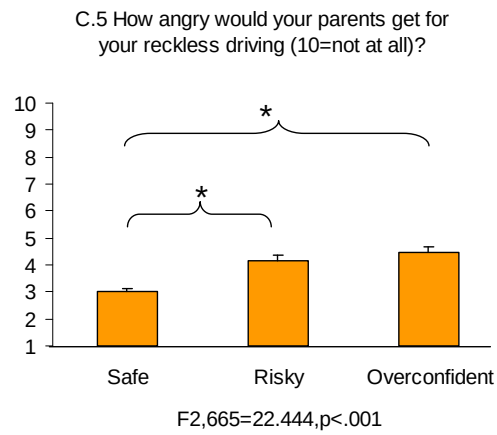


Figure G.3. Average scores for each group on items concerning friends' attitude (* p<.001).



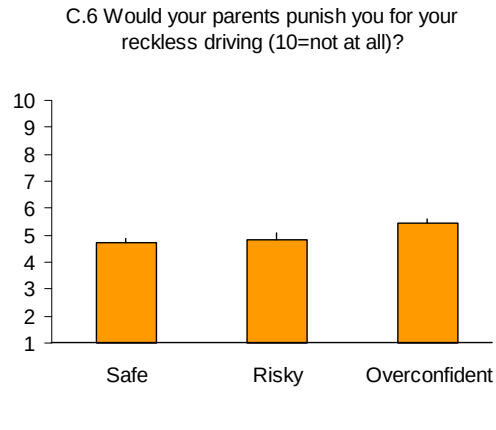


Figure G.4. Average scores for each group on items concerning parents' attitude (* p<.001).

2.2. SCOOTER DRIVERS

2.2.1. Sample description

A total of 156 people answered the Section 2 of the questionnaire. Males were 140 (89.7% of the total sample) and females were 16 (10.3% of the total sample). Their mean age was 18.3 years (standard deviation .9), ranging between 16 and 21 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

2.2.2. Driving habits

Tables H.1 to H.13 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Most scooter drivers from Bulgaria refer to use scooters or motorbikes on a fair regular basis (about 46% of them drive a scooter more than 4 times a week, without a gender prevalence). Their use of scooters is characterized by being very variable in term of number of kilometres travelled, from only few to more than 100 kilometres. Interestingly, male drivers refer to drive after 11.00 pm relatively often (about 47% of them drive after 11:00 pm more than 2 times a week). Bulgarian scooter drivers also are not normally used to go on as passengers. Male drivers also refer to have received a traffic fine less often than female drivers (but it should be noted that female drivers are very poorly represented in the sample), mostly for speeding. and driving without the helmet. Scooter drivers refer not to have been involved in accidents both as drivers or passengers very often, and usually they refer to have had only material damages.
Only few respondents (20% of the total sample, but mostly male drivers) state that they have driven after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol). However, very few of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially difficulties on following the road. This might suggest that a consistent number of young drivers are rather unaware of the negative effects of driving under the effects of alcohol.
Summarizing, Bulgarian young scooter drivers seem to be characterized by being frequent drivers, relatively experienced of driving during night hours, and not completely aware of the dangers associated with driving under the effects of alcohol.

	G1-6 How many times a week do you use a scooter?					
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	5	24	22	18	35	9
	(4.42%)	(21.24%)	(19.47%)	(15.93%)	(30.97%)	(7.96%)
Females		3	2	2	2	1
	0	(30.%)	(20.%)	(20.%)	(20.%)	(10.%)
Total	5	27	24	20	37	10
	(4.07%)	(21.95%)	(19.51%)	(16.26%)	(30.08%)	(8.13%)

Table H.1. Frequency distribution of respondents for item G1.6 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-7 How many kilometres do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	17	20	23	28	25
	(15.04%)	(17.7%)	(20.35%)	(24.78%)	(22.12%)
Females	2	1	4	1	2
	(20.%)	(10.%)	(40.%)	(10.%)	(20.%)
Total	19	21	27	29	27
	(15.45%)	(17.07%)	(21.95%)	(23.58%)	(21.95%)

Table H.2. Frequency distribution of respondents for item G1.7 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-8 In the last three months, how many times have you driven after 11:00 pm?				
	Never	1-2 times	2-4 times	More than 4 times
Males	35	24	26	28
	(30.97%)	(21.24%)	(23.01%)	(24.78%)
Females	4	4	1	1
	(40.%)	(40.%)	(10.%)	(10.%)
Total	39	28	27	29
	(31.71%)	(22.76%)	(21.95%)	(23.58%)

Table H.3. Frequency distribution of respondents for item G1.8 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-9 How often in a week do you go on a scooter sitting behind?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the week end
Males	31	29	24	13	15	1
	(27.43%)	(25.66%)	(21.24%)	(11.5%)	(13.27%)	(.88%)
Females	4	4	2			
	(40.%)	(40.%)	(20.%)	0	0	0
Total	35	33	26	13	15	1
	(28.46%)	(26.83%)	(21.14%)	(10.57%)	(12.2%)	(.81%)

Table H.4. Frequency distribution of respondents for item G1.9 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-10 In the last three months how often you accepted a lift on a scooter after 11 pm?				
	Never	1-2 times a month	2-4 times in a month	More than 4 times in a month
Males	49	33	19	12
	(43.36%)	(29.2%)	(16.81%)	(10.62%)
Females	7	3		
	(70.%)	(30.%)	0	0
Total	56	36	19	12
	(45.53%)	(29.27%)	(15.45%)	(9.76%)

Table H.5. Frequency distribution of respondents for item G1.10 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-11 Have you ever been fined?		
	Yes	No
Males	28	85
	(24.78%)	(75.22%)
Females	5	5
	(50.%)	(50.%)
Total	33	90
	(26.83%)	(73.17%)

Table H.6. Frequency distribution of respondents for item G1.11 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
Running a stop sign	8		8
	(5.71%)	0	(5.13%)
Running a red light	8	1	9
	(5.71%)	(6.25%)	(5.77%)
No parking	6	1	7
	(4.29%)	(6.25%)	(4.49%)
Passenger	7		7
	(5.%)	0	(4.49%)
Drunk driving	6	1	7
	(4.29%)	(6.25%)	(4.49%)
Driving without the helmet	14	2	16
	(10.%)	(12.5%)	(10.26%)
Speeding	10	2	12
	(7.14%)	(12.5%)	(7.69%)

Table H.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-21 Have you ever been involved in an accident as a driver?			
	Yes	No	No but I was close to
Males	19	79	15
	(16.81%)	(69.91%)	(13.27%)
Females	4	5	1
	(40.%)	(50.%)	(10.%)
Total	23	84	16
	(18.7%)	(68.29%)	(13.01%)

Table H.8. Frequency distribution of respondents for item G1.21 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-23 What were the consequences?			
	Material damages	Personal injuries	Both
Males	20	12	5
	(42.55%)	(25.53%)	(10.64%)
Females	2	2	1
	(40.%)	(40.%)	(20.%)
Total	22	14	6
	(42.31%)	(26.92%)	(11.54%)

Table H.9. Frequency distribution of respondents for item G1.23 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-24 Have you ever been involved in an accident as a passenger?			
	Yes	No	No but I was close to
Males	29	74	10
	(25.66%)	(65.49%)	(8.85%)
Females	2	7	1
	(20.%)	(70.%)	(10.%)
Total	31	81	11
	(25.2%)	(65.85%)	(8.94%)

Table H.10. Frequency distribution of respondents for item G1.24 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1_26 What were the consequences?			
	Material damages	Personal injuries	Both
Males	25	16	9
	(50.%)	(32.%)	(18.%)
Females	2	2	
	(50.%)	(50.%)	0
Total	27	18	9
	(50.%)	(33.33%)	(16.67%)

Table H.11. Frequency distribution of respondents for item G1.26 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-27 Have you ever driven after drinking alcoholic drinks?		
	Yes	No
Males	24	89
	(21.24%)	(78.76%)
Females	1	9
	(10.%)	(90.%)
Total	25	98
	(20.33%)	(79.67%)

Table H.12. Frequency distribution of respondents for item G1.27 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the road	11 (7.86%)	0	11 (7.05%)
You could hardly keep your head on straight	8 (5.71%)	0	8 (5.13%)
You had muscle cramps	6 (4.29%)	0	6 (3.85%)
You could hardly keep your eyes open	8 (5.71%)	0	8 (5.13%)
You got stomach cramps	5 (3.57%)	1 (6.25%)	6 (3.85%)
You could not focus on the road	6 (4.29%)	0	6 (3.85%)
Someone who was with you made you notice it	8 (5.71%)	0	8 (5.13%)

Table H.13. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. ANXIOUS DRIVERS. People in this group are especially characterized by high scores on anxiety, compared to safe drivers. They have a clear internal Locus of Control, and consider alcohol as having positive effects also on driving behaviour. They are tolerant toward traffic code violations, as violations are useful to keep traffic flowing smoothly They also seem not to be aware of the negative effects of alcohol upon driving. Interestingly, they refer to commit a higher number of violations of the traffic code compared to the other two groups of respondents.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender. However, it should be noted that the large majority of the sample is composed of male respondents.
Figure H.1 shows the profiles of the three groups of drivers on subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure H.2). Also, respondents in the three groups do not differ in term of the perceived friends' support of their reckless driving behaviour (Figure H.3). Finally, respondents in the three groups do not differ in the perceived parents' reaction if they would adopt a risky driving behaviour (Figure H.4).

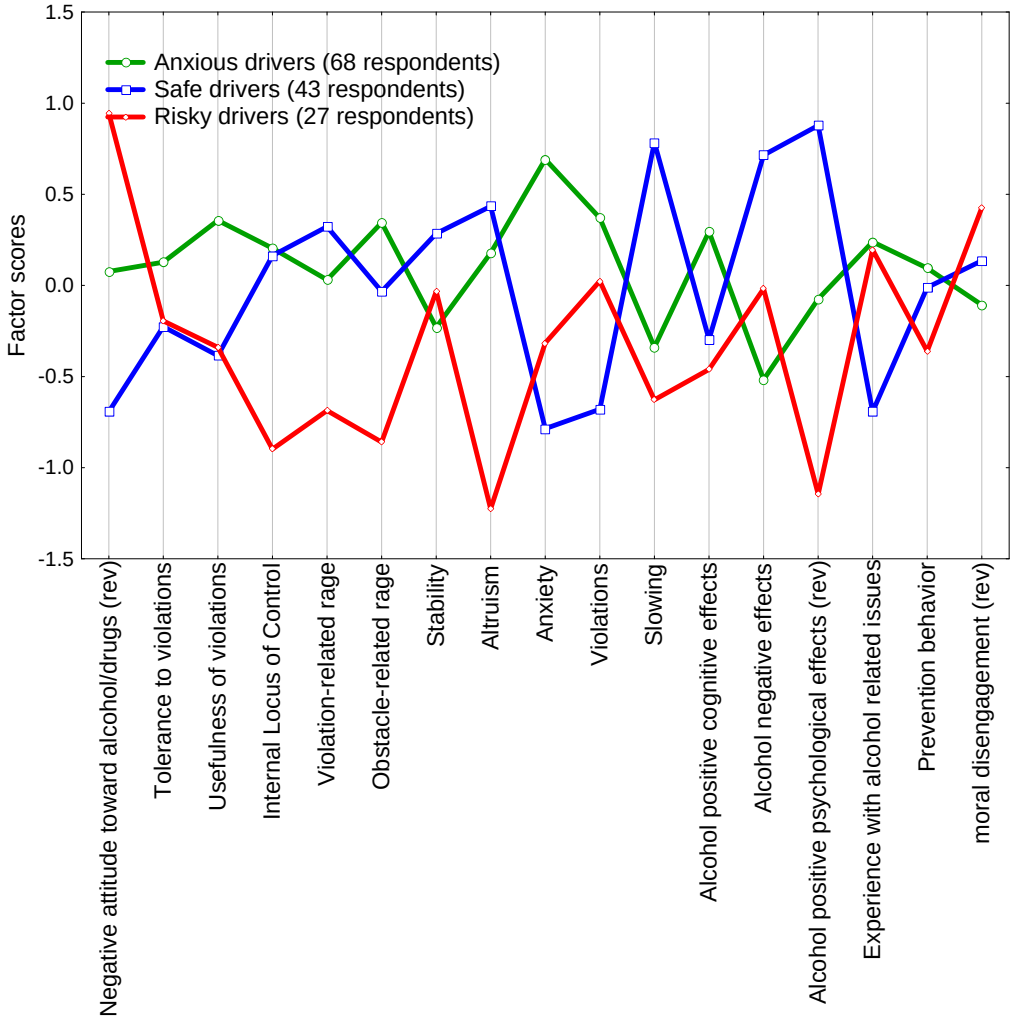
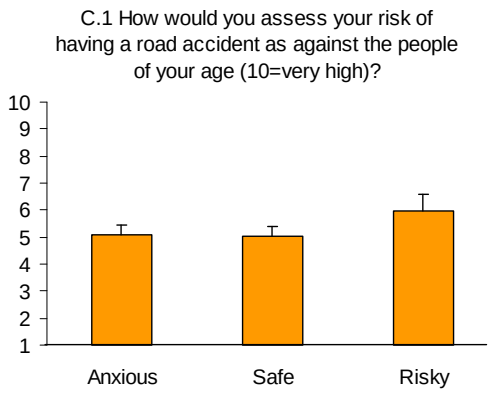


Figure H.1. Average scores for each group on subscales of the questionnaire.



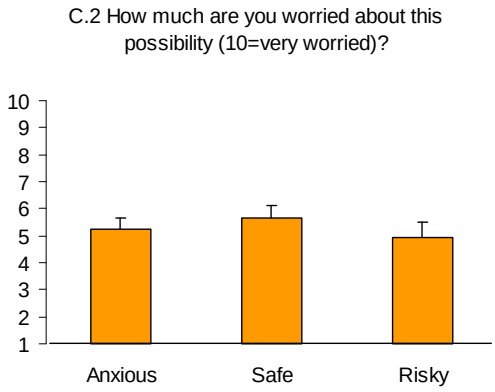
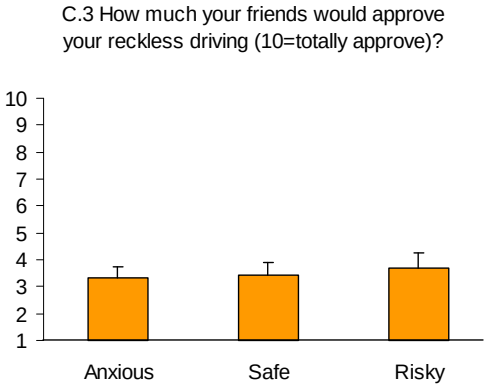


Figure H.2. Average scores for each group on items concerning risk perception (* p<.001).



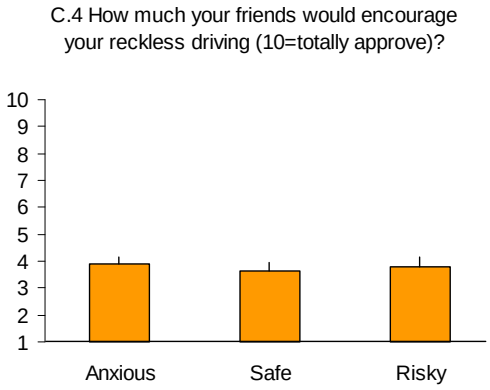
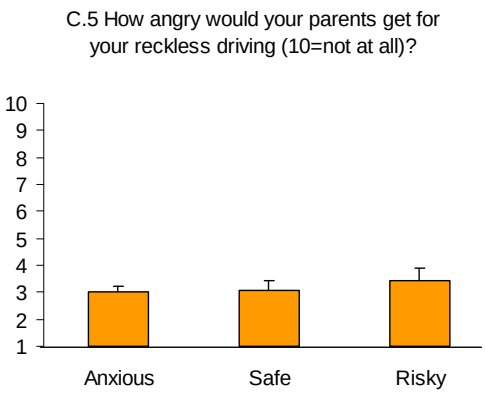


Figure H.3. Average scores for each group on items concerning friends' attitude (* p<.001).



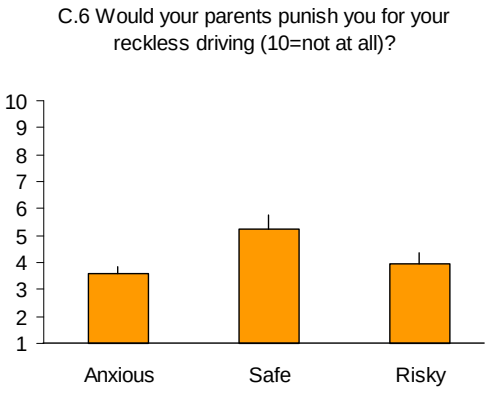


Figure H.4. Average scores for each group on items concerning parents' attitude (* p<.001).

2.3. NON DRIVERS

2.3.1. Sample description

A total of 1540 people answered the Section 3 of the questionnaire. Males were 1288 (83.64% of the total sample) and females were 252 (16.36% of the total sample). Their mean age was 18.4 years (standard deviation .81), ranging between 15 and 27 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of cluster analyses showed three separate groups of respondents:

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. ANXIOUS DRIVERS. People in the second group are characterized by being similar, to a certain extent, to the safe drivers, with the most notable exception that they have rather high scores on anxiety subscales and have a clear external LOC.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show low levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

The three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and anxious drivers.
Figure I.1 shows the profiles of the three groups of drivers on subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure I.2). However, respondents in the risky group feel to be supported and encouraged by their friends more than respondents in the other two groups (Figure I.3). The same respondents consider their parents would not be angry at their driving behaviour and would not punish them more than the other respondents (Figure I.4).

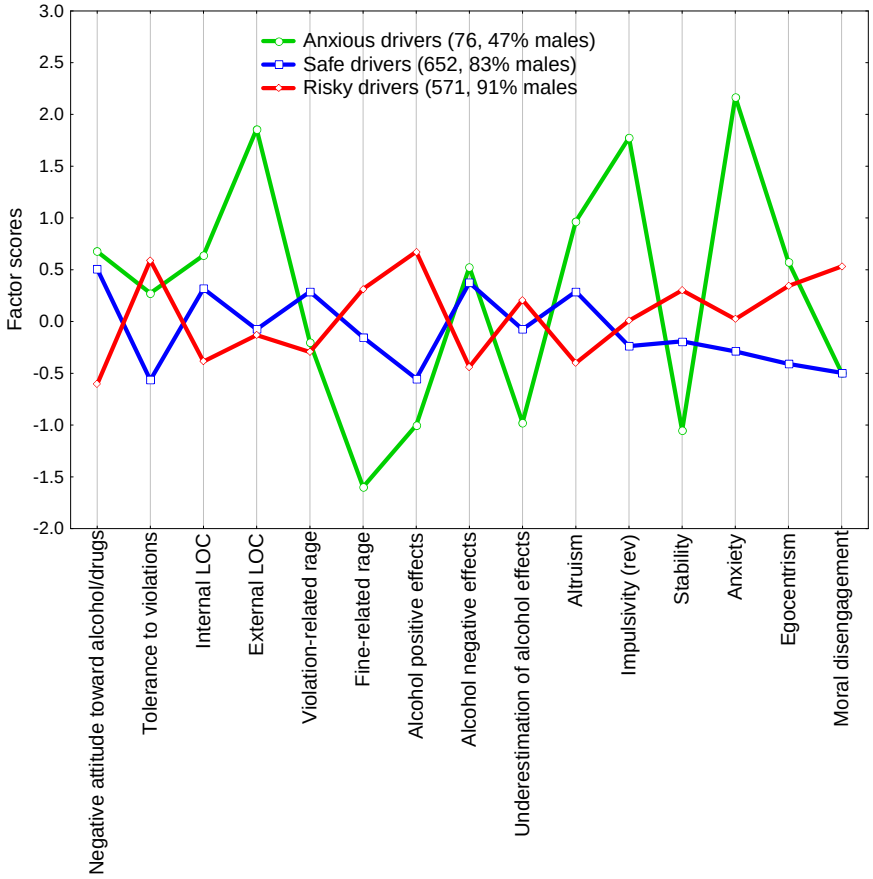


Figure I.1. Average scores for each group on the subscales of the questionnaire.

Figure I.2. Average scores for each group on items concerning risk perception (* p<.001).

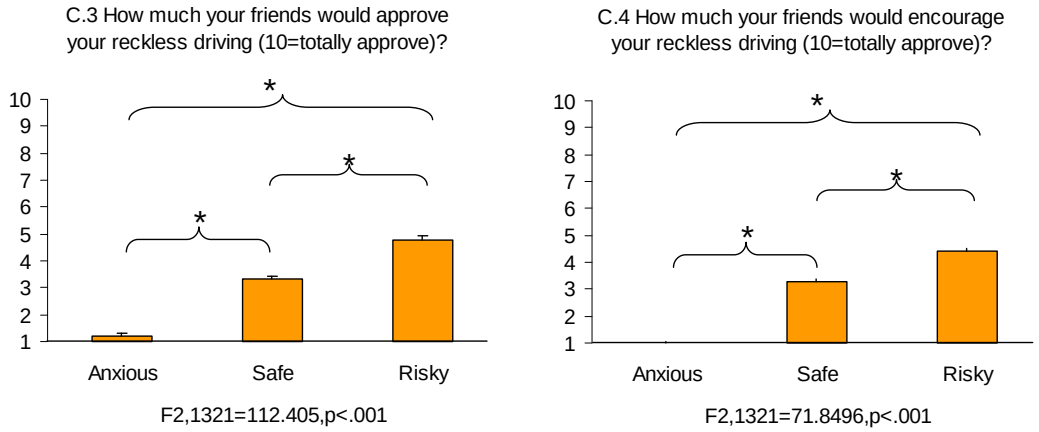


Figure I.3. Average scores for each group on items concerning friends' attitude (* p<.001).

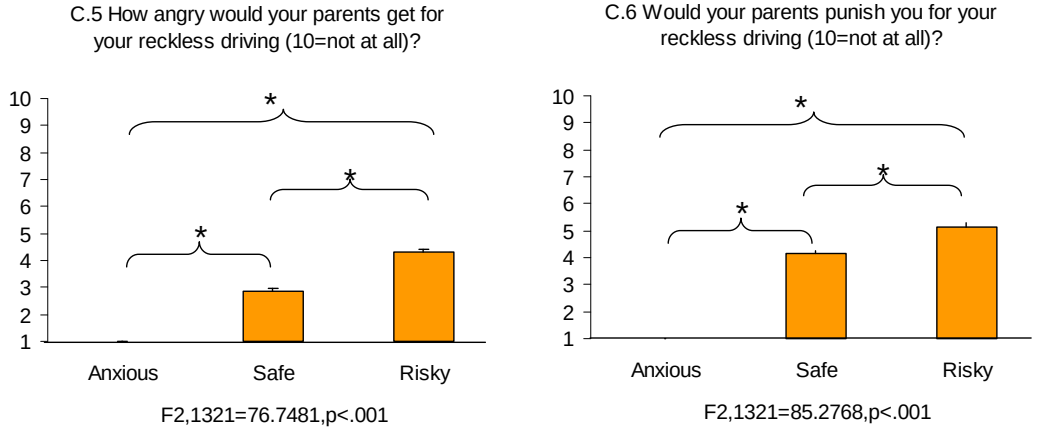


Figure I.4. Average scores for each group on items concerning parents' attitude (* p<.001).

Chapter 3

Results from Cyprus

3.1. CAR DRIVERS

3.1.1. Sample description

A total of 103 people answered the Section 1 of the questionnaire. Males were 56 (54.4% of the total sample) and females were 47 (45.6% of the total sample). Their mean age was 22.82 years (standard error .35), ranging between 19 and 39 years.
Only 17 respondents were older than 24 years old, though. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

3.1.2. Driving habits

Tables J.1 to J.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. No one of the respondents owns a car.
They however refer to use a car on a very regular basis (most of them drive everyday, without a prevalence of one gender), and for relatively short trips. Interestingly, male drivers refer to drive after midnight very often (about 80% of them drive after midnight more than 2 times a week), whereas female drivers are far less likely to drive after midnight (about 21% them do not drive after midnight at all).
Male drivers also refer to have received a traffic fine more often than female drivers, mostly for having parked where it was forbidden, for speeding, and interestingly, for drunk driving (about 14% of male drivers have been fined for drunk driving). Interestingly, about 58% the sample refers (60 respondents out of 103) state that they have driven at least once after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol), and about 22% of them quite often (mostly male drivers).
However, only about half of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially doziness and difficulties on keeping focused on the road. This might suggest that a consistent number of young drivers are still unaware of the negative effects of driving under the effects of alcohol.
Summarizing, young drivers from Cyprus seem to be characterized by being frequent drivers, quite expert indeed, also experienced of driving during night hours (especially male drivers), and not very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males		56
	0	(100.%)
Females		47
	0	(100.%)
Total		103
	0	(100.%)

Table J.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males			3	3	50	
	0	0	(5.36%)	(5.36%)	(89.29%)	0
Females	1		1	2	43	
	(2.13%)	0	(2.13%)	(4.26%)	(91.49%)	0
Total	1		4	5	93	
	(.97%)	0	(3.88%)	(4.85%)	(90.29%)	0

Table J.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	1	3	9	14	29
	(1.79%)	(5.36%)	(16.07%)	(25.%)	(51.79%)
Females	1	6	7	17	16
	(2.13%)	(12.77%)	(14.89%)	(36.17%)	(34.04%)
Total	2	9	16	31	45
	(1.94%)	(8.74%)	(15.53%)	(30.1%)	(43.69%)

Table J.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	4	25	13	14
	(7.14%)	(44.64%)	(23.21%)	(25.%)
Females	17	16	8	6
	(36.17%)*	(34.04%)	(17.02%)	(12.77%)
Total	21	41	21	20
	(20.39%)	(39.81%)	(20.39%)	(19.42%)

Table J.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	2 (3.57%)	9 (16.07%)	14 (25.%)	31 (55.36%)*
Females	10 (21.28%)*	11 (23.4%)	14 (29.79%)	12 (25.53%)
Total	12 (11.65%)	20 (19.42%)	28 (27.18%)	43 (41.75%)

Table J.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	No	Yes
Males	6 (10.71%)	50 (89.29%)*
Females	28 (59.57%)*	19 (40.43%)
Total	34 (33.01%)	69 (66.99%)

Table J.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	21 (37.5%)*	8 (17.02%)	29 (28.16%)
Running a red light	1 (1.79%)	2 (4.26%)	3 (2.91%)
Running a stop sign	2 (3.57%)	0	2 (1.94%)
Speeding	45 (80.36%)*	10 (21.28%)	55 (53.4%)
Drunk driving	8 (14.29%)*	1 (2.13%)	9 (8.74%)
Lack of seatbelts use	9 (16.07%)	2 (4.26%)	11 (10.68%)

Table J.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	13 (23.21%)	9 (16.07%)	7 (12.5%)	6 (10.71%)	10 (17.86%)*	11 (19.64%)*
Females	30 (63.83%)*	6 (12.77%)	7 (14.89%)	2 (4.26%)	1 (2.13%)	1 (2.13%)
Total	43 (41.75%)	15 (14.56%)	14 (13.59%)	8 (7.77%)	11 (10.68%)	12 (11.65%)

Table J.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
You could hardly follow the trajectory	5 (8.93%)	0	5 (4.85%)
You could hardly keep your head on straight	3 (5.36%)	0	3 (2.91%)
You had muscle cramps	2 (3.57%)	0	2 (1.94%)
You could hardly keep your eyes open	14 (25.%)*	1 (2.13%)	15 (14.56%)
You got stomach cramps	2 (3.57%)	0	2 (1.94%)
You could not focus on the road	6 (10.71%)	0	6 (5.83%)
Someone who was with you made you notice it	3 (5.36%)	1 (2.13%)	4 (3.88%)

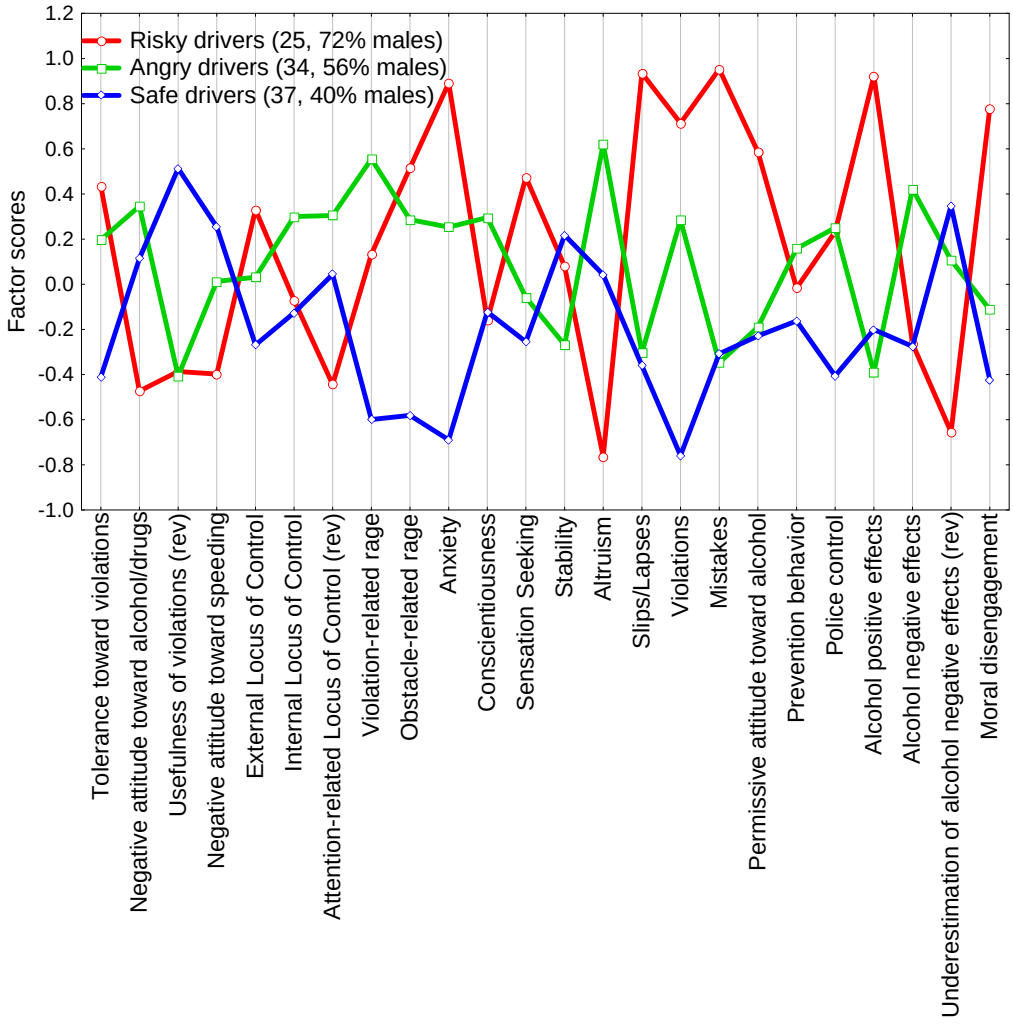
Table J.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. ANGRY DRIVERS. People in this group are characterized by having rather high scores on the rage-related subscales, both violations and obstacles-related. They are also high on the anxiety subscale, though not as high as the risky drivers. However, they are tolerant toward violations of the traffic rules. Interestingly enough, similarly to risky drivers, people in this group do consider violations of the traffic code as useful for keeping traffic flowing. Similarly to the safe drivers, however, they show low scores on moral disengagement.

3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a (not significant) prevalence of males can be observed among the risky and angry drivers.
Figure J.1 shows the profiles of the three groups of drivers on selected subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident (Figure J.2), or in terms of perception of parents' and friends' support and encouragement for their reckless driving behaviour (Figures J.3 and J.4).



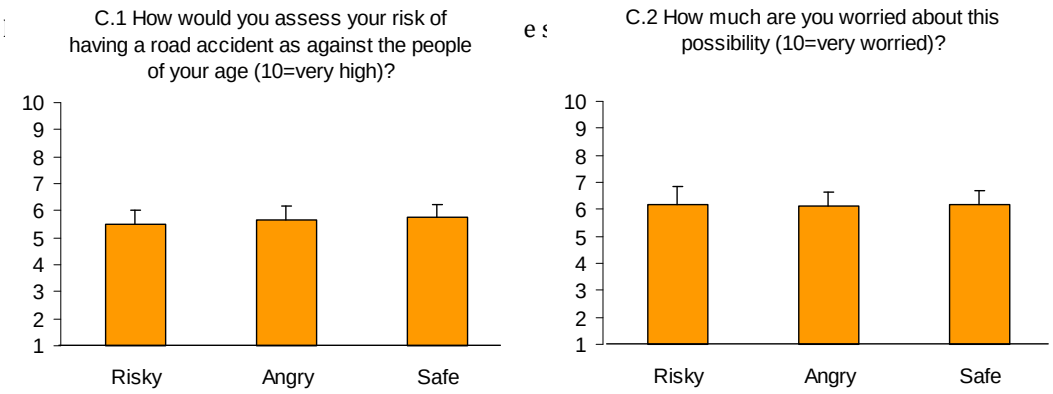


Figure J.2. Average scores for each group on items concerning risk perception (* p<.001).

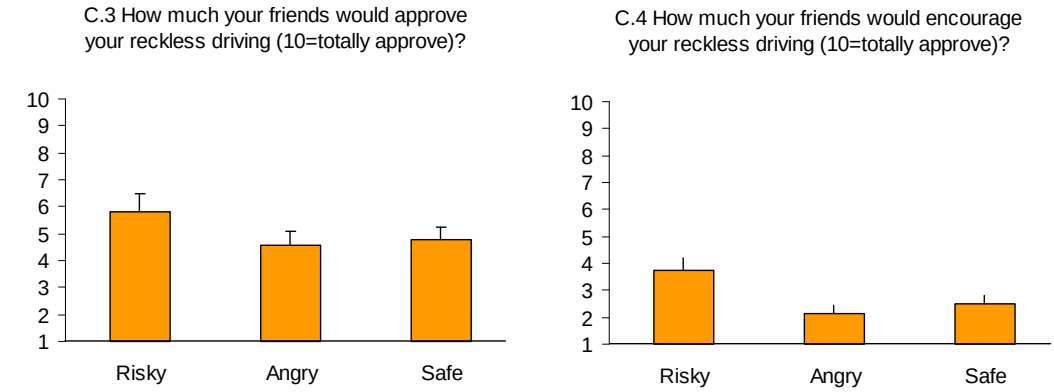


Figure J.3. Average scores for each group on items concerning friends' attitude (* p<.001).

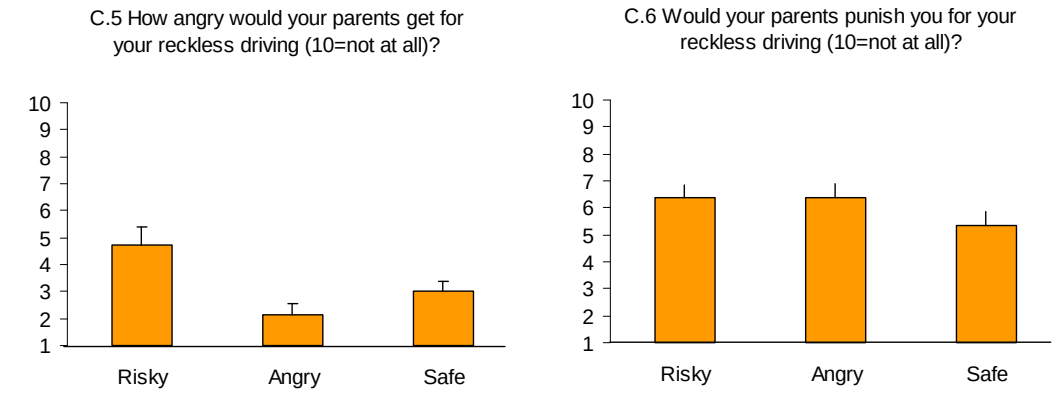


Figure J.4. Average scores for each group on items concerning parents' attitude (* p<.001).

3.2. NON DRIVERS

3.2.1. Sample description

A total of 90 people answered the Section 3 of the questionnaire. Males were 42 (46,7% of the total sample) and females were 48 (53.3% of the total sample). Their mean age was 18.0 years (standard deviation 0.41), ranging between 17 and 20 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. ANGRY DRIVERS. People in this group are characterized by having rather high scores on the rage-related subscales, both violations and obstacles-related. They are also high on the anxiety subscale, though not as high as the risky drivers. However, they are tolerant toward violations of the traffic rules. Interestingly enough, similarly to risky drivers, people in this group do consider violations of the traffic code as useful for keeping traffic flowing. Similarly to the safe drivers, however, they show low scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky drivers.
Figure K.1 shows the profiles of the three groups of drivers on selected subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure K.2). However, respondents in the risky group feel to be encouraged by their friends more than respondents in the other two groups (Figure K.3). The same respondents consider their parents would not be angry at their driving behaviour more than the other respondents (Figure K.4).

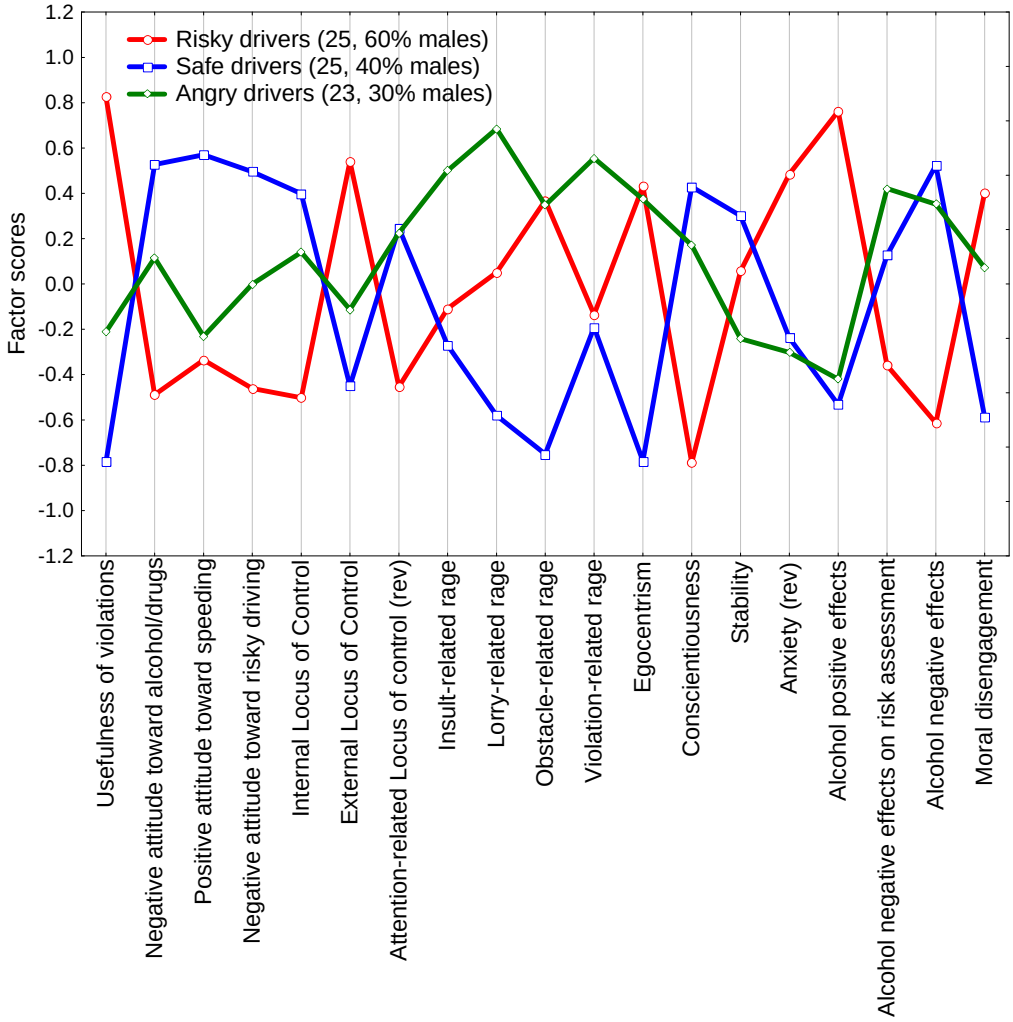


Figure K.1. Average scores for each group on the subscales of the questionnaire.

Figure K.2. Average scores for each group on items concerning risk perception.

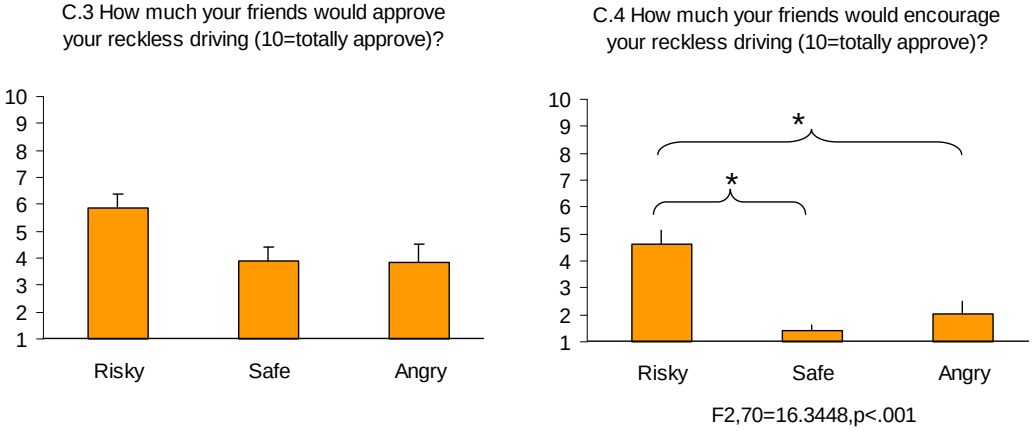


Figure K.3. Average scores for each group on items concerning friends' attitude.

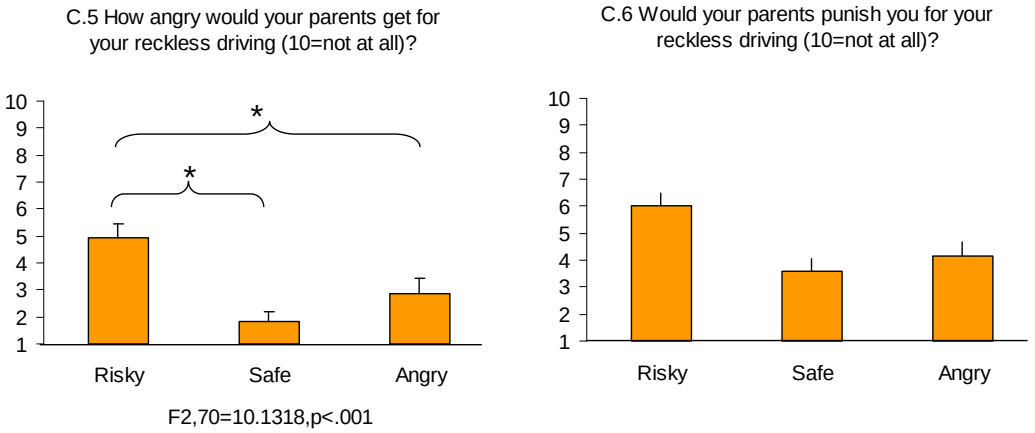


Figure K.4. Average scores for each group on items concerning parents' attitude.

Chapter 4

Results Estonia

4.1. CAR DRIVERS

4.1.1. Sample description

A total of 382 people answered the Section 1 of the questionnaire. Males were 258 (67.5% of the total sample) and females were 124 (32.5% of the total sample). Their mean age was 20.4 years (standard deviation 1.95), ranging between 187 and 25 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

4.1.2. Driving habits

Tables L.1 to L.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Few Estonian young drivers own a car, though female drivers are more likely to own a car than male drivers. They however refer to use a car on a very regular basis (most of them drive everyday, again with a prevalence of male drivers compared to female drivers), and for relatively long trips. Interestingly, male drivers refer to drive after midnight relatively often (about half of them drive after midnight more than 2 times a week), where female drivers are far less likely to drive after midnight (about 36% them do not drive after midnight at all). Male drivers also refer to have received a traffic fine less often than female drivers, mostly for having parked where it was forbidden, and for speeding. Interestingly, most of the respondents state that they have never driven after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol). However, less than half of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially difficulties on keeping focused on the road. This might suggest that a consistent number of young drivers are still unaware of the negative effects of driving under the effects of alcohol.
Summarizing, Estonian young drivers seem to be characterized by being frequent drivers, quite expert indeed, also experienced of driving during night hours (especially male drivers), and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	47	211
	(18.22%)	(81.78%)
Females	31	91
	(25.41%)	(74.59%)
Total	78	302
	(20.53%)	(79.47%)

Table L.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	4	20	30	25	114	17
	(1.9%)	(9.52%)	(14.29%)	(11.9%)	(54.29%)*	(8.1%)
Females	4	17	17	12	31	10
	(4.4%)	(18.68%)*	(18.68%)	(13.19%)	(34.07%)	(10.99%)
Total	8	37	47	37	145	27
	(2.66%)	(12.29%)	(15.61%)	(12.29%)	(48.17%)	(8.97%)

Table L.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	8	12	25	30	135
	(3.81%)	(5.71%)	(11.9%)	(14.29%)	(64.29%)*
Females	5	14	15	25	32
	(5.49%)	(15.38%)*	(16.48%)	(27.47%)*	(35.16%)
Total	13	26	40	55	167
	(4.32%)	(8.64%)	(13.29%)	(18.27%)	(55.48%)

Table L.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	26	72	41	71
	(12.38%)	(34.29%)	(19.52%)	(33.81%)*
Females	22	41	16	12
	(24.18%)*	(45.05%)	(17.58%)	(13.19%)
Total	48	113	57	83
	(15.95%)	(37.54%)	(18.94%)	(27.57%)

Table L.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	37	78	36	59
	(17.62%)	(37.14%)	(17.14%)	(28.1%)*
Females	33	30	13	15
	(36.26%)*	(32.97%)	(14.29%)	(16.48%)
Total	70	108	49	74
	(23.26%)	(35.88%)	(16.28%)	(24.58%)

Table L.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	Yes	No
Males	104 (49.52%)	106 (50.48%)*
Females	75 (82.42%)*	16 (17.58%)
Total	179 (59.47%)	122 (40.53%)

Table L.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
No parking	30 (11.63%)	8 (6.56%)	38 (10.%)
Running a red light	12 (4.65%)	1 (.82%)	13 (3.42%)
Running a stop sign	6 (2.33%)	0	6 (1.58%)
Speeding	62 (24.03%)*	5 (4.1%)	67 (17.63%)
Drunk driving	12 (4.65%)	0	12 (3.16%)
Lack of seatbels use	23 (8.91%)*	1 (.82%)	24 (6.32%)

Table L.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	115 (54.76%)	71 (33.81%)*	15 (7.14%)*	6 (2.86%)	0	3 (1.43%)
Females	76 (83.52%)*	11 (12.09%)	1 (1.1%)	3 (3.3%)	0	0
Total	191 (63.46%)	82 (27.24%)	16 (5.32%)	9 (2.99%)	0	3 (1.%)

Table L.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	15 (5.81%)*	1 (.82%)	16 (4.21%)
You could hardly keep your head on straight	7 (2.71%)	1 (.82%)	8 (2.11%)
You had muscle cramps	5 (1.94%)	0	5 (1.32%)
You could hardly keep your eyes open	12 (4.65%)	3 (2.46%)	15 (3.95%)
You got stomach cramps	6 (2.33%)	0	6 (1.58%)
You could not focus on the road	21 (8.14%)*	1 (.82%)	22 (5.79%)
Someone who was with you made you notice it	11 (4.26%)	0	11 (2.89%)

Table L.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences ($p<.001$) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. AGGRESSIVE DRIVERS. People in this group are especially characterized by high scores on aggressive/angry-related subscales, compared to safe drivers. They are tolerant toward traffic code violations, and have rather high scores on sensation seeking and egocentrism. Similarly to the risky drivers, they show high scores on moral disengagement. They also seem to be aware of the negative effects of alcohol upon driving, though are less involved in preventing behaviours.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among all the groups of drivers.
The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure L.2). Instead, respondents in the aggressive group consider their friends as approving and encouraging their reckless driving behaviour more than respondents in the other two groups (Figure L.3). Finally, respondents in the aggressive drivers group refer their parents would be less angry if they would adopt a risky driving behaviour than respondents in the other two groups (Figure L.4).

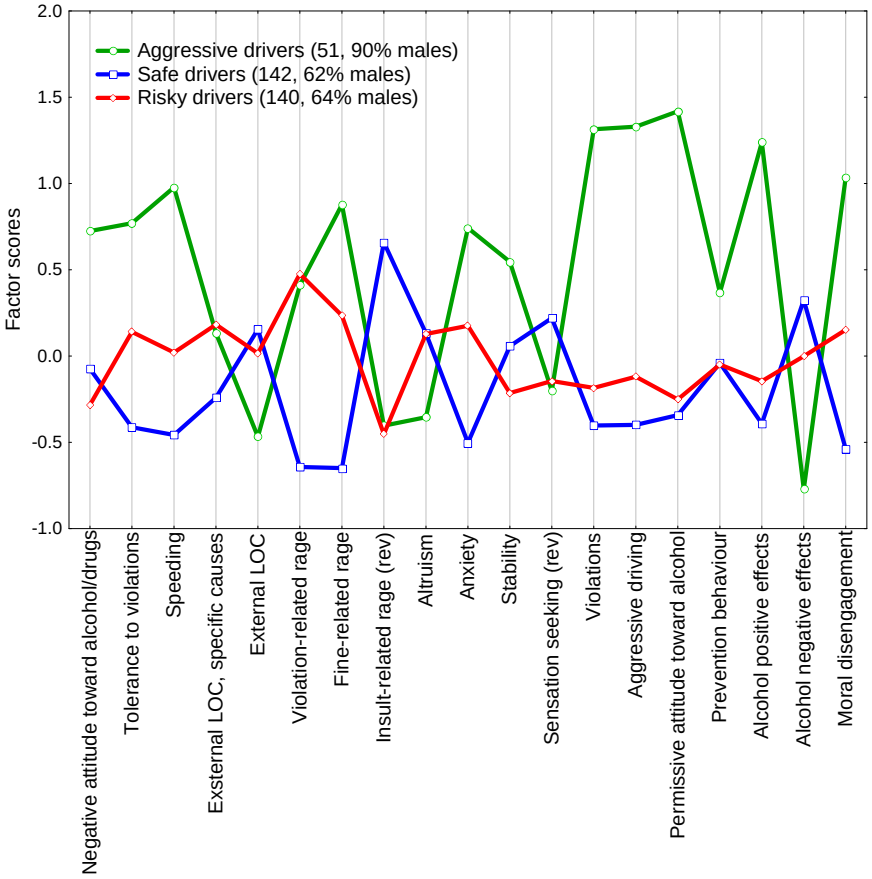


Figure L.1. Average scores for each group on selected subscales of the questionnaire.

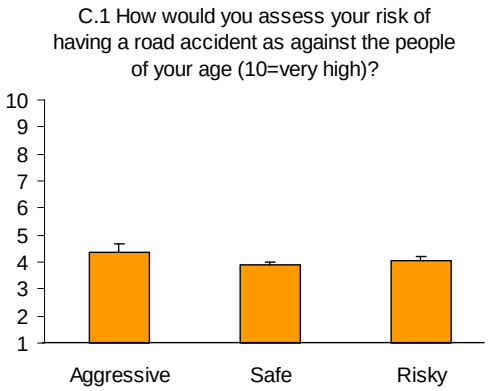
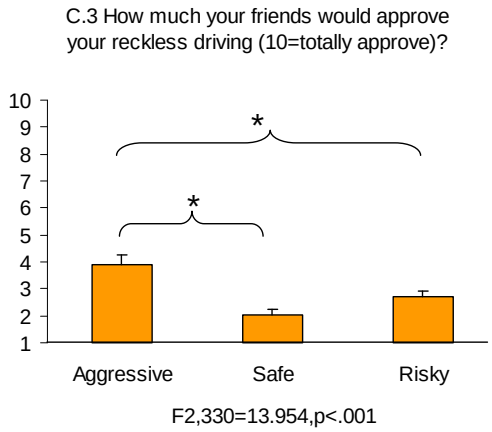


Figure L.2. Average scores for each group on items concerning risk perception (* p<.001).



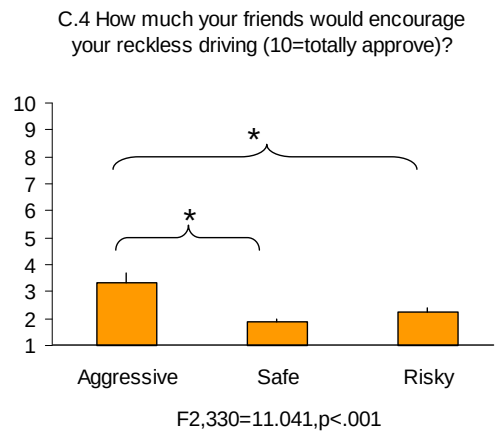
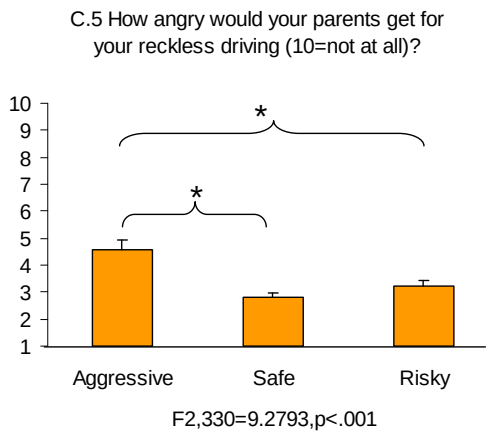


Figure L.3. Average scores for each group on items concerning friends' attitude (* p<.001).



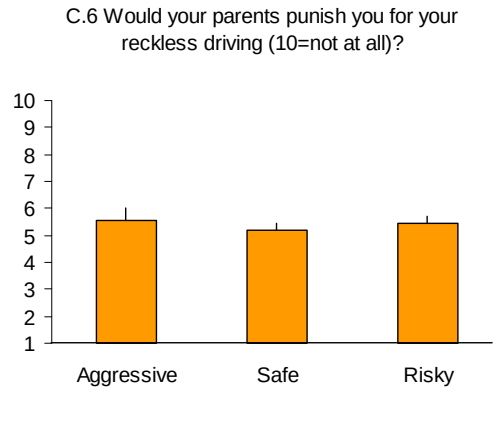


Figure L.4. Average scores for each group on items concerning parents' attitude (* p<.001).

4.2. NON DRIVERS

4.2.1. Sample description

A total of 169 people answered the Section 3 of the questionnaire. Males were 80 (47.1% of the total sample) and females were 89 (52.4% of the total sample). Their mean age was 18.6 years (standard deviation 1.68), ranging between 16 and 26 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They are also quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. ANGRY DRIVERS. People in this group are characterized by having rather high scores on the rage-related subscales, both violations and obstacles-related. However, they are also tolerant toward violations of the traffic rules.. Similarly to the risky drivers, however, they show high scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show high scores on altruism. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky drivers.
The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure M.2). However, respondents in the safe group feel to be supported and encouraged by their friends less than respondents in the other two groups (Figure M.3). Finally, the three groups do not differ in terms of parents' reaction to their driving behaviour (Figure M.4).

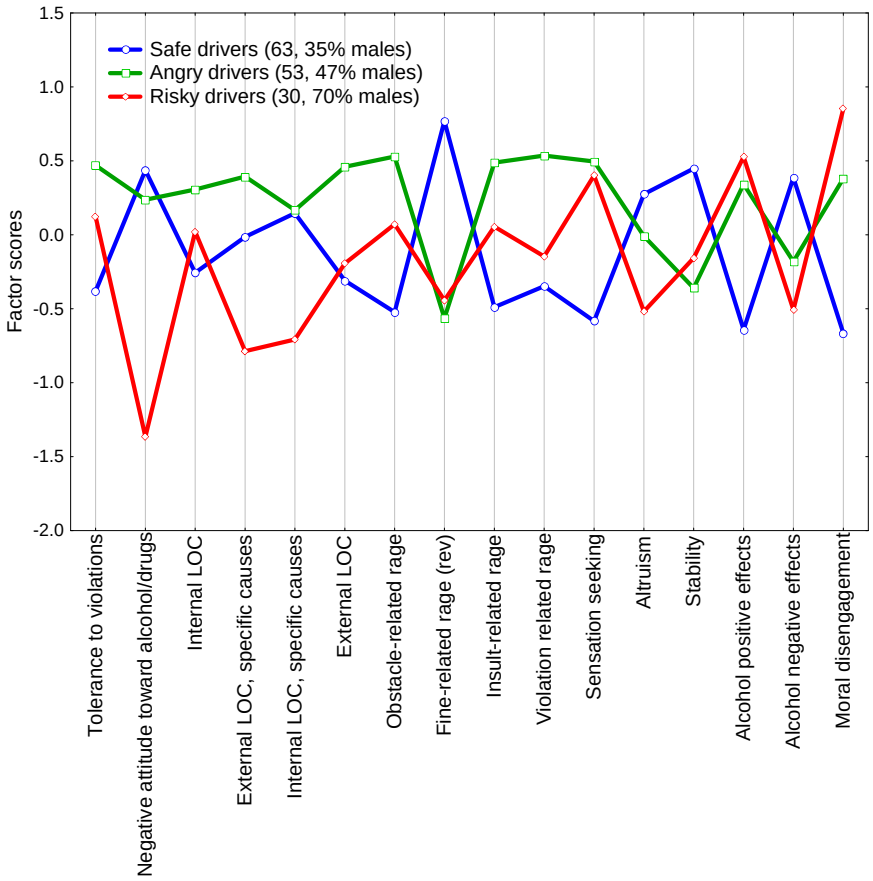


Figure M.1. Average scores for each group on the subscales of the questionnaire.

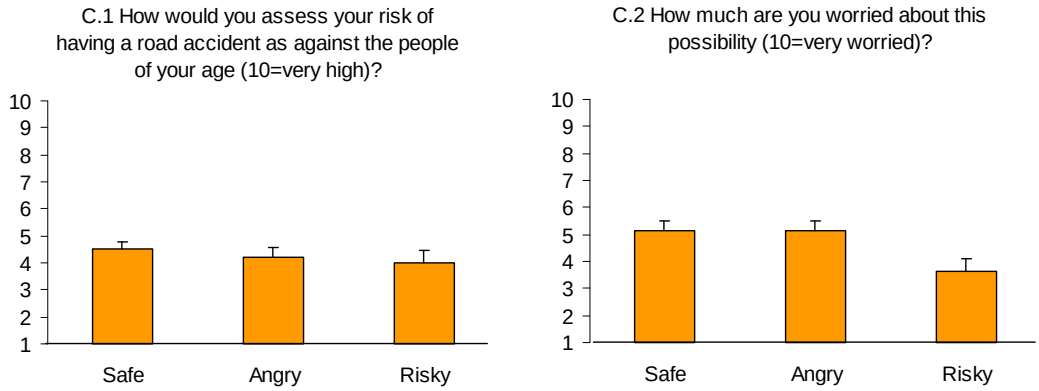


Figure M.2. Average scores for each group on items concerning risk perception (* p<.001).

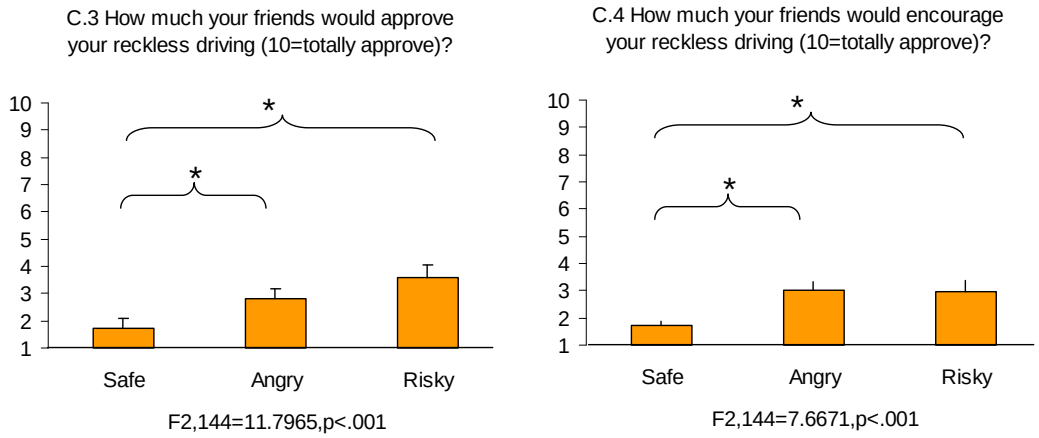


Figure M.3. Average scores for each group on items concerning friends' attitude (* p<.001).

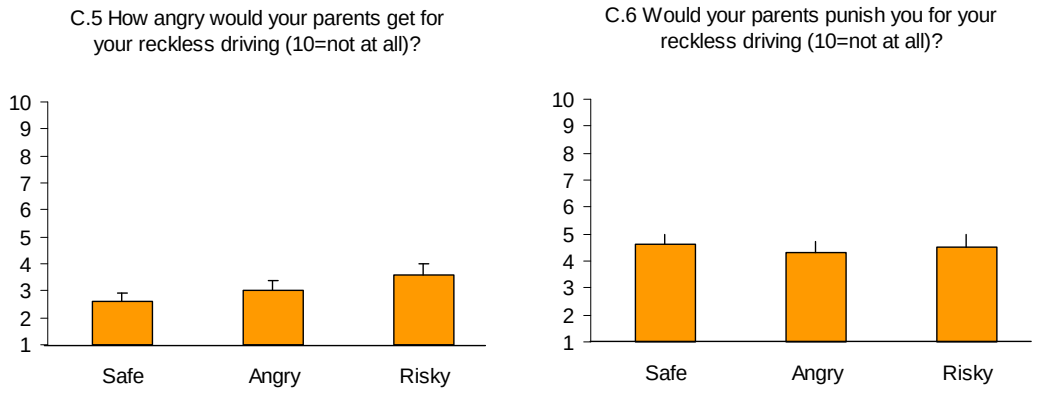


Figure M.4. Average scores for each group on items concerning parents' attitude (* p<.001).

Chapter 5

Results from Germany

5.1. CAR DRIVERS

5.1.1. Sample description

A total of 415 people answered the Section 1 of the questionnaire. Males were 278 (67% of the total sample) and females were 137 (33% of the total sample). Their mean age was 19.04 years (standard deviation 3.35), ranging between 17 and 26 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

5.1.2. Driving habits

Tables N.1 to N.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Relatively few respondents from Germany own a car (about 33% of the respondents), with female drivers being more probable to own a car. They however refer to use a car on a regular basis (most of them drive everyday, with a prevalence of male drivers), and for relatively long trips (especially for male drivers). Both male and female drivers refer to drive after midnight on relatively few occasions (about 61% of them drive after midnight less than 2 times a week). Male drivers also refer to have received a traffic fine less often than female drivers, mostly for speeding.
Most of the respondents refer not to drive after having drunk alcohol (and it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol).
Summarizing, German young drivers seem to be characterized by being frequent drivers, not very experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	84 (30.22%)	194 (69.78%)*
Females	56 (40.88%)*	81 (59.12%)
Total	140 (33.73%)	275 (66.27%)

Table N.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	4	19	35	24	107	3
	(2.08%)	(9.9%)	(18.23%)	(12.5%)	(55.73%)*	(1.56%)
Females	1	21	24	11	22	2
	(1.23%)	(25.93%)*	(29.63%)*	(13.58%)	(27.16%)	(2.47%)
Total	5	40	59	35	129	5
	(1.83%)	(14.65%)	(21.61%)	(12.82%)	(47.25%)	(1.83%)

Table N.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	9	25	32	43	83
	(4.69%)	(13.02%)	(16.67%)	(22.4%)	(43.23%)*
Females	9	28	18	15	11
	(11.11%)	(34.57%)*	(22.22%)	(18.52%)	(13.58%)
Total	18	53	50	58	94
	(6.59%)	(19.41%)	(18.32%)	(21.25%)	(34.43%)

Table N.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	51	87	33	21
	(26.56%)	(45.31%)	(17.19%)*	(10.94%)
Females	43	30	5	3
	(53.09%)*	(37.04%)	(6.17%)	(3.7%)
Total	94	117	38	24
	(34.43%)	(42.86%)	(13.92%)	(8.79%)

Table N.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	40	68	33	51
	(20.83%)	(35.42%)	(17.19%)	(26.56%)
Females	33	25	9	14
	(40.74%)*	(30.86%)	(11.11%)	(17.28%)
Total	73	93	42	65
	(26.74%)	(34.07%)	(15.38%)	(23.81%)

Table N.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	Yes	No
Males	113 (58.85%)	79 (41.15%)*
Females	67 (82.72%)*	14 (17.28%)
Total	180 (65.93%)	93 (34.07%)

Table N.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	32 (11.51%)*	4 (2.92%)	36 (8.67%)
Running a red light	6 (2.16%)	0	6 (1.45%)
Running a stop sign	3 (1.08%)	0	3 (.72%)
Speeding	56 (20.14%)*	7 (5.11%)	63 (15.18%)
Drunk driving	4 (1.44%)	0	4 (.96%)
Lack of seatbelts use	5 (1.8%)	0	5 (1.2%)

Table N.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	127 (66.15%)	40 (20.83%)*	9 (4.69%)	6 (3.13%)	1 (.52%)	9 (4.69%)
Females	76 (93.83%)*	2 (2.47%)	0	1 (1.23%)	1 (1.23%)	1 (1.23%)
Total	203 (74.36%)	42 (15.38%)	9 (3.3%)	7 (2.56%)	2 (.73%)	10 (3.66%)

Table N.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	7 (2.52%)	0	7 (1.69%)
You could hardly keep your head on straight	7 (2.52%)	0	7 (1.69%)
You had muscle cramps	3 (1.08%)	0	3 (.72%)
You could hardly keep your eyes open	11 (3.96%)	0	11 (2.65%)
You got stomach cramps	4 (1.44%)	0	4 (.96%)
You could not focus on the road	11 (3.97%)	0	11 (2.66%)
Someone who was with you made you notice it	8 (2.88%)	1 (.73%)	9 (2.17%)

Table N.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences ($p<.001$) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. OVERCONFIDENT DRIVERS. People in the second group are characterized by being rather overconfident on their abilities as drivers. Interestingly, compared to people in the other two groups they are characterized by an internal Locus of Control rather than external, meaning that they consider accidents as essentially due to drivers' errors and mistakes. However, they are tolerant toward violations of the traffic rules, significantly less anxious than the other groups, but they show higher levels of rage, both violation- and obstacle-related. Interestingly enough, differently from risky drivers, people in this group do not consider violations of the traffic code as useful for keeping traffic flowing. Similarly to the risky drivers, however, they show high scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and overconfident drivers.

Figure N.1 shows the profiles of the three groups of drivers on the subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident. However, respondents in the safe drivers group are slightly more worried about this possibility (Figure N.2). Also, respondents in the three groups do not rate differently how much their parents would be angry for their reckless driving behaviour (Figure N.4). Finally, respondents in the three groups differ in terms of how supportive and encouraging their friends are perceived, with the risky drivers rating their friends as more supportive and encouraging than respondents in the safe driver group (Figure N.3).

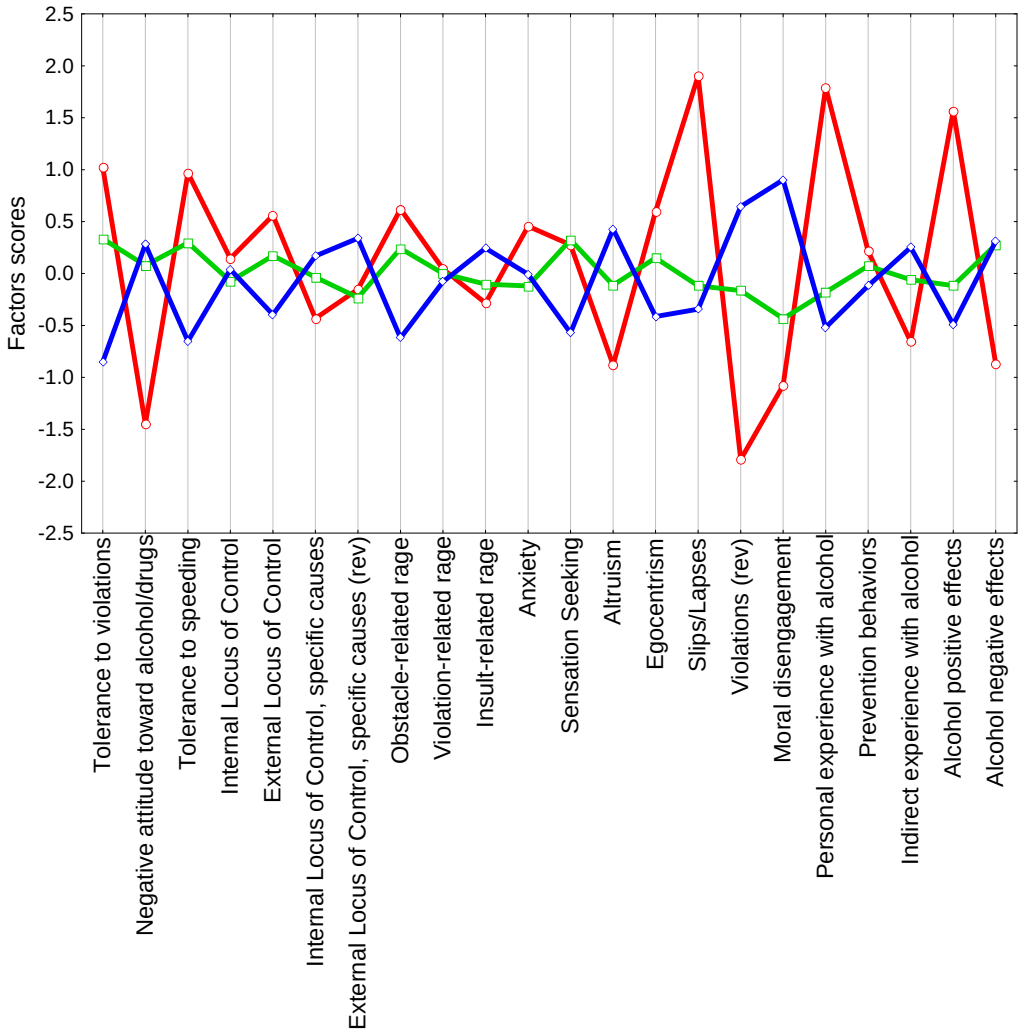


Figure N.1. Average scores for each group on selected subscales of the questionnaire.

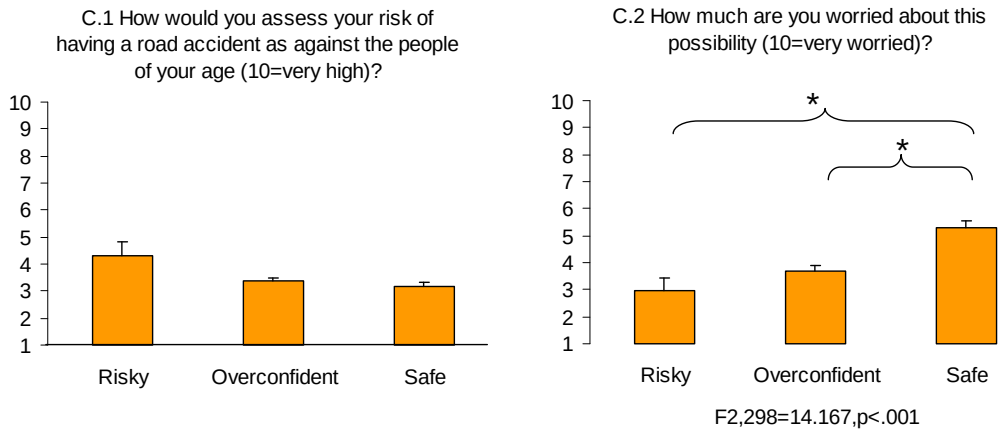


Figure N.2. Average scores for each group on items concerning risk perception (* p<.001).

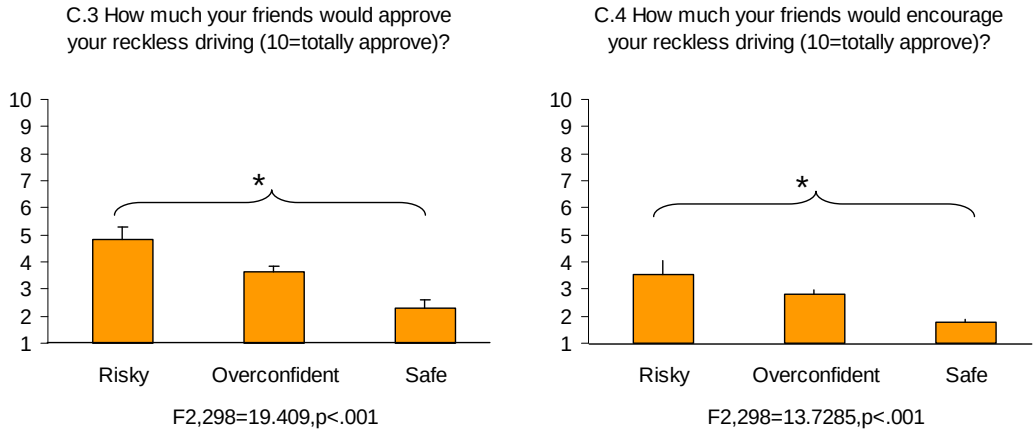


Figure N.3. Average scores for each group on items concerning friends' attitude (* p<.001).

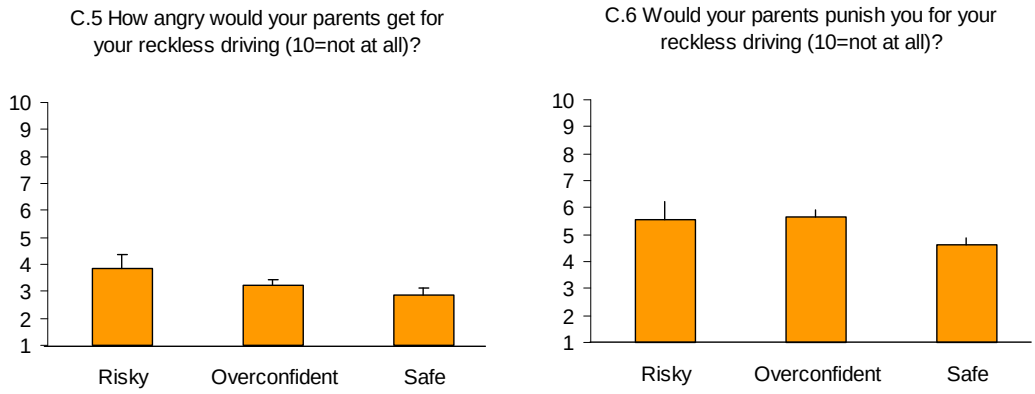


Figure N.4. Average scores for each group on items concerning parents' attitude (* p<.001).

5.2. NON DRIVERS

5.2.1. Sample description

A total of 260 people answered the Section 3 of the questionnaire. Males were 146 (56.5% of the total sample) and females were 113 (43.5% of the total sample). Their mean age was 17.1 years (standard deviation 1.07), ranging between 16 and 23 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. ANGRY DRIVERS. People in this group are especially characterized by having higher scores on the rage-related subscales. Interestingly, compared to people in the safe driving group they are characterized by an internal Locus of Control rather than internal, meaning that they consider accidents as essentially due to external specific causes and factors. Similarly to the risky drivers, however, they show high scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a (not significant) prevalence of males can be observed among the risky drivers.
The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure O.2). However, respondents in the risky group feel to be supported and encouraged by their friends more than respondents in the other two groups (Figure O.3). On the other hand, respondents in the safe drivers group feel that their parents would be angry for their reckless behaviour more than the other respondents (Figure O.4).

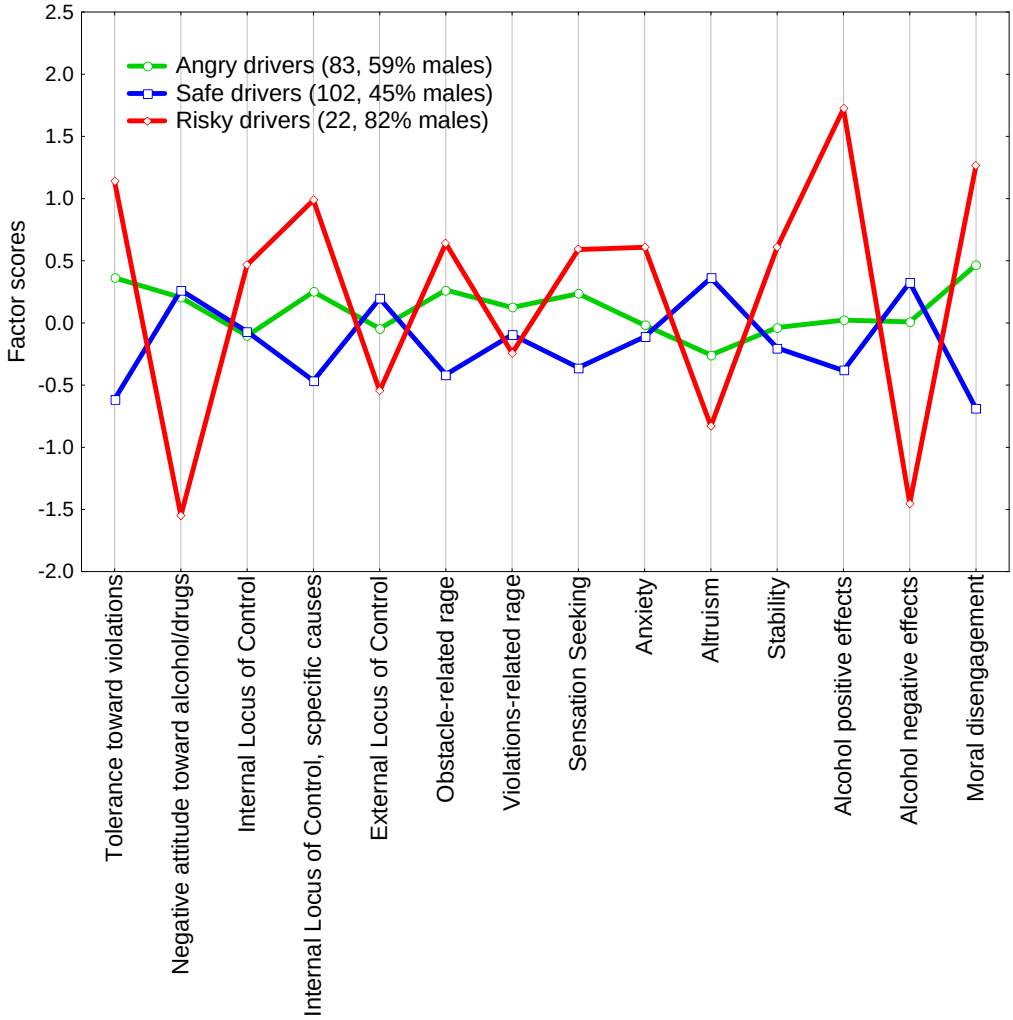


Figure O.1. Average scores for each group on the subscales of the questionnaire.

Figure O.2. Average scores for each group on items concerning risk perception (* p<.001).

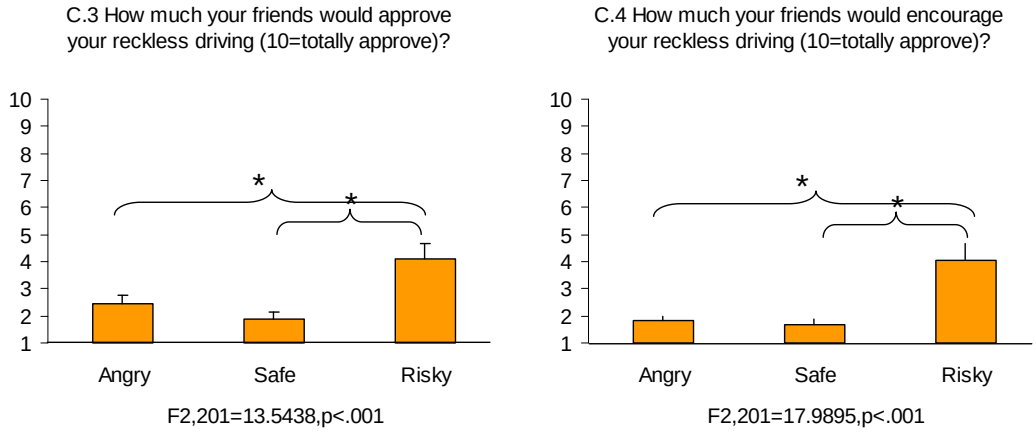


Figure O.3. Average scores for each group on items concerning friends' attitude (* p<.001).

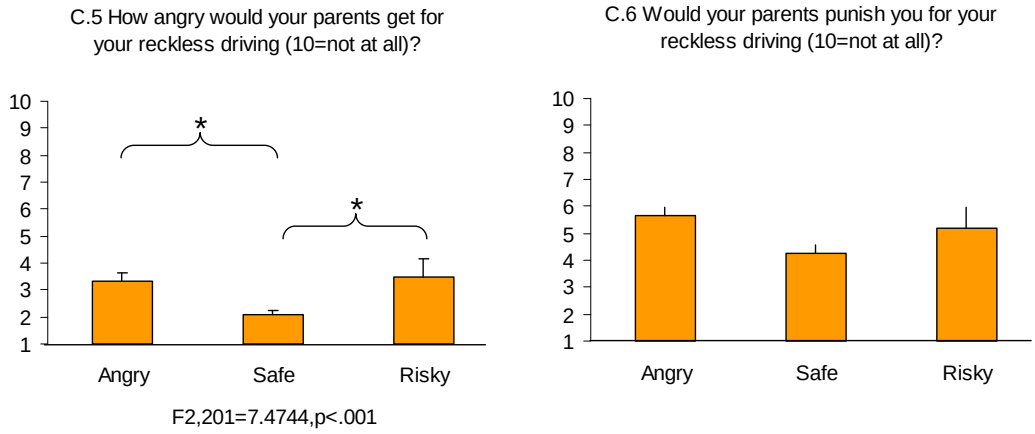


Figure O.4. Average scores for each group on items concerning parents' attitude (* p<.001).

Chapter 6

Results from Ireland

6.1. CAR DRIVERS

6.1.1. Sample description

A total of 237 people answered the Section 1 of the questionnaire. Males were 132 (55.7% of the total sample) and females were 105 (44.3% of the total sample). Their mean age was 21.48 years (standard error .79), ranging between 18 and 39 years. Only 19 respondents were older than 24 years old, though. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

6.1.2. Driving habits

Tables P.1 to P.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. About half of the respondents both males and females, owns a car, and refer to use a car on a very regular basis (most of them drive everyday, without a prevalence of one gender), for relatively short trips. However, both male and female drivers refer to drive after midnight quite rarely (only about 35% of them drive after midnight more than 2 times a week), and about 38% of them do not drive after midnight at all. Quite a few drivers refer to have received a traffic fine, independently of the gender, mostly for speeding.
Driving after having had a drink is a very rare behaviour, about 84% the sample refers that they never drive after drinking.
Summarizing, Irish young drivers seem to be characterized by being frequent drivers, not very experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol, as almost all of them do not drive after having had alcoholic drinks. Interestingly, the very same pattern of driving habits holds for both male and female drivers.

H-4 Do you own a car?		
	Yes	No
Males	61	71
	(46.21%)	(53.79%)
Females	48	57
	(45.71%)	(54.29%)
Total	109	128
	(45.99%)	(54.01%)

Table P.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	1	6	6	9	47	2
	(1.41%)	(8.45%)	(8.45%)	(12.68%)	(66.2%)	(2.82%)
Females	1	5	6	6	35	4
	(1.75%)	(8.77%)	(10.53%)	(10.53%)	(61.4%)	(7.02%)
Total	2	11	12	15	82	6
	(1.56%)	(8.59%)	(9.38%)	(11.72%)	(64.06%)	(4.69%)

Table P.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	6	13	15	14	23
	(8.45%)	(18.31%)	(21.13%)	(19.72%)	(32.39%)
Females	3	14	9	11	20
	(5.26%)	(24.56%)	(15.79%)	(19.3%)	(35.09%)
Total	9	27	24	25	43
	(7.03%)	(21.09%)	(18.75%)	(19.53%)	(33.59%)

Table P.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	23	23	10	15
	(32.39%)	(32.39%)	(14.08%)	(21.13%)
Females	17	22	6	12
	(29.82%)	(38.6%)	(10.53%)	(21.05%)
Total	40	45	16	27
	(31.25%)	(35.16%)	(12.5%)	(21.09%)

Table P.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	25	21	7	18
	(35.21%)	(29.58%)	(9.86%)	(25.35%)
Females	24	13	11	9
	(42.11%)	(22.81%)	(19.3%)	(15.79%)
Total	49	34	18	27
	(38.28%)	(26.56%)	(14.06%)	(21.09%)

Table P.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	No	Yes
Males	59	12
	(83.1%)	(16.9%)
Females	44	13
	(77.19%)	(22.81%)
Total	103	25
	(80.47%)	(19.53%)

Table P.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	2	4	6
	(1.52%)	(3.81%)	(2.53%)
Running a red light	2	1	3
	(1.52%)	(.95%)	(1.27%)
Running a stop sign	1	1	2
	(.76%)	(.95%)	(.84%)
Speeding	9	8	17
	(6.82%)	(7.62%)	(7.17%)
Drunk driving	1		1
	(.76%)	(.%)	(.42%)
Lack of seatbels use	2		2
	(1.52%)	(.%)	(.84%)

Table P.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	57	8	1	2	2	1
	(80.28%)	(11.27%)	(1.41%)	(2.82%)	(2.82%)	(1.41%)
Females	50	4	1	2		
	(87.72%)	(7.02%)	(1.75%)	(3.51%)	(.%)	(.%)
Total	107	12	2	4	2	1
	(83.59%)	(9.38%)	(1.56%)	(3.13%)	(1.56%)	(.78%)

Table P.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	2 (1.52%)	0	2 (.84%)
You could hardly keep your head on straight	2 (1.52%)	0	2 (.84%)
You had muscle cramps	0	1 (.95%)	1 (.42%)
You could hardly keep your eyes open	2 (1.52%)	0	2 (.84%)
You got stomach cramps	0	0	0
You could not focus on the road	5 (3.79%)	1 (.95%)	6 (2.53%)
Someone who was with you made you notice it	0	0	0

Table P.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences ($p<.001$) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and impulsivity, and have more direct experiences of driving under the effect of alcohol.
2. ANGRY DRIVERS. People in this group are characterized by having rather high scores on the rage-related subscales, both violations and obstacles-related. They are also high on the anxiety subscale, though not as high as the risky drivers. However, they are tolerant toward violations of the traffic rules. Interestingly enough, similarly to risky drivers, people in this group do consider violations of the traffic code as useful for keeping traffic flowing. Similarly to the safe drivers, however, they show low scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on internal Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and angry drivers.
Figure P.1 shows the profiles of the three groups of drivers on selected subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident (Figure P.2). However, respondents in the risky driver group believe their parents would not punish them for their reckless driving behaviour compared to the other two groups (Figure P.4). Finally, respondents in the three groups differ in terms of how supportive and encouraging their friends are perceived, with the risky drivers rating their friends as more supportive and encouraging (Figure P.3).

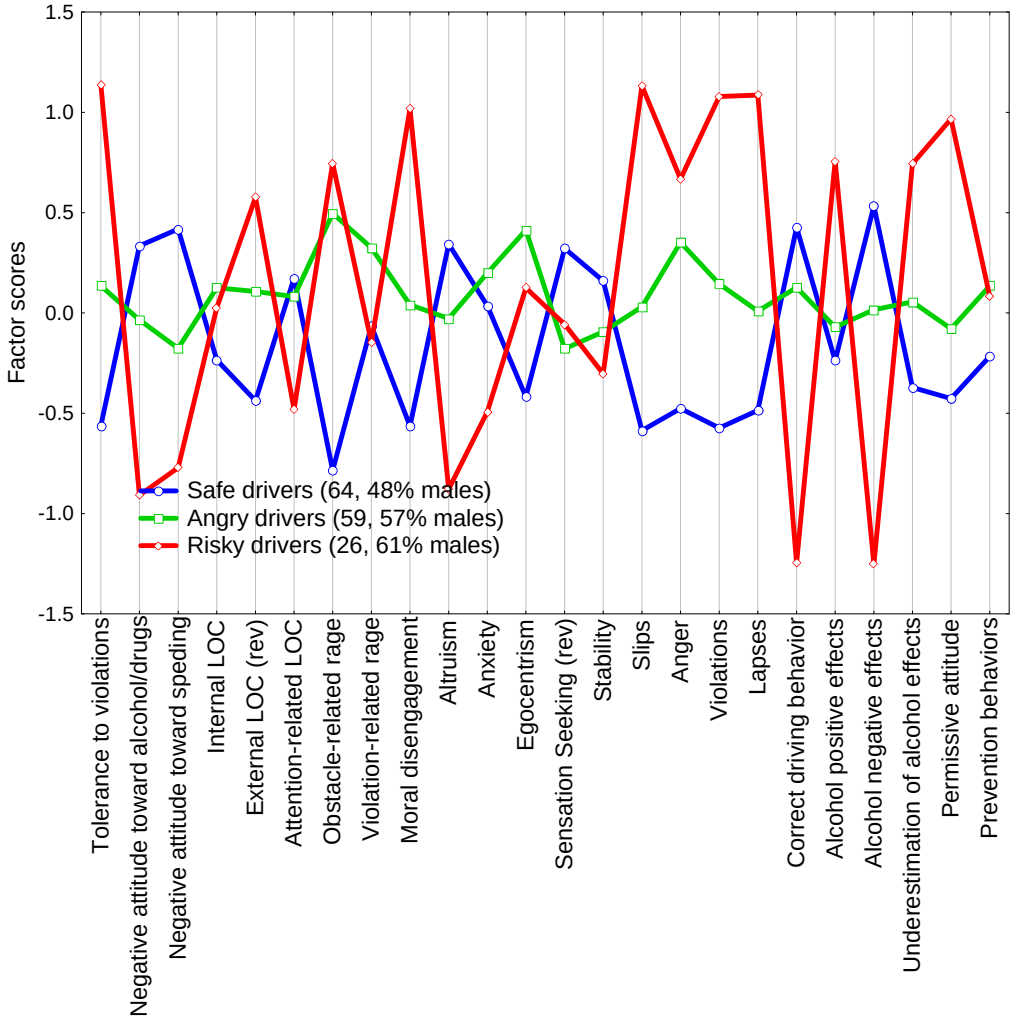


Figure P.1. Average scores for each group on the subscales of the questionnaire.

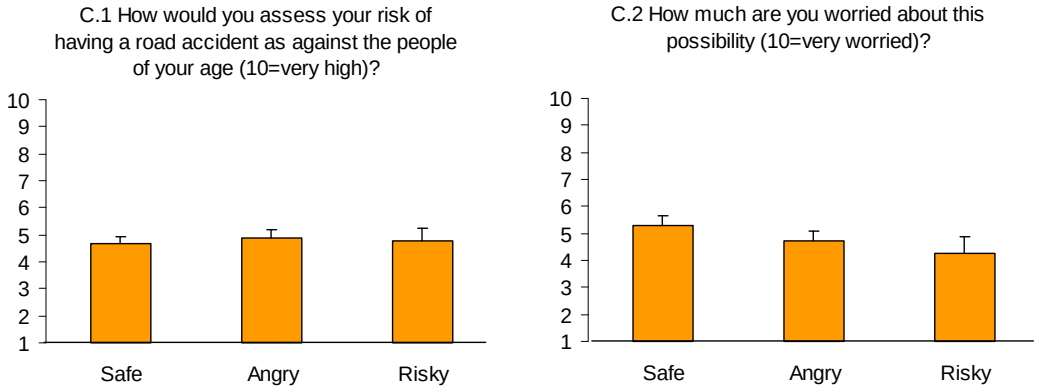


Figure P.2. Average scores for each group on items concerning risk perception.

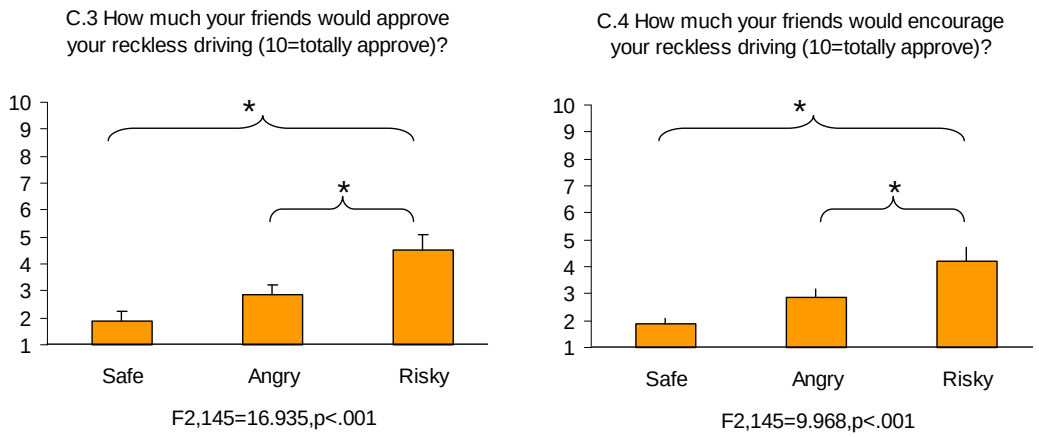


Figure P.3. Average scores for each group on items concerning friends' attitude.

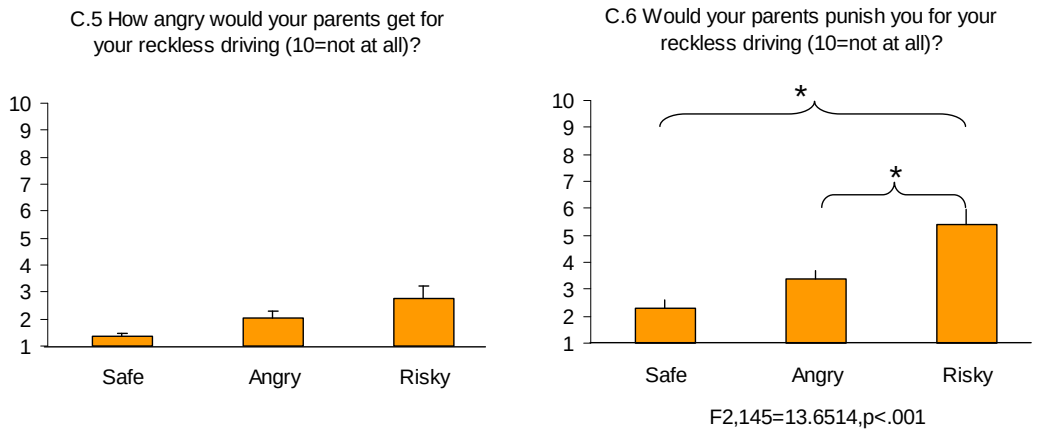


Figure P.4. Average scores for each group on items concerning parents' attitude.

6.2. NON DRIVERS

6.2.1. Sample description

A total of 350 people answered the Section 3 of the questionnaire. Males were 211 (60.3% of the total sample) and females were 139 (39.7% of the total sample). Their mean age was 19.0 years (standard deviation 1.63), ranging between 17 and 21 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. ANGRY DRIVERS. People in the second group are especially characterized by having higher scores on the rage-related subscales being. Interestingly, compared to people in the other two groups they are characterized by an external Locus of Control rather than internal, meaning that they consider accidents as essentially due to external causes and factors. Similarly to the risky drivers, however, they show high scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky drivers.
Figure Q.1 shows the profiles of the three groups of drivers on subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident, but risky drivers are less worried about this possibility than respondents in the other two groups (Figure Q.2). Also, respondents in the risky drivers group feel to be supported and encouraged by their friends more than respondents in the other two groups (Figure Q.3). The same respondents consider their parents would not be angry at their driving behaviour more than the other respondents (Figure Q.4).

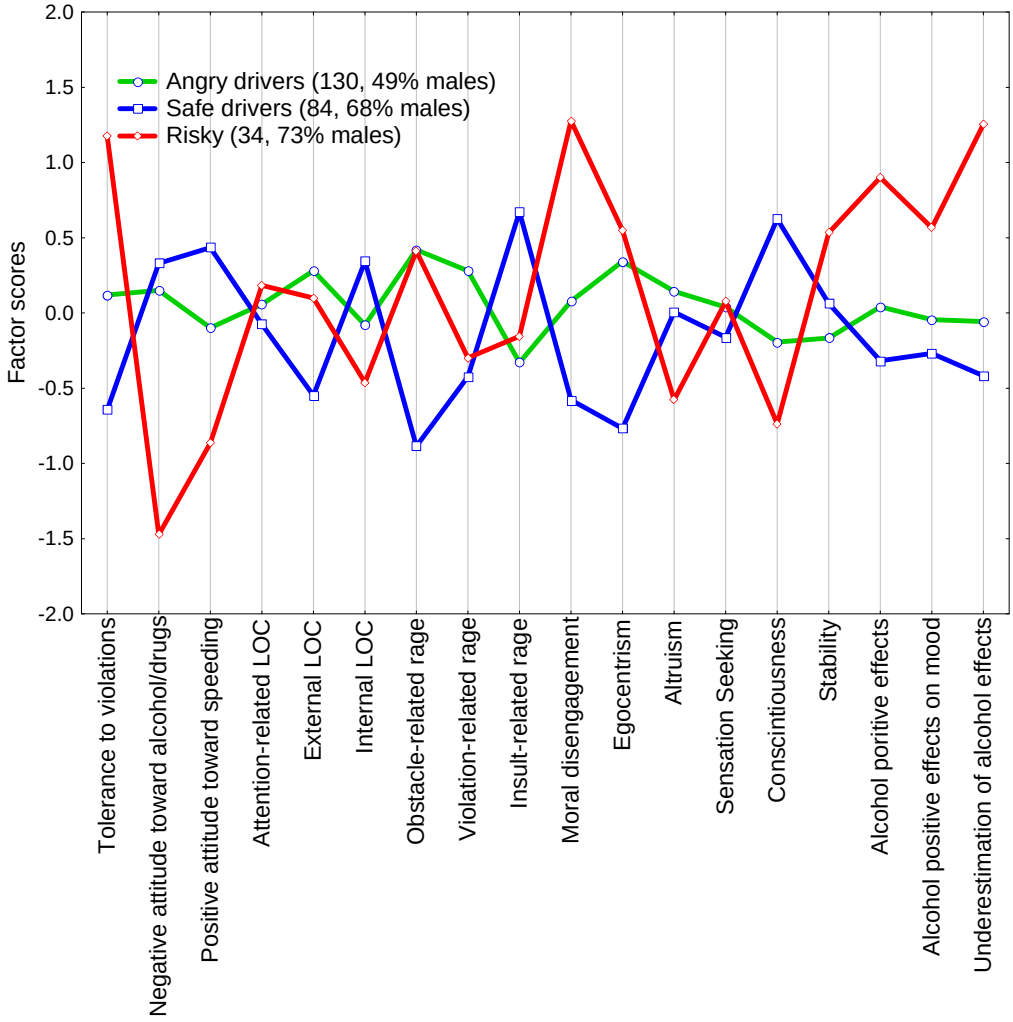


Figure Q.1. Average scores for each group on the subscales of the questionnaire.

Figure Q.2. Average scores for each group on items concerning risk perception (* p<.001).

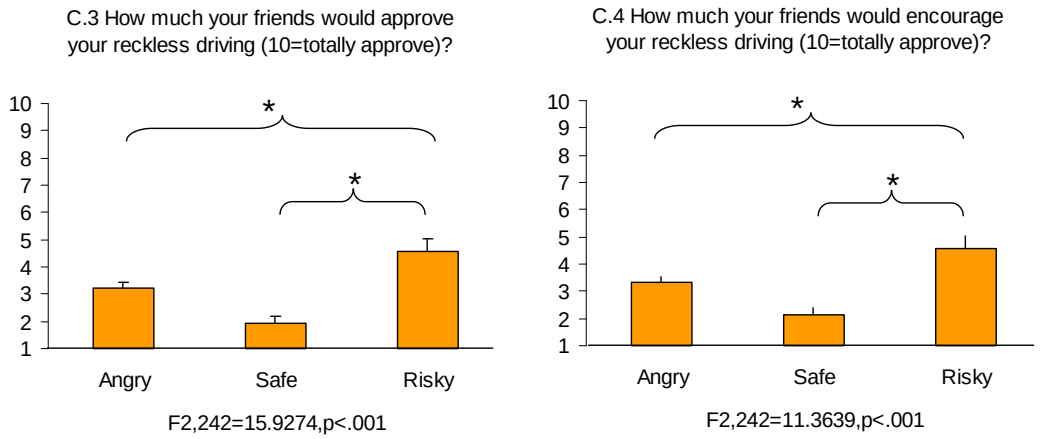


Figure Q.3. Average scores for each group on items concerning friends' attitude (* p<.001).

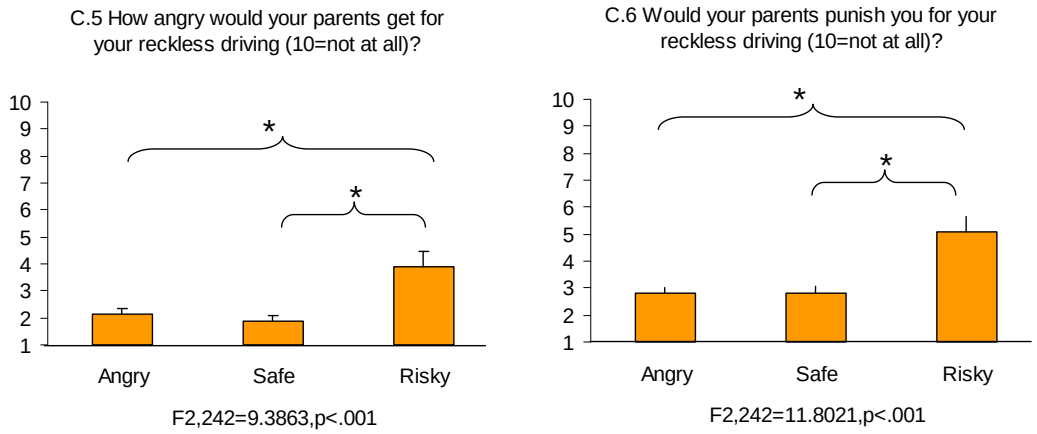


Figure Q.4. Average scores for each group on items concerning parents' attitude (* p<.001).

Chapter 7

Results from Italy

7.1. CAR DRIVERS

7.1.1. Sample description

A total of 545 people answered the Section 1 of the questionnaire. Males were 312 (57.2% of the total sample) and females were 233 (42.8% of the total sample). Their mean age was 19.7 years (standard deviation .45), ranging between 18 and 23 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

7.1.2. Driving habits

Tables R.1 to R.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Few Italian young drivers own a car, though female drivers are more likely to own a car than male drivers. They however refer to use a car on a very regular basis (most of them drive everyday, again with a prevalence of male drivers compared to female drivers), and for relatively long trips. Interestingly, male drivers refer to drive after midnight relatively often (about 62% of them drive after midnight more than 2 times a week), where female drivers are far less likely to drive after midnight (about 51% them do not drive after midnight at all). Male drivers also refer to have received a traffic fine more often than female drivers, mostly for having parked where it was forbidden, and for speeding. Interestingly, about 40% the sample refers (173 respondents out of 444) state that they have driven at least once after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol). However, less than half of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially doziness and difficulties on keeping focused on the road. This might suggest that a consistent number of young drivers are still unaware of the negative effects of driving under the effects of alcohol. Summarizing, Italian young drivers seem to be characterized by being frequent drivers, quite expert indeed, also experienced of driving during night hours (especially male drivers), and not very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	41 (13.18%)	270 (86.82%)*
Females	58 (24.89%)*	175 (75.11%)
Total	99 (18.2%)	445 (81.8%)

Table R.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	2	15	38	40	171	3
	(.74%)	(5.58%)	(14.13%)	(14.87%)	(63.57%)*	(1.12%)
Females	0	17	37	27	89	5
		(9.71%)	(21.14%)	(15.43%)	(50.86%)	(2.86%)
Total	2	32	75	67	260	8
	(.45%)	(7.21%)	(16.89%)	(15.09%)	(58.56%)	(1.8%)

Table R.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	9	18	63	64	115
	(3.35%)	(6.69%)	(23.42%)	(23.79%)	(42.75%)*
Females	15	47	49	39	25
	(8.57%)	(26.86%)*	(28.%)	(22.29%)	(14.29%)
Total	24	65	112	103	140
	(5.41%)	(14.64%)	(25.23%)	(23.2%)	(31.53%)

Table R.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	74	92	55	48
	(27.51%)	(34.2%)	(20.45%)	(17.84%)*
Females	94	46	22	13
	(53.71%)*	(26.29%)	(12.57%)	(7.43%)
Total	168	138	77	61
	(37.84%)	(31.08%)	(17.34%)	(13.74%)

Table R.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	52	48	57	112
	(19.33%)	(17.84%)	(21.19%)	(41.64%)*
Females	89	30	26	30
	(50.86%)*	(17.14%)	(14.86%)	(17.14%)
Total	141	78	83	142
	(31.76%)	(17.57%)	(18.69%)	(31.98%)

Table R.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	Yes	No
Males	214 (79.55%)	55 (20.45%)*
Females	162 (92.57%)*	13 (7.43%)
Total	376 (84.68%)	68 (15.32%)

Table R.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	32 (10.29%)*	7 (3.%)	39 (7.17%)
Running a red light	3 (.96%)	0	3 (.55%)
Running a stop sign	3 (.96%)	1 (.43%)	4 (.74%)
Speeding	18 (5.79%)*	1 (.43%)	19 (3.49%)
Drunk driving	0	0	0
Lack of seatbelts use	7 (2.25%)	0 *	7 (1.29%)

Table R.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	135 (50.19%)	51 (18.96%)	28 (10.41%)	33 (12.27%)*	7 (2.6%)	15 (5.58%)
Females	136 (77.71%)*	21 (12.%)	11 (6.29%)	5 (2.86%)	2 (1.14%)	0
Total	271 (61.04%)	72 (16.22%)	39 (8.78%)	38 (8.56%)	9 (2.03%)	15 (3.38%)

Table R.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	7 (2.25%)	2 (.86%)	9 (1.65%)
You could hardly keep your head on straight	2 (.64%)	2 (.86%)	4 (.74%)
You had muscle cramps	4 (1.29%)	0	4 (.74%)
You could hardly keep your eyes open	16 (5.14%)	5 (2.15%)	21 (3.86%)
You got stomach cramps	8 (2.57%)	0	8 (1.47%)
You could not focus on the road	19 (6.11%)	9 (3.86%)	28 (5.15%)
Someone who was with you made you notice it	10 (3.22%)	1 (.43%)	11 (2.02%)

Table R.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and impulsivity, and have more direct experiences of driving under the effect of alcohol.
2. OVERCONFIDENT DRIVERS. People in this group are characterized by being rather overconfident on their abilities as drivers. However, they are more tolerant toward violations of the traffic rules compared to safe drivers, but they show higher levels of rage, both violation- and obstacle-related than safe drivers. Similarly to the risky drivers, however, they show high scores on moral disengagement. They also seem to be aware of the negative effects of alcohol upon driving, though are less involved in preventing behaviors.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on internal Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and overconfident drivers.
Figure R.1 shows the profiles of the three groups of drivers on the subscales. Risky drivers seem to be aware that their behaviour increases the risk of being involved in car accidents, as they rate their risk as higher compared to respondents in the other two groups (Figure R.2), though they are not more worried than the other respondents. Also, respondents in the risky drivers group consider their friends as supportive and even encouraging their

reckless behaviour more than respondents in the other two groups (Figure R.3). Similarly, the same respondents consider that their parents would be less angry for their reckless driving behaviour (Figure R.4).

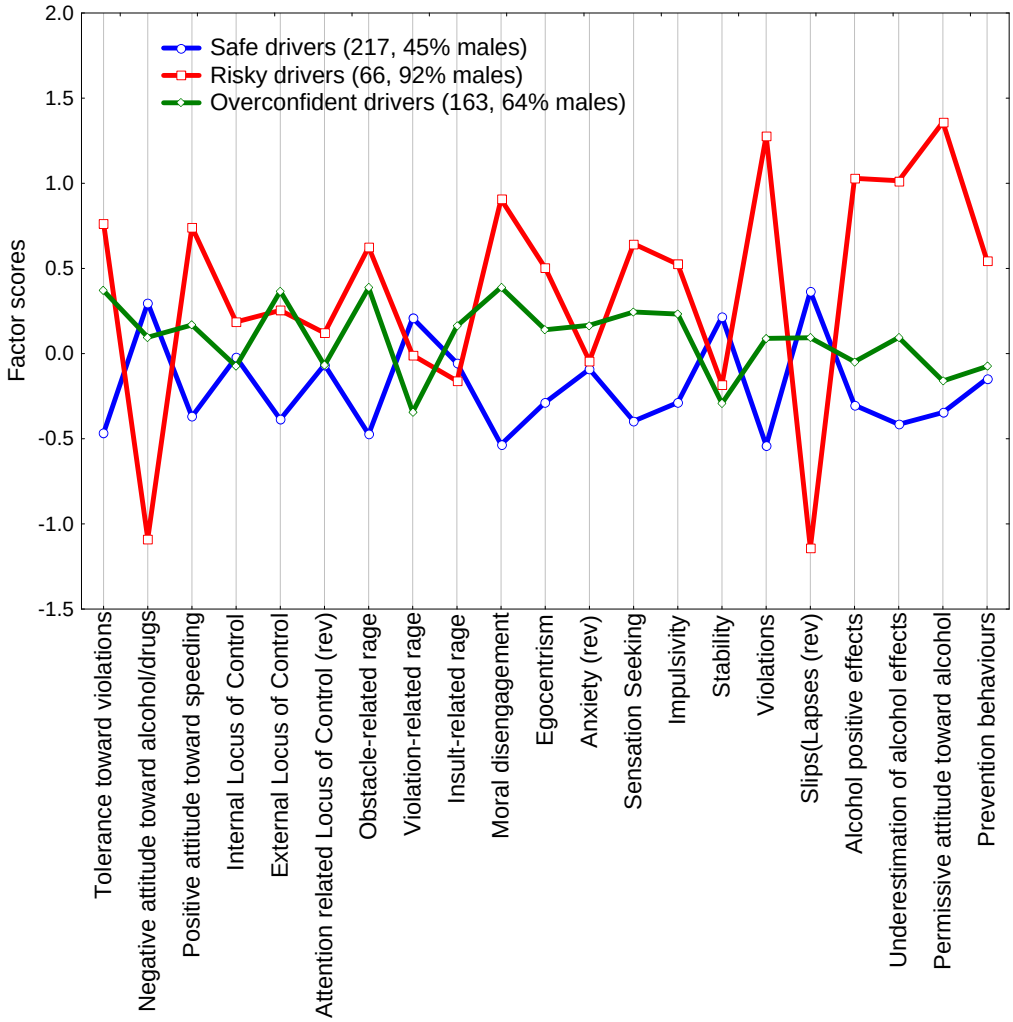


Figure R.1. Average scores for each group on the subscales of the questionnaire.

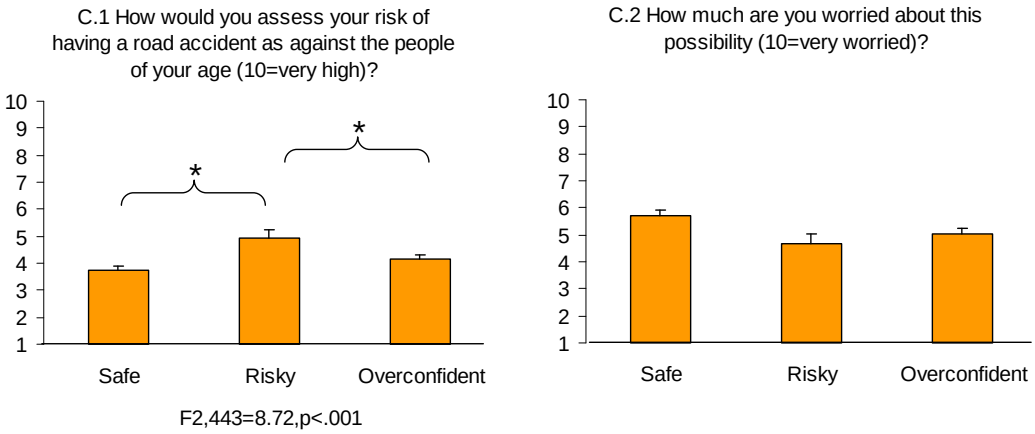


Figure R.2. Average scores for each group on items concerning risk perception (* p<.001).

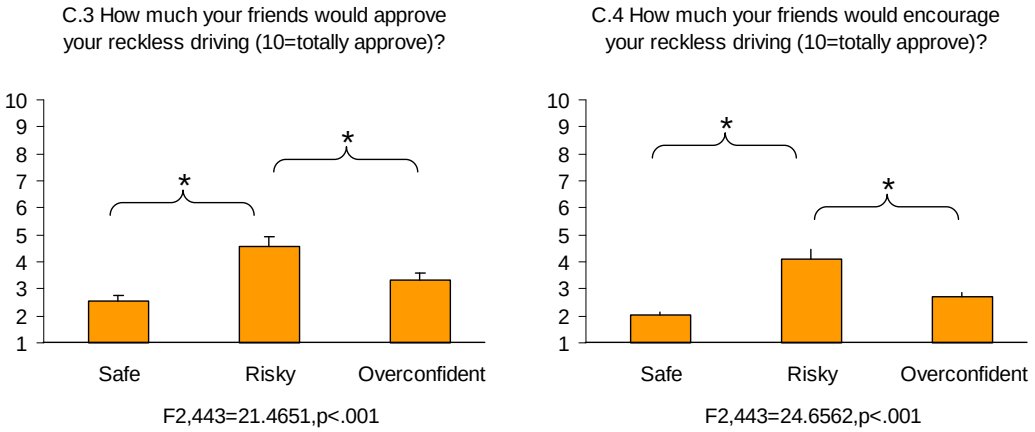


Figure R.3. Average scores for each group on items concerning friends' attitude (* p<.001).

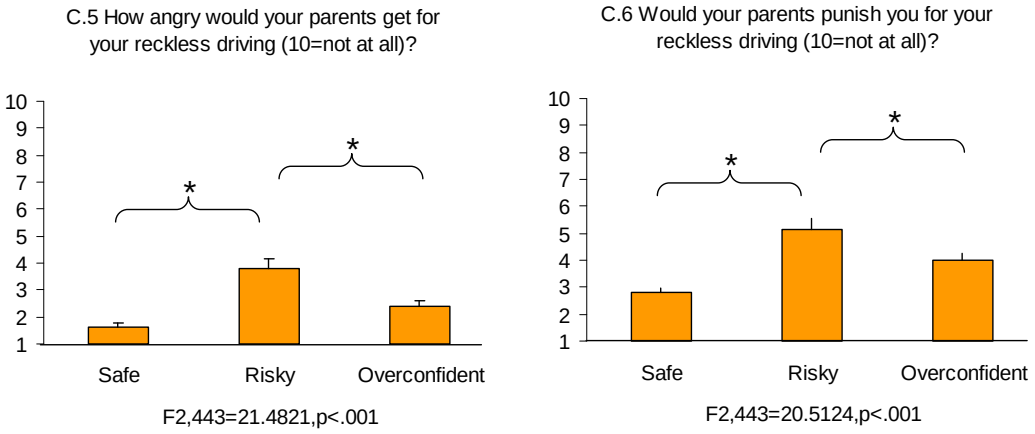


Figure R.4. Average scores for each group on items concerning parents' attitude (* p<.001).

7.2. SCOOTER RIDERS

7.2.1. Sample description

A total of 346 people answered the Section 2 of the questionnaire. Males were 239 (69.1% of the total sample) and females were 107 (30.9% of the total sample). Their mean age was 17.4 years (standard deviation 1.27), ranging between 15 and 20 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

7.2.2. Driving habits

Tables S.1 to S.13 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Most Italian scooter drivers refer not to use scooters or motorbikes very often (most of them drive a scooter 1-2 times a week, with a prevalence of male drivers compared to female drivers). Their use of scooters is characterized by being very variable in term of number of kilometres travelled, from only few to more than 100 kilometres. Interestingly, male drivers refer to drive after 11.00 pm relatively often (almost 50% of them drive after 11:00 pm more than 2 times a week), where female drivers are far less likely to drive during night hours (about 52% of them do not drive after 11:00 pm at all). Italian scooter drivers also are not normally used to go on as passengers, except after 11:00 pm, when this habit becomes more frequent. Male drivers also refer to have received a traffic fine more often than female drivers, mostly for driving without the helmet. Interestingly, scooter drivers refer not to have been involved in accidents both as drivers or passengers very often, and usually they refer to have had only material damages.

Less than half the sample (32% of the total sample) states that they have driven after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol). However, very few of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially difficulties on keeping focused on the road. This might suggest that a consistent number of young drivers are still unaware of the negative effects of driving under the effects of alcohol.

Summarizing, Italian young scooter drivers seem to be characterized by being infrequent drivers, somehow experienced of driving during night hours (especially male drivers), and not very aware of the dangers associated with driving under the effects of alcohol.

	G1-6 How many times a week do you use a scooter?					
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	13 (27.08%)	35 (72.92%)	46 (18.47%)	41 (16.47%)	73 (29.32%)	4 (1.61%)
Females	13 (36.11%)*	23 (63.89%)*	14 (15.38%)	10 (10.99%)	18 (19.78%)	0
Total	26 (30.95%)	58 (69.05%)	60 (17.65%)	51 (15.%)	91 (26.76%)	4 (1.18%)

Table S.1. Frequency distribution of respondents for item G1.6 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-7 How many kilometres do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	42	43	47	47	33
	(16.87%)	(17.27%)	(19.58%)	(19.58%)*	(13.75%)*
Females	23	26	19	8	2
	(25.27%)	(28.57%)*	(19.79%)	(8.33%)	(2.08%)
Total	65	69	66	55	35
	(19.12%)	(20.29%)	(19.64%)	(16.37%)	(10.42%)

Table S.2. Frequency distribution of respondents for item G1.7 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-8 In the last three months, how many times have you driven after 11:00 pm?				
	Never	1-2 times	2-4 times	More than 4 times
Males	64	49	26	73
	(26.67%)	(20.42%)	(11.4%)	(32.02%)*
Females	50	17	4	7
	(52.08%)*	(17.71%)	(6.56%)	(11.48%)
Total	114	66	30	80
	(33.93%)	(19.64%)	(10.38%)	(27.68%)

Table S.3. Frequency distribution of respondents for item G1.8 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-9 How often in a week do you go on a scooter sitting behind?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the week end
Males	64	65	38	24	17	4
	(28.07%)	(28.51%)	(45.78%)	(28.92%)	(20.48%)	(4.82%)
Females	31	19	19	5	2	2
	(50.82%)	(31.15%)	(67.86%)	(17.86%)	(7.14%)	(7.14%)
Total	95	84	57	29	19	6
	(32.87%)	(29.07%)	(51.35%)	(26.13%)	(17.12%)	(5.41%)

Table S.4. Frequency distribution of respondents for item G1.9 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-10 In the last three months how often you accepted a lift on a scooter after 11:00 pm?				
	Never	1-2 times a month	2-4 times in a month	More than 4 times in a month
Males	103	56	25	28
	(64.78%)	(35.22%)	(47.17%)*	(52.83%)*
Females	56	17	3	2
	(76.71%)*	(23.29%)	(60.%)	(40.%)
Total	159	73	28	30
	(68.53%)	(31.47%)	(48.28%)	(51.72%)

Table S.5. Frequency distribution of respondents for item G1.10 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-11 Have you ever been fined?		
	Yes	No
Males	33 (15.57%)*	179 (84.43%)
Females	3 (3.85%)	75 (96.15%)*
Total	36 (12.41%)	254 (87.59%)

Table S.6. Frequency distribution of respondents for item G1.11 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
Running a stop sign	1 (.42%)	0	1 (.29%)
Running a red light	3 (1.27%)	0	3 (.87%)
No parking	4 (1.69%)	1 (.93%)	5 (1.46%)
Passenger	10 (4.24%)	0	10 (2.92%)
Drunk driving	2 (.85%)	0	2 (.58%)
Driving without the helmet	13 (5.51%)	0	13 (3.79%)
Speeding	7 (2.97%)	0	7 (2.04%)

Table S.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-21 Have you ever been involved in an accident as a driver?			
	Yes	No	No but I was close to
Males	60 (30.46%)*	137 (69.54%)	15 (29.41%)
Females	11 (14.67%)	64 (85.33%)*	3 (27.27%)
Total	71 (26.1%)	201 (73.9%)	18 (29.03%)

Table S.8. Frequency distribution of respondents for item G1.21 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-23 What were the consequences?			
	Material damages	Personal injuries	Both
Males	36	7	20
	(70.59%)	(25.93%)	(74.07%)
Females	8	0	4
	(72.73%)		(100.%)
Total	44	7	24
	(70.97%)	(22.58%)	(77.42%)

Table S.9. Frequency distribution of respondents for item G1.23 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-24 Have you ever been involved in an accident as a passenger?			
	Yes	No	No but I was close to
Males	59	147	6
	(28.64%)	(71.36%)	(13.33%)
Females	18	55	5
	(24.66%)	(75.34%)	(31.25%)
Total	77	202	11
	(27.6%)	(72.4%)	(18.03%)

Table S.10. Frequency distribution of respondents for item G1.24 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-26 What were the consequences?			
	Material damages	Personal injuries	Both
Males	39	12	9
	(86.67%)	(57.14%)	(42.86%)
Females	11	0	7
	(68.75%)		(100.%)*
Total	50	12	16
	(81.97%)	(42.86%)	(57.14%)

Table S.11. Frequency distribution of respondents for item G1.26 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-27 Have you ever driven after drinking alcoholic drinks?		
	Yes	No
Males	83	129
	(39.15%)*	(60.85%)
Females	10	68
	(12.82%)	(87.18%)*
Total	93	197
	(32.07%)	(67.93%)

Table S.12. Frequency distribution of respondents for item G1.27 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the road	16 (6.78%)	0	16 (4.66%)
You could hardly keep your head on straight	9 (3.81%)	1 (.93%)	10 (2.92%)
You had muscle cramps	5 (2.12%)	0	5 (1.46%)
You could hardly keep your eyes open	14 (5.93%)*	1 (.93%)	15 (4.37%)
You got stomach cramps	14 (5.93%)	2 (1.87%)	16 (4.66%)
You could not focus on the road	21 (8.9%)*	1 (.93%)	22 (6.41%)
Someone who was with you made you notice it	7 (2.97%)	1 (.93%)	8 (2.33%)

Table S.13. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences ($p<.001$) between males and females.

Results of the cluster analyses showed three separate groups of respondents

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. SPEEDING DRIVERS. People in this group are characterized by having a positive attitude toward speeding. Interestingly, compared to people in the other two groups they are characterized by an external Locus of Control rather than internal, meaning that they do not consider accidents as essentially due to drivers' errors and mistakes. However, they are tolerant toward violations of the traffic rules, but they show higher levels of obstacle-related rage. Interestingly enough, similarly to the risky drivers, speeding drivers show high scores on moral disengagement. However, differently from the risky drivers, speeding drivers are not tolerant toward drunk driving as they are aware of alcohol negative effects upon driving.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a (not significant) prevalence of males can be observed among the risky and speeding drivers.
Figure S.1 shows the profiles of the three groups of drivers on selected subscales. The three groups of drivers are not different in terms of perceived probability of being involved in an accidents, though safe drivers are more worried about that than the other two groups

(Figure S.2). Also, respondents in the safe drivers group consider their friends as less supportive and even encouraging their reckless behaviour than respondents in the other two groups (Figure S.3). Similarly, the same respondents consider that their parents would be more angry for their reckless driving behaviour (Figure S.4).

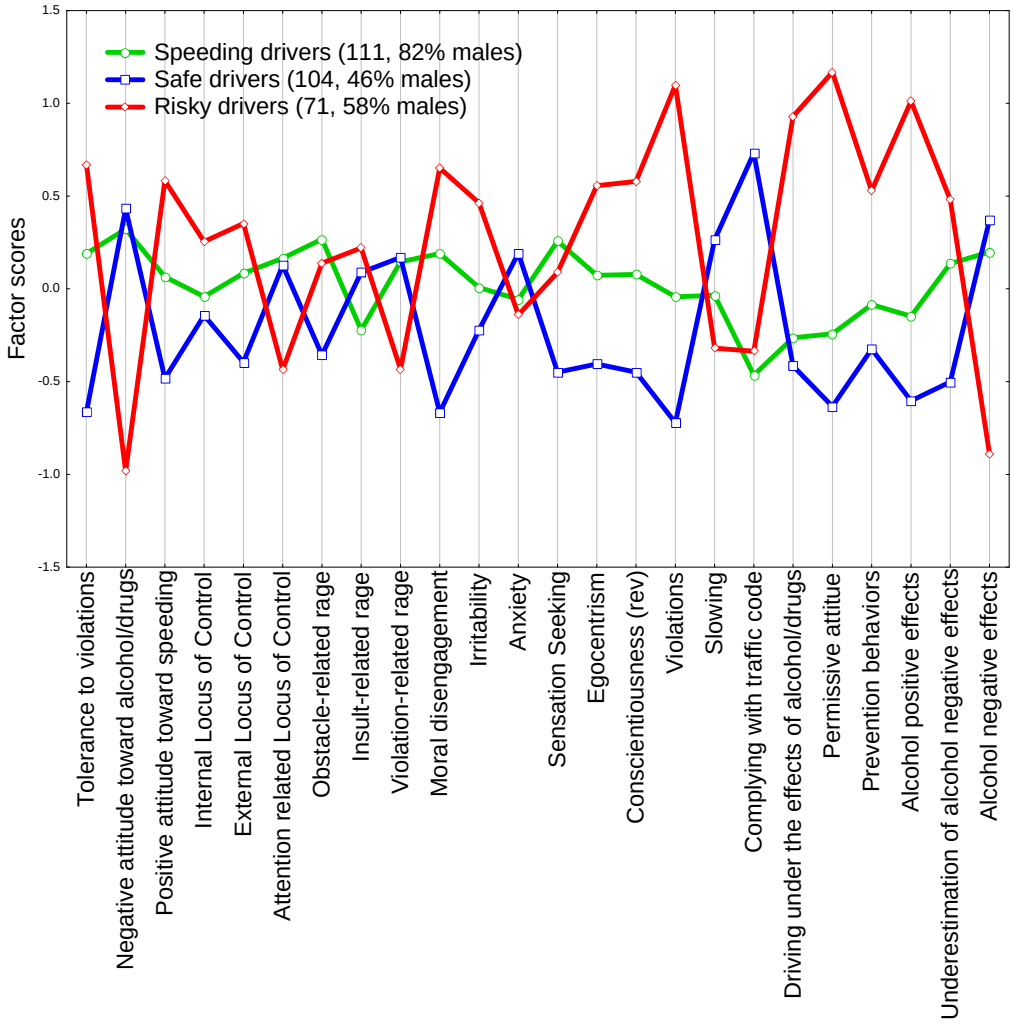


Figure S.1. Average scores for each group on the subscales of the questionnaire.

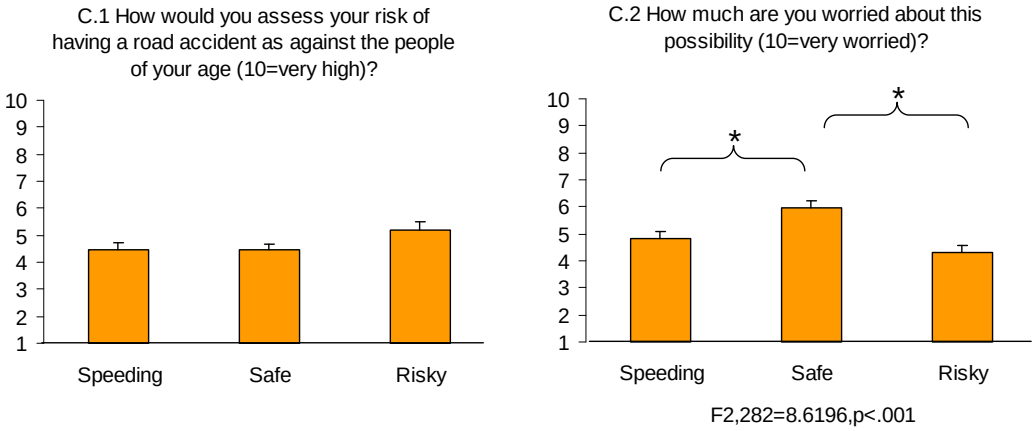


Figure S.2. Average scores for each group on items concerning risk perception.

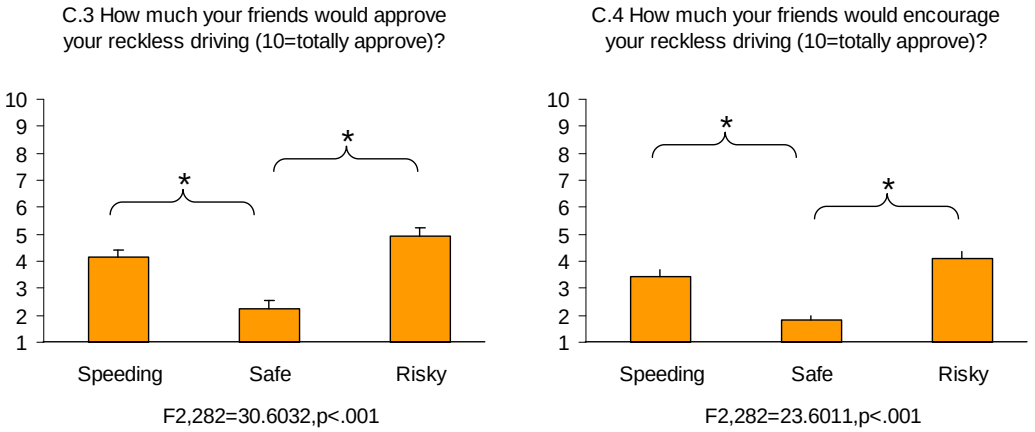


Figure S.3. Average scores for each group on items concerning friends' attitude.

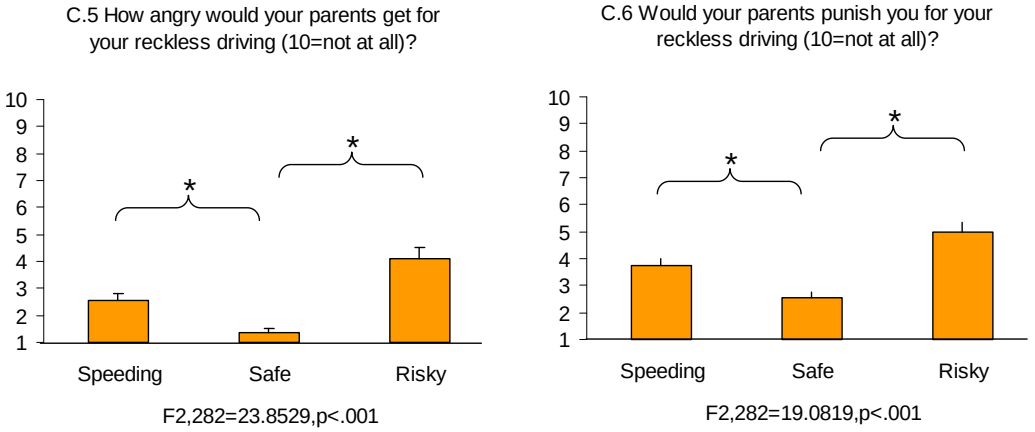


Figure S.4. Average scores for each group on items concerning parents' attitude.

7.3. NON DRIVERS

7.3.1. Sample description

A total of 352 people answered the Section 3 of the questionnaire. Males were 147 (41.76% of the total sample) and females were 205 (58.24% of the total sample). Their mean age was 17.2 years (standard deviation 1.55), ranging between 14 and 22 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. ANGRY DRIVERS. People in the second group are especially characterized by having higher scores on the rage-related subscales being. Interestingly, compared to people in the other two groups they are characterized by an external Locus of Control rather than internal, meaning that they consider accidents as essentially due to external causes and factors. Furthermore, these people have rather high scores on the anxiety subscale. Similarly to the risky drivers, however, they show high scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky drivers.
Figure T.1 shows the profiles of the three groups of drivers on subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure T.2). However, respondents in the risky drivers group feel to be supported and encouraged by their friends more than respondents in the other two groups (Figure T.3). The same respondents consider their parents would not be angry at their driving behaviour more than the other respondents (Figure T.4).

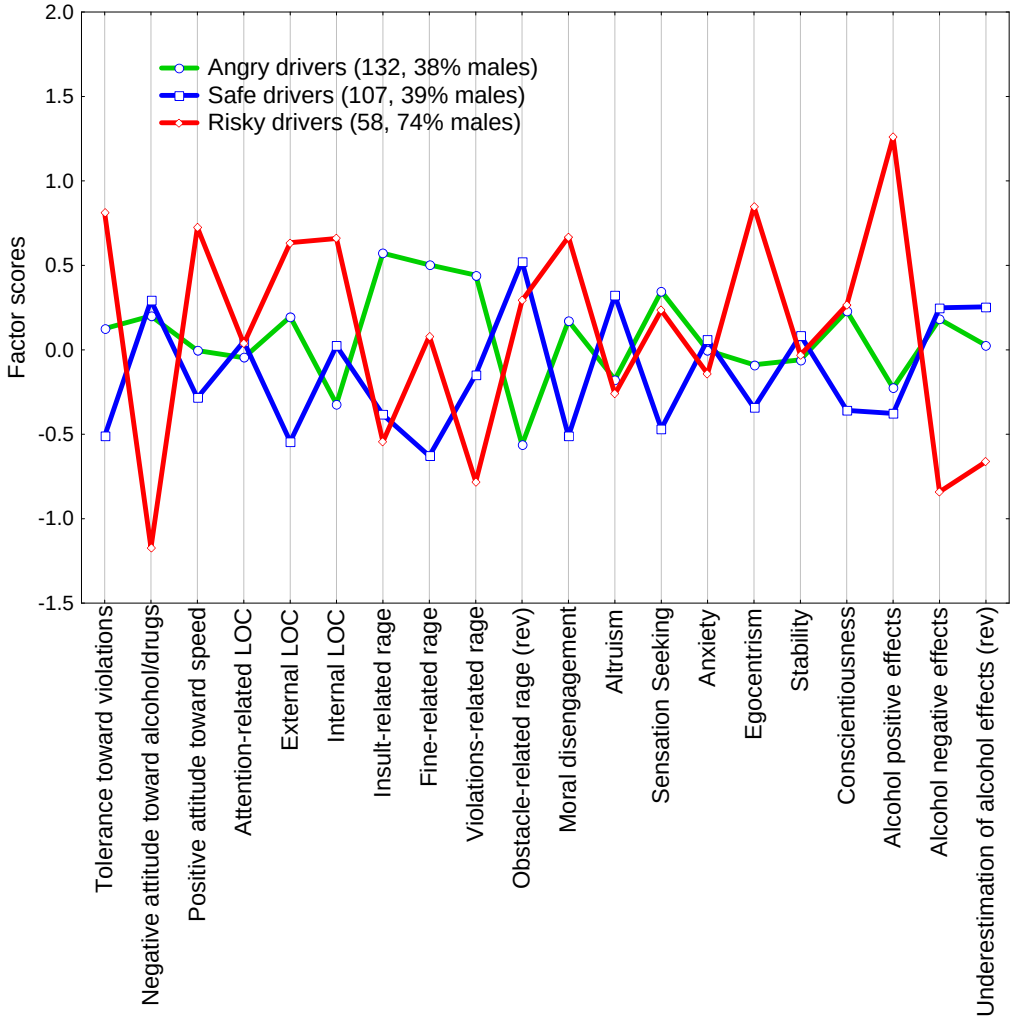


Figure T.1. Average scores for each group on the subscales of the questionnaire.

Figure T.2. Average scores for each group on items concerning risk perception (* p<.001).

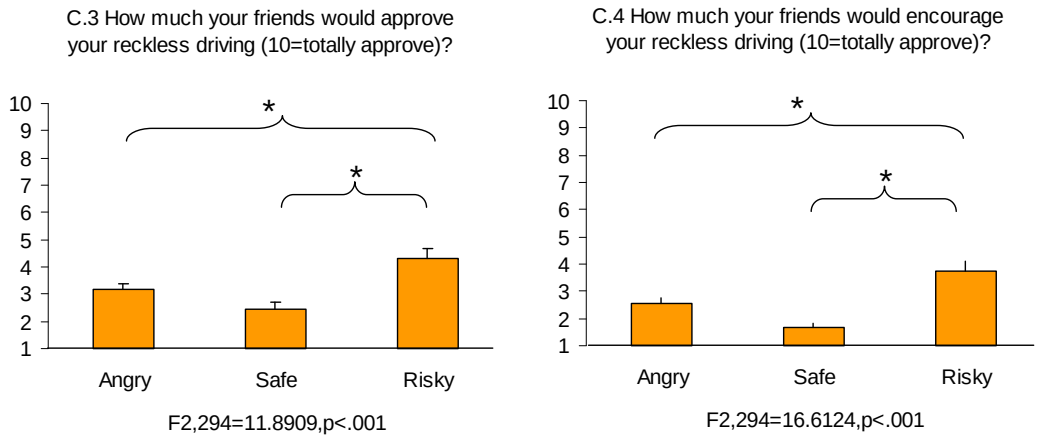


Figure T.3. Average scores for each group on items concerning friends' attitude (* p<.001).

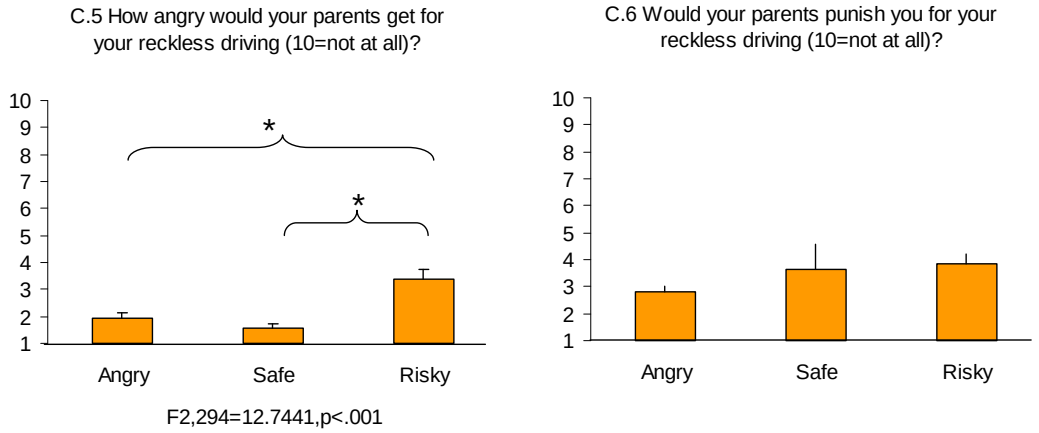


Figure T.4. Average scores for each group on items concerning parents' attitude (* p<.001).

Chapter 8

Results from Latvia

8.1. CAR DRIVERS

8.1.1. Sample description

A total of 172 people answered the Section 1 of the questionnaire. Males were 108 (62.1% of the total sample) and females were 64 (36.8% of the total sample). Their mean age was 18.4 years (standard error .08), ranging between 17 and 20 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

8.1.2. Driving habits

Tables U.1 to U.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Slightly more than half of the respondents from Latvia own a car, with a slight, not significant prevalence of female drivers. It should be noted that about half of the respondents omitted to answer to the items concerning their driving habits. Thus, what follows concerns only those who have answered, and should be taken cautiously. Respondents refer to use a car on a fairly regular basis (about half of them of them drive almost everyday, without a prevalence of one gender), and for relatively long trips. Both male and female drivers refer to rarely drive after midnight (about 68% of them drive after midnight 2 times a week or less). Most respondents also refer not to have received a traffic fine and for those who have received a fine, the more common violation is for having parked where it was forbidden, and for speeding.
Most of the respondents refer not to drive after having drunk alcohol (and it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol).
Summarizing, young drivers from Latvia seem to be characterized by being frequent drivers, not very experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	59	49
	(54.63%)	(45.37%)
Females	38	25
	(60.32%)	(39.68%)
Total	97	74
	(56.73%)	(43.27%)

Table U.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	1	8	8	6	23	2
	(2.08%)	(16.67%)	(16.67%)	(12.5%)	(47.92%)	(4.17%)
Females		5	8	3	7	2
	0	(20.%)	(32.%)	(12.%)	(28.%)	(8.%)
Total	1	13	16	9	30	4
	(1.37%)	(17.81%)	(21.92%)	(12.33%)	(41.1%)	(5.48%)

Table U.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	2	3	17	9	17
	(4.17%)	(6.25%)	(35.42%)	(18.75%)	(35.42%)
Females	1	6	6	7	5
	(4.%)	(24.%)*	(24.%)	(28.%)	(20.%)
Total	3	9	23	16	22
	(4.11%)	(12.33%)	(31.51%)	(21.92%)	(30.14%)

Table U.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	11	12	14	11
	(22.92%)	(25.%)	(29.17%)	(22.92%)
Females	6	9	5	5
	(24.%)	(36.%)	(20.%)	(20.%)
Total	17	21	19	16
	(23.29%)	(28.77%)	(26.03%)	(21.92%)

Table U.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	14	16	6	12
	(29.17%)	(33.33%)	(12.5%)	(25.%)
Females	9	11	2	3
	(36.%)	(44.%)	(8.%)	(12.%)
Total	23	27	8	15
	(31.51%)	(36.99%)	(10.96%)	(20.55%)

Table U.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	Yes	No
Males	27 (56.25%)	21 (43.75%)*
Females	24 (96.%)*	1 (4.%)
Total	51 (69.86%)	22 (30.14%)

Table U.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	9 (8.33%)	1 (1.59%)	10 (5.85%)
Running a red light	6 (5.56%)	0	6 (3.49%)
Running a stop sign	6 (5.56%)	0	6 (3.51%)
Speeding	13 (12.04%)*	1 (1.56%)	14 (8.14%)
Drunk driving	7 (6.48%)	0	7 (4.07%)
Lack of seatbels use	4 (3.7%)	0	4 (2.33%)

Table U.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	29 (60.42%)	6 (12.5%)	4 (8.33%)	1 (2.08%)	1 (2.08%)	7 (14.58%)
Females	20 (80.%)	5 (20.%)	0	0	0	0
Total	49 (67.12%)	11 (15.07%)	4 (5.48%)	1 (1.37%)	1 (1.37%)	7 (9.59%)

	Males	Females	Total
You could hardly follow the trajectory	7 (6.48%)	0	7 (4.07%)
You could hardly keep your head on straight	6 (5.61%)	0	6 (3.51%)
You had muscle cramps	5 (4.63%)	0	5 (2.91%)
You could hardly keep your eyes open	6 (5.56%)	1 (1.56%)	7 (4.07%)
You got stomach cramps	5 (4.67%)	0	5 (2.92%)
You could not focus on the road	4 (3.74%)	1 (1.56%)	5 (2.92%)
Someone who was with you made you notice it	6 (5.56%)	1 (1.56%)	7 (4.07%)

Table U.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and impulsivity, and have more direct experiences of driving under the effect of alcohol.
2. INATTENTIVE DRIVERS. People in this group are characterized by attention related factors. Indeed, they show low scores on attention-related locus of control, high scores on anxiety and, most importantly, high scores on the slips/lapses scale. This suggests that they refer to be especially likely to commit errors related to attention/action while driving. These respondents are however also likely to speed up. Similarly to the safe drivers, however, they show low scores on moral disengagement. They also seem to be aware of the negative effects of alcohol upon driving.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on internal Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

The three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and inattentive drivers.
The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure U.2). Also, respondents in the three groups do not differ in the perceived support for their reckless driving from their friends (Figure U.3) or parents (Figure U.4).

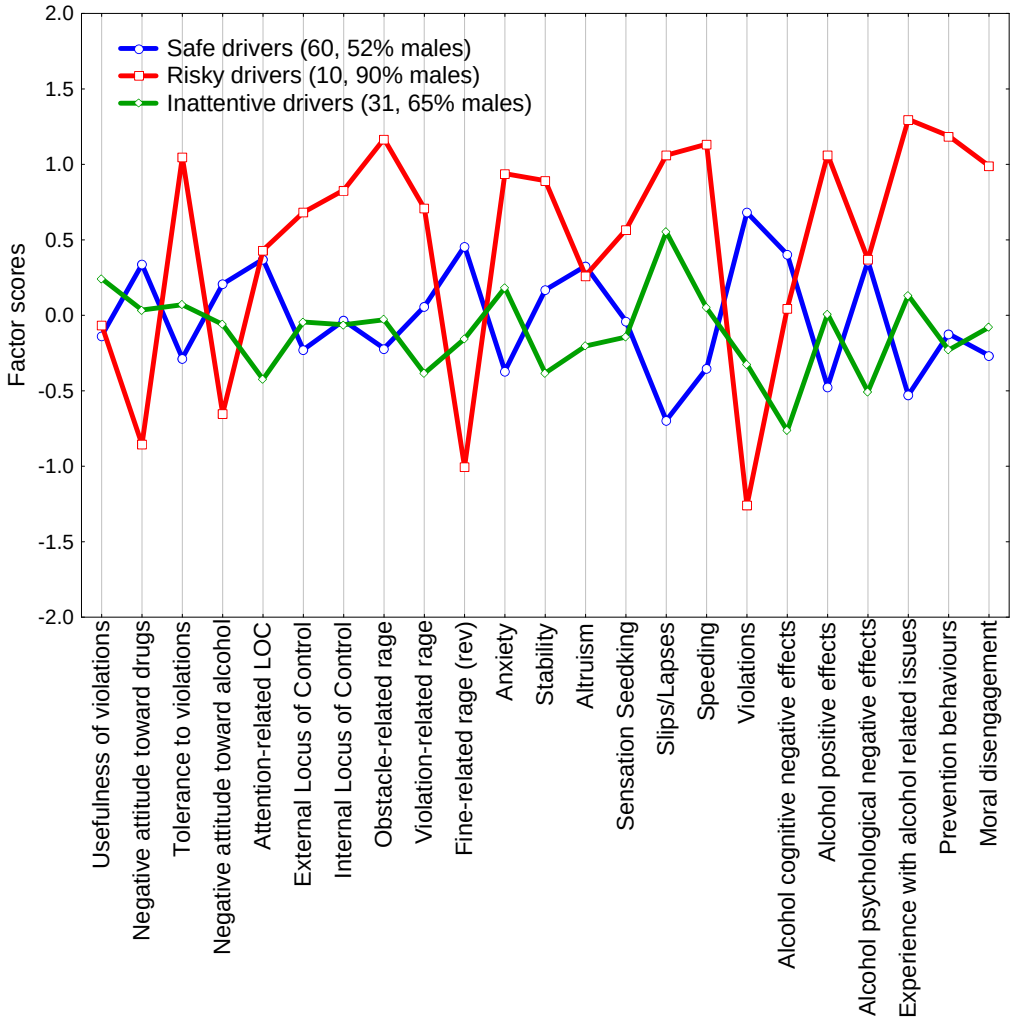


Figure U.1. Average scores for each group on the subscales of the questionnaire.

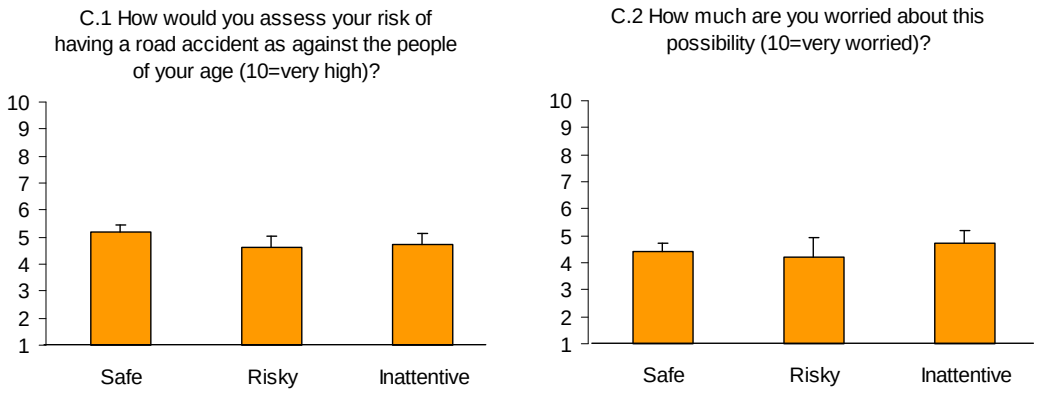


Figure U.2. Average scores for each group on items concerning risk perception.

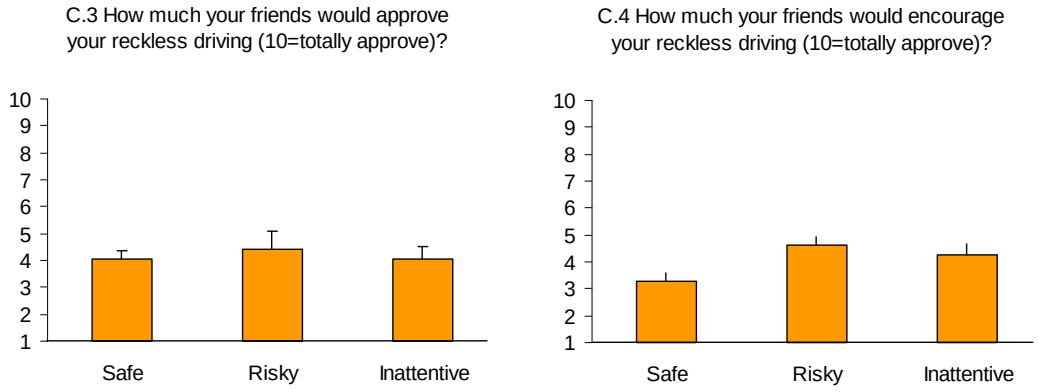


Figure U.3. Average scores for each group on items concerning friends' attitude.

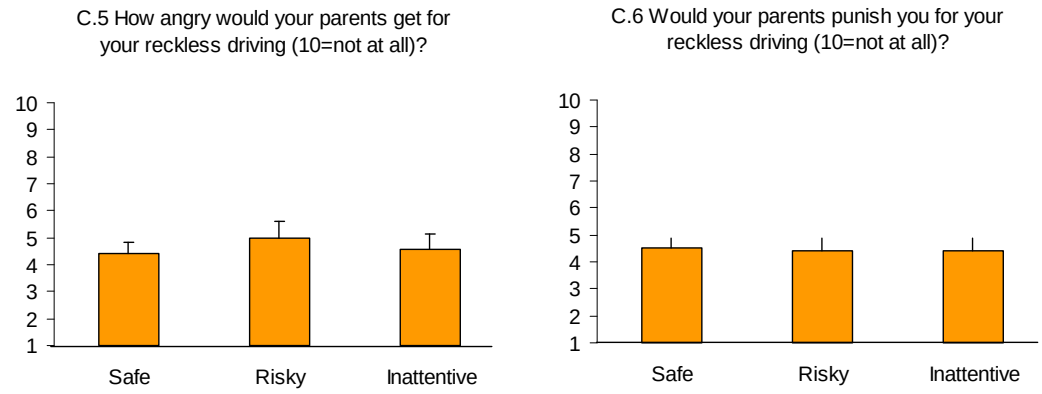


Figure U.4. Average scores for each group on items concerning parents' attitude.

8.2. NON DRIVERS

8.2.1. Sample description

A total of 779 people answered the Section 3 of the questionnaire. Males were 334 (42.87% of the total sample) and females were 445 (57.12% of the total sample). Their mean age was 17.55 years (standard deviation 1.29), ranging between 14 and 21 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. ALCOHOL TOLERANT DRIVERS. People in this group have a very similar profile as those in the safe drivers group, with the exception that they are far less aware of the negative effects of driving after having drunk alcohol.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender.
Figure W.1 shows the profiles of the three groups of drivers on the subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure W.2). However, respondents in the safe drivers group feel to be encouraged by their friends less than respondents in the other two groups (Figure W.3). Respondents in the three groups do not differ in term of perceived parents' behaviour (Figure W.4).

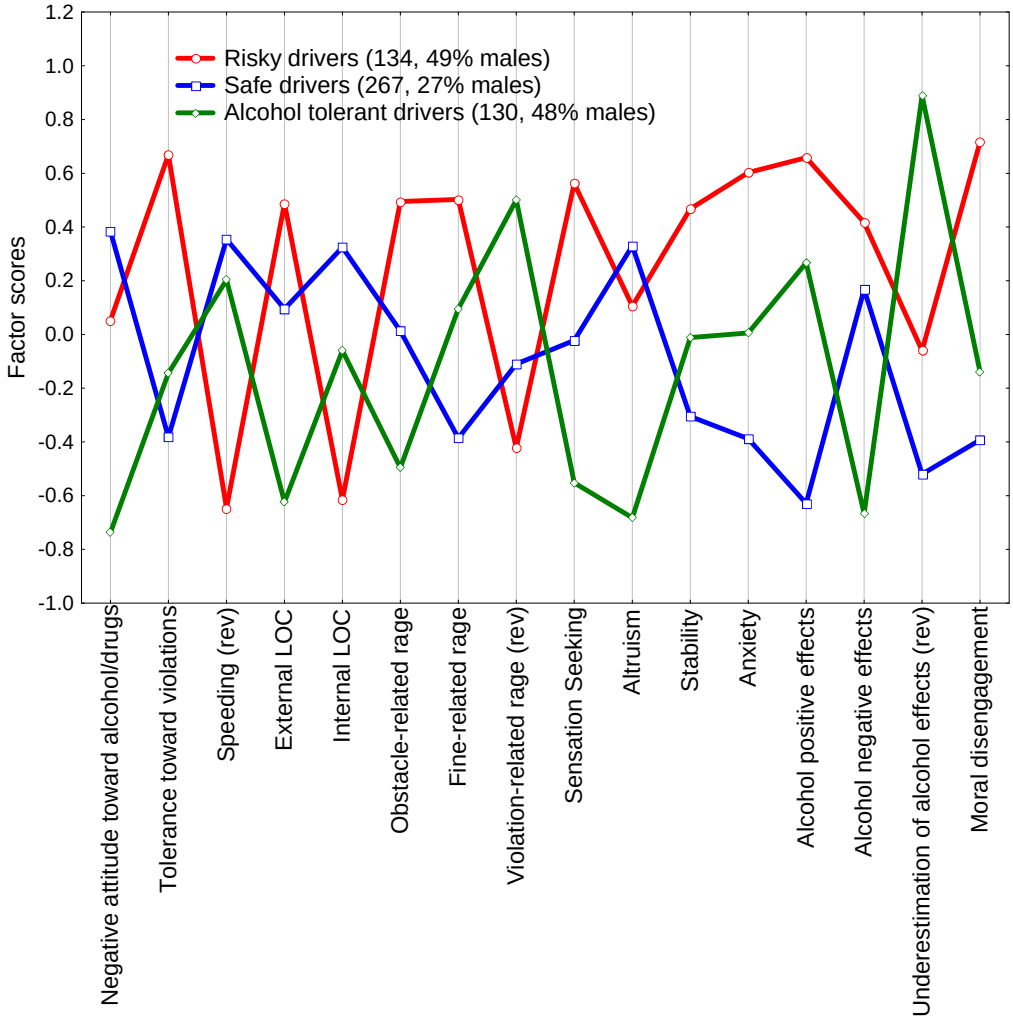


Figure W.1. Average scores for each group on the subscales of the questionnaire.

Figure W.2. Average scores for each group on items concerning risk perception.

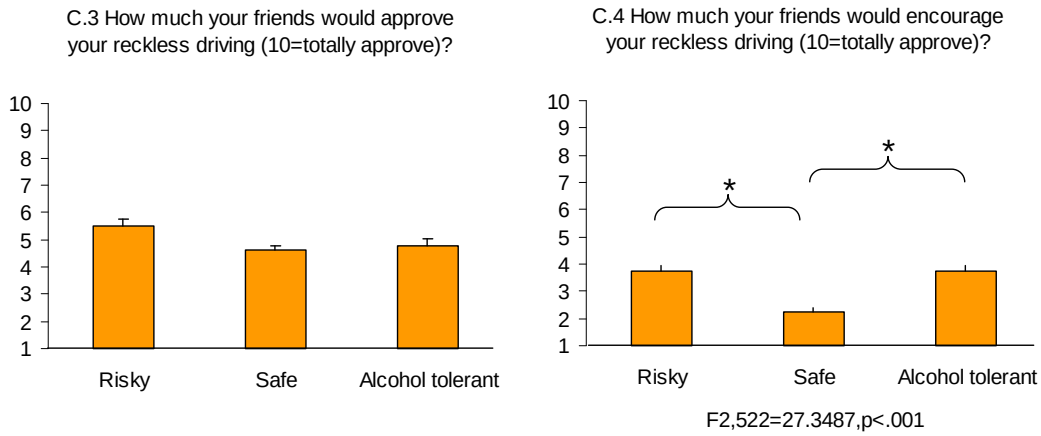


Figure W.3. Average scores for each group on items concerning friends' attitude.

Figure W.4. Average scores for each group on items concerning parents' attitude.

Chapter 9

Results from Lithuania

9.1. CAR DRIVERS

9.1.1. Sample description

A total of 463 people answered the Section 1 of the questionnaire. Males were 222 (47.9% of the total sample) and females were 241 (52.1% of the total sample). Their mean age was 20.60 years (standard error .09), ranging between 17 and 32 years. Only 15 respondents were older than 24 years old. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

9.1.2. Driving habits

Tables X.1 to X.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. About half of the respondents owns a car, with a prevalence of female respondents. Many of them, however, refer to use a car on a very regular basis (about 43% of the respondents drive everyday, without a prevalence of one gender), and for relatively long trips. Interestingly, quite a few respondents (about 43%) refer not to drive after midnight, with no gender prevalence. Male drivers also refer to have received a traffic fine more often than female drivers, mostly for speeding, and lack of seatbelts use.
Almost all the respondents state that they do not drive after having drunk alcohol (it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol), again with no gender prevalence.
Summarizing, young drivers from Lithuania seem to be characterized by being frequent drivers, not experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	83 (37.39%)	139 (62.61%)*
Females	126 (52.28%)*	115 (47.72%)
Total	209 (45.14%)	254 (54.86%)

Table X.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	4	15	21	30	66	3
	(2.88%)	(10.79%)	(15.11%)	(21.58%)	(47.48%)	(2.16%)
Females		24	27	17	43	4
	0	(20.87%)*	(23.48%)	(14.78%)	(37.39%)	(3.48%)
Total	4	39	48	47	109	7
	(1.57%)	(15.35%)	(18.9%)	(18.5%)	(42.91%)	(2.76%)

Table X.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	4	16	23	53	43
	(2.88%)	(11.51%)	(16.55%)	(38.13%)	(30.94%)
Females	3	12	24	43	33
	(2.61%)	(10.43%)	(20.87%)	(37.39%)	(28.7%)
Total	7	28	47	96	76
	(2.76%)	(11.02%)	(18.5%)	(37.8%)	(29.92%)

Table X.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	40	51	27	21
	(28.78%)	(36.69%)	(19.42%)	(15.11%)
Females	27	63	16	9
	(23.48%)	(54.78%)*	(13.91%)	(7.83%)
Total	67	114	43	30
	(26.38%)	(44.88%)	(16.93%)	(11.81%)

Table X.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	59	23	27	30
	(42.45%)	(16.55%)	(19.42%)	(21.58%)
Females	50	23	18	24
	(43.48%)	(20.%)	(15.65%)	(20.87%)
Total	109	46	45	54
	(42.91%)	(18.11%)	(17.72%)	(21.26%)

Table X.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	No	Yes
Males	91 (65.47%)	48 (34.53%)*
Females	91 (79.13%)*	24 (20.87%)
Total	182 (71.65%)	72 (28.35%)

Table X.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	13 (5.86%)	7 (2.9%)	20 (4.32%)
Running a red light	8 (3.6%)	3 (1.24%)	11 (2.38%)
Running a stop sign	6 (2.7%)	2 (.83%)	8 (1.73%)
Speeding	28 (12.61%)*	10 (4.15%)	38 (8.21%)
Drunk driving	5 (2.25%)	1 (.41%)	6 (1.3%)
Lack of seatbelts use	19 (8.56%)*	9 (3.73%)	28 (6.05%)

Table X.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	115 (82.73%)	19 (13.67%)	3 (2.16%)	0	0	2 (1.44%)
Females	103 (89.57%)	8 (6.96%)	3 (2.61%)	0	0	1 (.87%)
Total	218 (85.83%)	27 (10.63%)	6 (2.36%)	0	0	3 (1.18%)

Table X.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	3 (1.35%)	1 (.41%)	4 (.86%)
You could hardly keep your head on straight	3 (1.35%)	1 (.41%)	4 (.86%)
You had muscle cramps	2 (.9%)	0	2 (.43%)
You could hardly keep your eyes open	3 (1.35%)	2 (.83%)	5 (1.08%)
You got stomach cramps	3 (1.35%)	1 (.41%)	4 (.86%)
You could not focus on the road	1 (.45%)	1 (.41%)	2 (.43%)
Someone who was with you made you notice it	6 (2.7%)	2 (.83%)	8 (1.73%)

Table X.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences ($p<.001$) between males and females.

Results of the cluster analyses showed three separate groups of respondents (Figure X.1).

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and impulsivity, and have more direct experiences of driving under the effect of alcohol.
2. OVERCONFIDENT DRIVERS. People in this group are characterized by being rather overconfident on their abilities as drivers. However, they are more tolerant toward violations of the traffic rules compared to safe drivers, but they show higher levels of rage, both violation- and obstacle-related than safe drivers. Similarly to the risky drivers, however, they show high scores on moral disengagement. They also seem to be aware of the negative effects of alcohol upon driving, though are less involved in preventing behaviours.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on internal Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky drivers.
The three groups do differ in terms of their perception of risk of being involved in an accident. Namely, respondents in the overconfident drivers group rate their risk of being involved in a car accident as lower compared to both the other groups, and are slightly (albeit not significantly) less worried about this possibility (Figure X.2). However, respondents in the three groups do rate their parents reactions similarly (Figure X.4).

Finally, respondents in the three groups differ in terms of how supportive and encouraging their friends are perceived, with the risky drivers rating their friends as more supportive and encouraging than the other two groups, but overconfident drivers rating their friends as less supportive than the other two groups (Figure X.3).

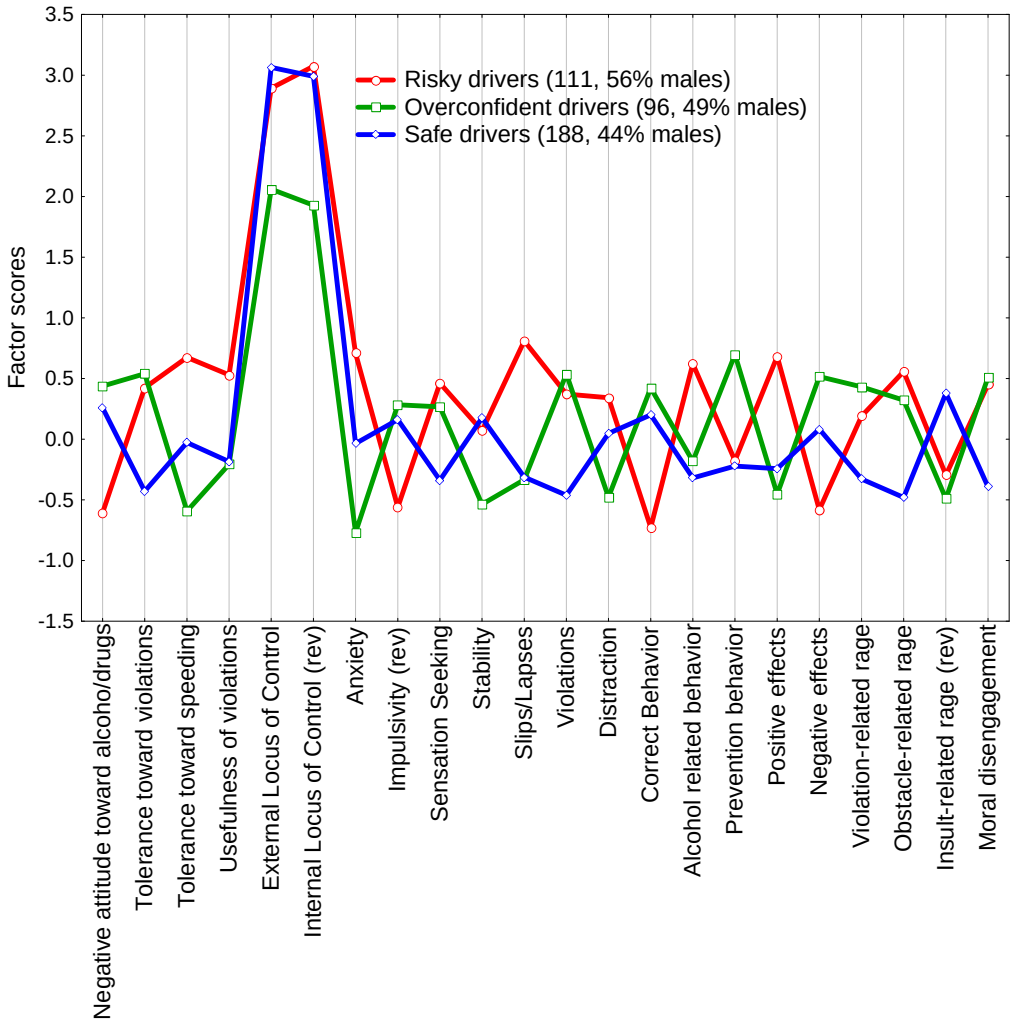


Figure X.1. Average scores for each group on the subscales of the questionnaire.

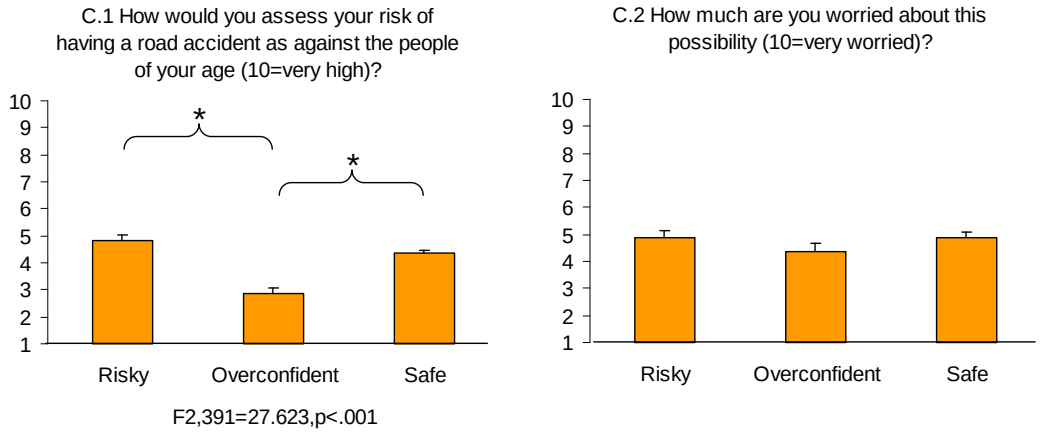


Figure X.2. Average scores for each group on items concerning risk perception (* p<.001).

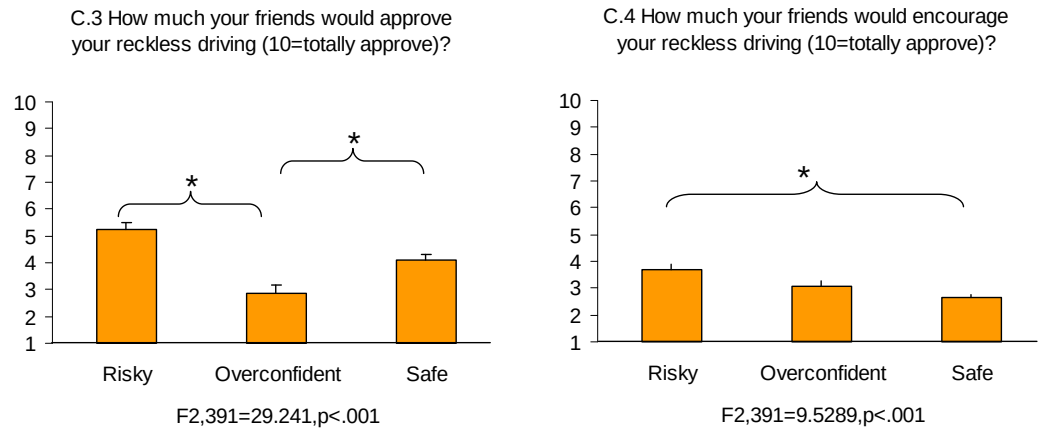


Figure X.3. Average scores for each group on items concerning friends' attitude (* p<.001).

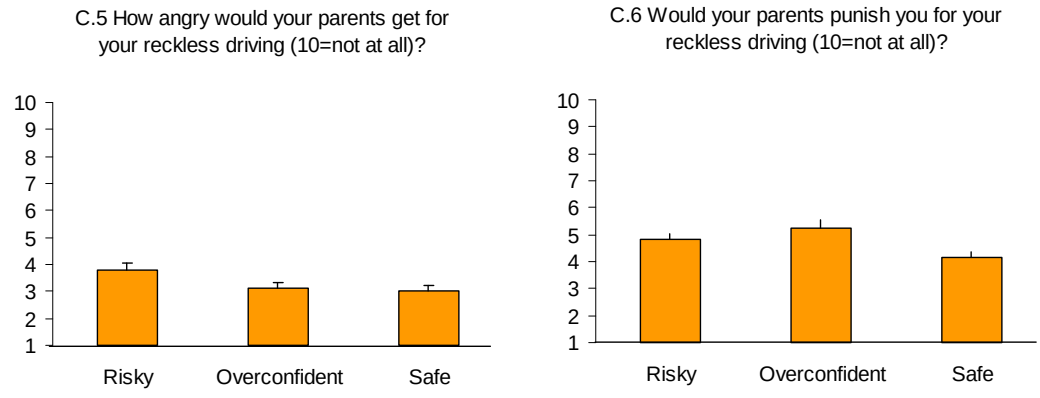


Figure X.4. Average scores for each group on items concerning parents' attitude (* p<.001).

9.2. SCOOTER RIDERS

9.2.1. Sample description

A total of 231 people answered the Section 2 of the questionnaire. Males were 155 (67.1% of the total sample) and females were 76 (32.9% of the total sample). Their mean age was 19.3 years (standard deviation 2.05), ranging between 17 and 24 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

9.2.2. Driving habits

Tables Y.1 to Y.13 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Most scooter male drivers from Lithuania refer to use scooters or motorbikes on a rather sparse base (only about 24% everyday), whereas female drivers use of a scooter is even rarer (about 5% of them use it everyday). Their use of scooters is also characterized by being very variable in term of number of kilometres travelled, from only few to more than 100 kilometres. Interestingly, male drivers refer to drive after 11.00 pm relatively often (more than 30% of them drive after 11:00 pm more than 4 times a week), whereas female drivers are far less likely to drive during night hours (about 38% of them do not drive after 11:00 pm at all). Scooter drivers also are not normally used to go on as passengers. Male drivers also refer to have received a traffic fine more often than female drivers, mostly for driving without the helmet and speeding. Interestingly, scooter drivers refer not to have been involved in accidents both as drivers or passengers very often, and usually they refer to have had only material damages.
Few respondents (about 21% of the total sample) state that they have driven after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol). However, very few of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially difficulties on keeping focused on the road. This might suggest that a consistent number of young drivers are still unaware of the negative effects of driving under the effects of alcohol.
Summarizing, young scooter drivers from Lithuania seem to be characterized by being not very regular drivers, not very experienced of driving during night hours (especially female drivers), and not very aware of the dangers associated with driving under the effects of alcohol.

	G1-6 How many times a week do you use a scooter?					
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	6	40	31	17	33	9
	(4.41%)	(29.41%)	(22.79%)	(12.5%)	(24.26%)*	(6.62%)
Females	3	20	23	6	3	3
	(5.17%)	(34.48%)	(39.66%)*	(10.34%)	(5.17%)	(5.17%)
Total	9	60	54	23	36	12
	(4.64%)	(30.93%)	(27.84%)	(11.86%)	(18.56%)	(6.19%)

Table Y.1. Frequency distribution of respondents for item G1.6 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-7 How many kilometres do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	10	27	44	41	14
	(7.35%)	(19.85%)	(32.35%)	(30.15%)	(10.29%)*
Females	8	15	22	12	1
	(13.79%)	(25.86%)	(37.93%)	(20.69%)	(1.72%)
Total	18	42	66	53	15
	(9.28%)	(21.65%)	(34.02%)	(27.32%)	(7.73%)

Table Y.2. Frequency distribution of respondents for item G1.7 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-8 In the last three months, how many times have you driven after 11:00 pm?				
	Never	1-2 times	2-4 times	More than 4 times
Males	46	29	20	41
	(33.82%)	(21.32%)	(14.71%)	(30.15%)
Females	22	19	3	14
	(37.93%)	(32.76%)	(5.17%)	(24.14%)
Total	68	48	23	55
	(35.05%)	(24.74%)	(11.86%)	(28.35%)

Table Y.3. Frequency distribution of respondents for item G1.8 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-9 How often in a week do you go on a scooter sitting behind?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the week end
Males	84	37	6	3		6
	(61.76%)*	(27.21%)	(4.41%)	(2.21%)	0	(4.41%)
Females	27	17	6		6	2
	(46.55%)	(29.31%)	(10.34%)	0	(10.34%)	(3.45%)
Total	111	54	12	3	6	8
	(57.22%)	(27.84%)	(6.19%)	(1.55%)	(3.09%)	(4.12%)

Table Y.4. Frequency distribution of respondents for item G1.9 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-10 In the last three months how often you accepted a lift on a scooter after 11 pm?				
	Never	1-2 times a month	2-4 times in a month	More than 4 times in a month
Males	103	23	5	5
	(75.74%)	(16.91%)	(3.68%)	(3.68%)
Females	38	14		6
	(65.52%)	(24.14%)	0	(10.34%)
Total	141	37	5	11
	(72.68%)	(19.07%)	(2.58%)	(5.67%)

Table Y.5. Frequency distribution of respondents for item G1.10 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-11 Have you ever been fined?		
	Yes	No
Males	27 (19.85%)*	109 (80.15%)
Females	3 (5.17%)	55 (94.83%)*
Total	30 (15.46%)	164 (84.54%)

Table Y.6. Frequency distribution of respondents for item G1.11 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
Running a stop sign	1 (.65%)	0	1 (.43%)
Running a red light	1 (.65%)	0	1 (.43%)
No parking	2 (1.29%)	1 (1.32%)	3 (1.3%)
Passenger	1 (.65%)	0	1 (.43%)
Drunk driving	1 (.65%)	0	1 (.43%)
Driving without the helmet	17 (10.97%)*	1 (1.32%)	18 (7.79%)
Speeding	9 (5.81%)	1 (1.32%)	10 (4.33%)

Table Y.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-21 Have you ever been involved in an accident as a driver?			
	Yes	No	No but I was close to
Males	16 (11.76%)	67 (49.26%)	53 (38.97%)
Females	0	32 (55.17%)	26 (44.83%)
Total	16 (8.25%)	99 (51.03%)	79 (40.72%)

Table Y.8. Frequency distribution of respondents for item G1.21 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-23 What were the consequences?			
	Material damages	Personal injuries	Both
Males	6	4	7
	(9.52%)	(6.35%)	(11.11%)
Females	0	0	0
Total	6	4	7
	(6.74%)	(4.49%)	(7.87%)

Table Y.9. Frequency distribution of respondents for item G1.23 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-24 Have you ever been involved in an accident as a passenger?			
	Yes	No	No but I was close to
Males	20	79	37
	(14.71%)	(58.09%)	(27.21%)
Females	8	36	14
	(13.79%)	(62.07%)	(24.14%)
Total	28	115	51
	(14.43%)	(59.28%)	(26.29%)

Table Y.10. Frequency distribution of respondents for item G1.24 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-26 What were the consequences?			
	Material damages	Personal injuries	Both
Males	11	6	4
	(52.38%)	(28.57%)	(19.05%)
Females	2	3	3
	(25.%)	(37.5%)	(37.5%)
Total	13	9	7
	(44.83%)	(31.03%)	(24.14%)

Table Y.11. Frequency distribution of respondents for item G1.26 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-27 Have you ever driven after drinking alcoholic drinks?		
	Yes	No
Males	17	119
	(12.5%)	(87.5%)
Females	3	55
	(5.17%)	(94.83%)
Total	20	174
	(10.31%)	(89.69%)

Table Y.12. Frequency distribution of respondents for item G1.27 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the road	3 (1.94%)	0	3 (1.3%)
You could hardly keep your head on straight	1 (.65%)	1 (1.32%)	2 (.87%)
You had muscle cramps	1 (.65%)	0	1 (.43%)
You could hardly keep your eyes open	4 (2.58%)	2 (2.63%)	6 (2.6%)
You got stomach cramps	4 (2.58%)	2 (2.63%)	6 (2.6%)
You could not focus on the road	8 (5.16%)	0	8 (3.46%)
Someone who was with you made you notice it	3 (1.94%)	0	3 (1.3%)

Table Y.13. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. SPEEDING DRIVERS. People in this group are especially characterized by high scores on speeding subscales, compared to safe drivers. They are not tolerant toward traffic code violations, and have rather high scores on sensation seeking and egocentrism. Similarly to the safe drivers, they show low scores on moral disengagement. However, they also seem to be not aware of the negative effects of alcohol upon driving.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

The three groups do not differ in terms of gender, though a prevalence of males can be observed among the risky and speeding drivers. However, speeding drivers are slightly older than the other two groups ($F_{2,211}=44.00$, $p<.001$).
Figure Y.1 shows the profiles of the three groups of drivers on subscales. The three groups do differ in terms of their perception of risk of being involved in an accident. Namely, respondents in the speeding drivers group perceive they have a lower probability to be involved in an accident, but the three groups do not differ on how much they worry about this possibility (Figure Y.2). Also, respondents in the risky drivers group rate their parents'

anger for their reckless driving style lower than respondents in the other two groups (Figure Y.4). Finally, respondents in speeding drivers group feel less approved by their peers in their reckless driving behaviour than respondents in the other two drivers groups (Figure Y.3).

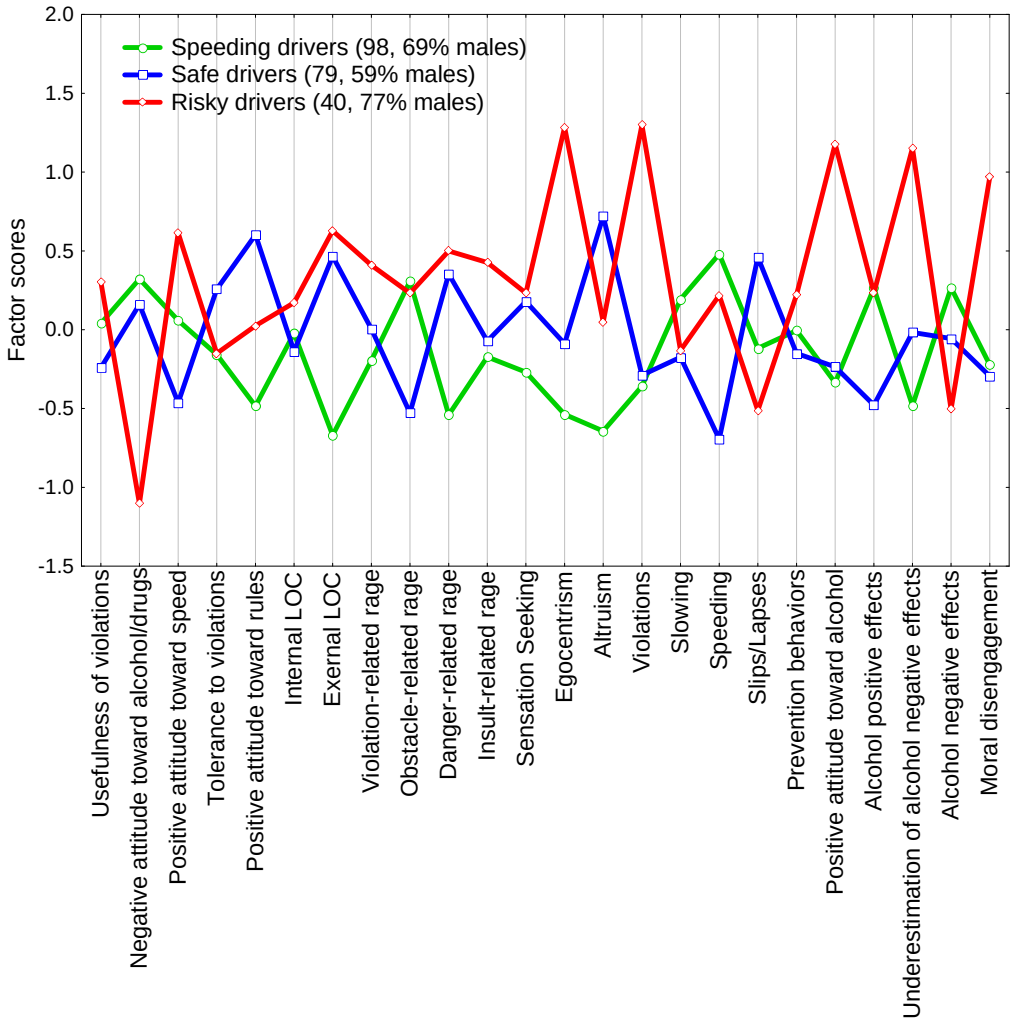
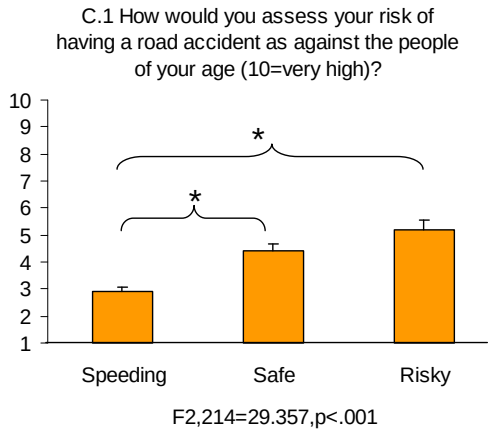


Figure Y.1. Average scores for each group on the subscales of the questionnaire.



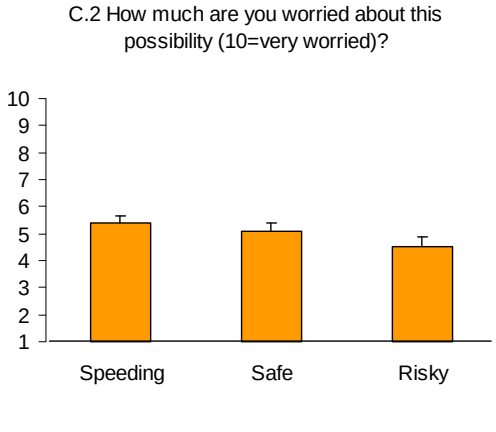
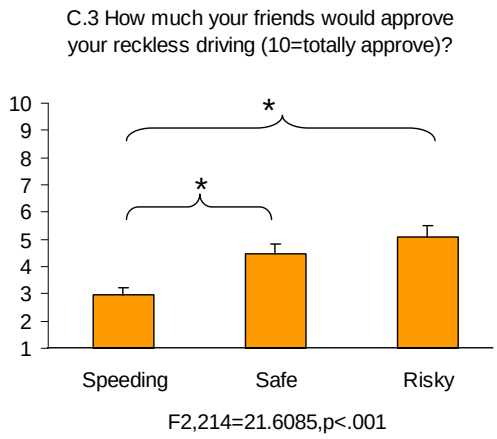


Figure Y.2. Average scores for each group on items concerning risk perception (* p<.001).



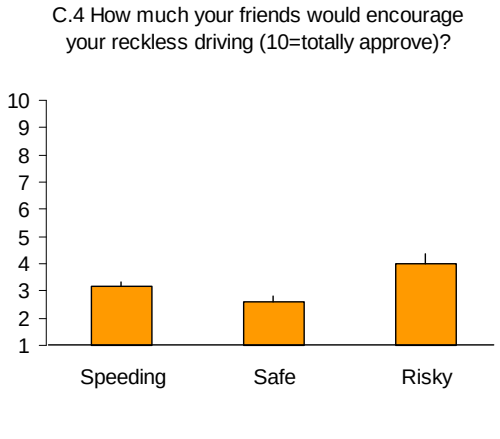
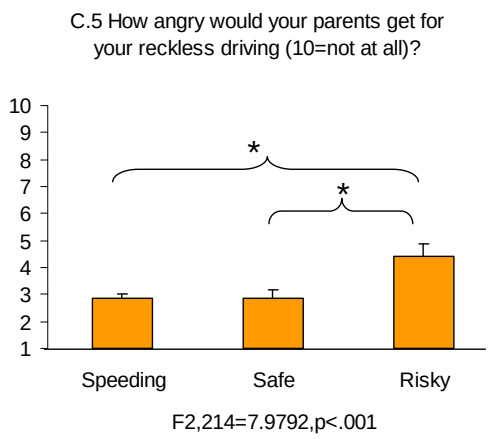


Figure Y.3. Average scores for each group on items concerning friends' attitude (* p<.001).



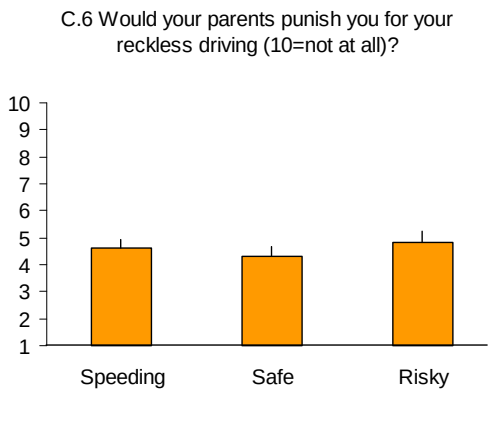


Figure Y.4. Average scores for each group on items concerning parents' attitude (* p<.001).

9.3. NON DRIVERS

9.3.1. Sample description

A total of 225 people answered the Section 3 of the questionnaire. Males were 81 (36% of the total sample) and females were 144 (64% of the total sample). Their mean age was 20 years (standard deviation 1.96), ranging between 17 and 24 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results showed three separate groups of respondents.

1. RISKY DRIVERS. The first group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They are also quite tolerant toward violations of the traffic code and speeding Furthermore, risky drivers have high scores on driving related rage, both due to violations (of others) and obstacles, and very high scores on moral disengagement.
2. SPEEDING DRIVERS. People in the second group are characterized by being rather permissive toward speeding. Compared to people in the other two groups speeding drivers are characterized by an internal Locus of Control rather than external, meaning that they consider accidents as essentially due to drivers' errors and mistakes. However, they are tolerant toward violations of the traffic rules, significantly less altruistic than the other groups, and they show high levels of obstacle-related rage. Interestingly enough, differently from risky drivers, people in this group do not consider violations of the traffic code as useful for keeping traffic flowing. Differently from the risky drivers, they show low scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show high score on altruism. They are also aware of the alcohol negative effects upon driving, and feel rage during driving due to violations of the traffic rules. People in the safe drivers group show low scores on moral disengagement.

The three groups do differ in terms of age, as respondents in the Speeding drivers group are slightly younger than the others (about 19yo vs about 20yo) ($F_{2,198}=4.82$, $p<.01$). With regards to gender, a slight (not significant) prevalence of males can be observed in the risky drivers groups.
Figure Z.1 shows the profiles of the three groups of drivers on selected subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure Z.2). Similarly, respondents do not differ on how much they feel supported and encouraged by their friends (Figure Z.3), or on their ratings on how much their parents would be angry at their driving behaviour (Figure Z.4).

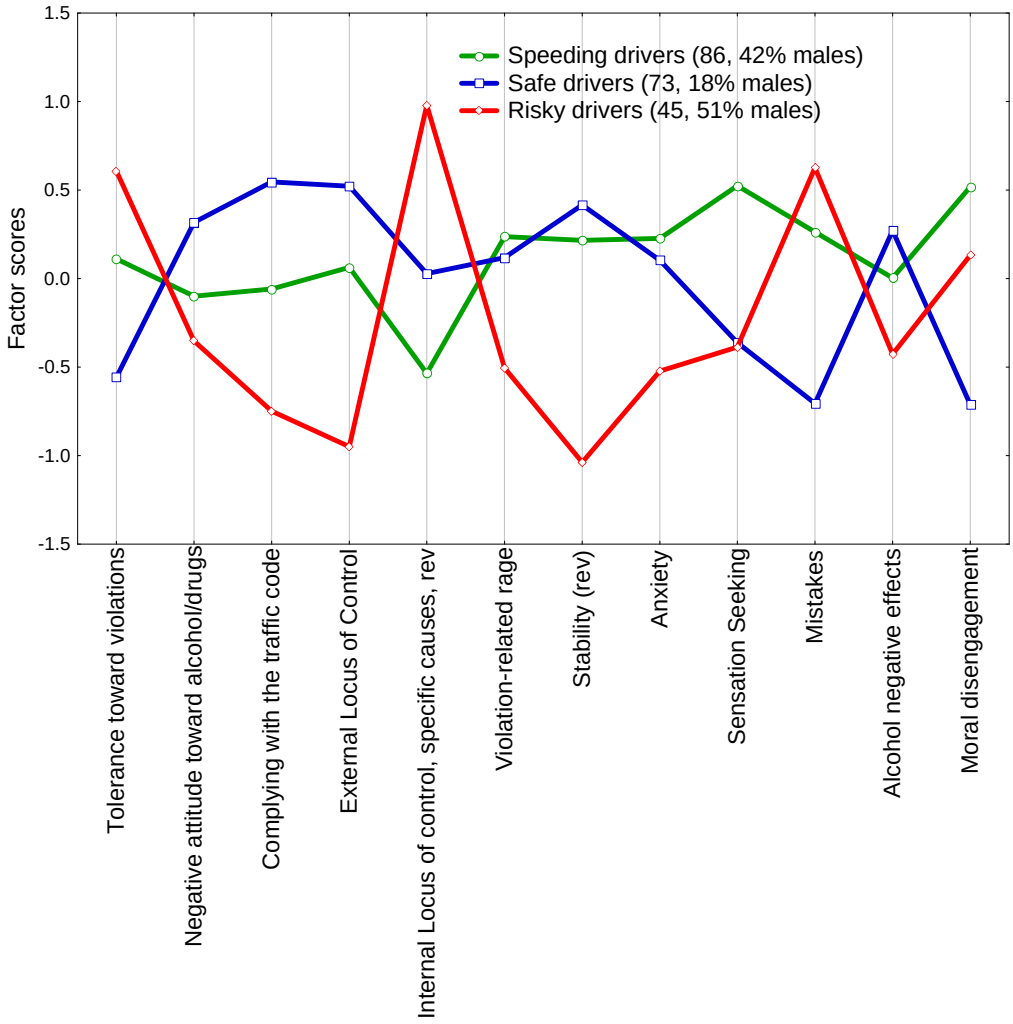
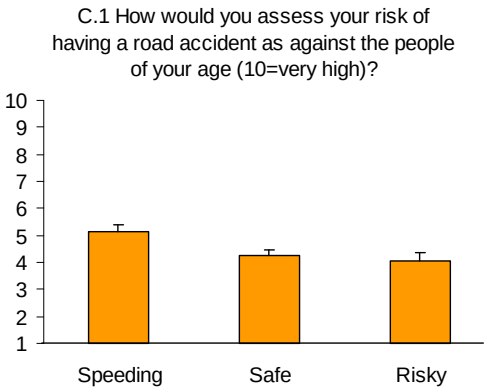


Figure Z.1. Average scores for each group on the subscales of the questionnaire



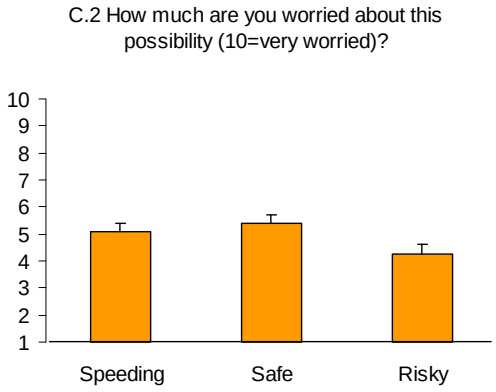
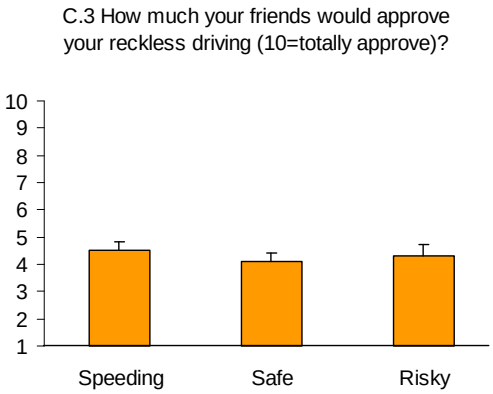


Figure Z.2. Average scores for each group on items concerning risk perception.



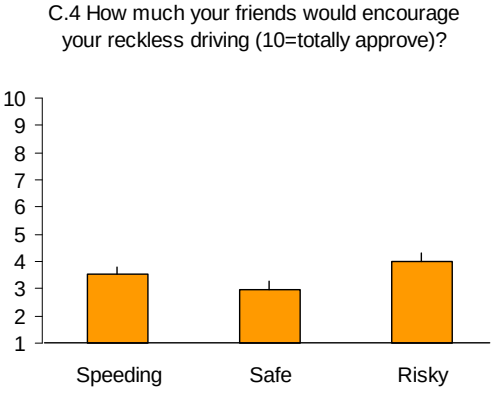
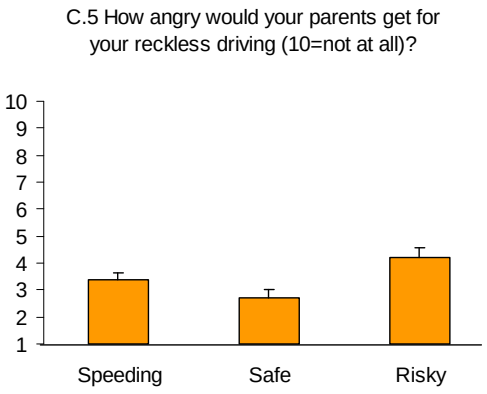


Figure Z.3. Average scores for each group on items concerning friends' attitude.



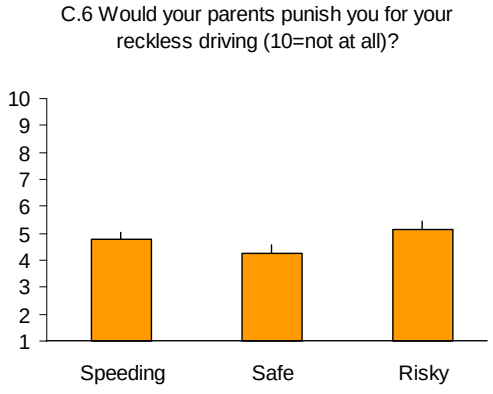


Figure Z.4. Average scores for each group on items concerning parents' attitude.

Chapter 10

Results from Malta

10.1. CAR DRIVERS

10.1.1. Sample description

A total of 111 people answered the Section 1 of the questionnaire. Males were 93 (83.8 % of the total sample) and females were 18 (16.2% of the total sample). Their mean age was 22.87 years (standard deviation 2.78), ranging between 20 and 29 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

10.1.2. Driving habits

Tables J1.1 to J1.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Only few respondents from Malta own a car (about 4% of the respondents), independently of the gender. They however refer to use a car on a regular basis (most of them drive everyday, again without a prevalence of one gender), and for relatively long trips (especially for male drivers). Both male and female drivers refer to drive after midnight relatively often (about 52% of them drive after midnight more than 2 times a week). Male drivers also refer to have received a traffic fine less often than female drivers, mostly for driving without using the seatbelts and parking where it is forbidden.
Most of the respondents refer not to drive after having drunk alcohol (and it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol).
Summarizing, young drivers from Malta seem to be characterized by being frequent drivers, experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	2	87
	(2.25%)	(97.75%)
Females	2	16
	(11.11%)	(88.89%)
Total	4	103
	(3.74%)	(96.26%)

Table J1.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males		2	4	10	67	3
	0	(2.33%)	(4.65%)	(11.63%)	(77.91%)	(3.49%)
Females			2	1	13	
	0	0	(12.5%)	(6.25%)	(81.25%)	0
Total		2	6	11	80	3
	0	(1.96%)	(5.88%)	(10.78%)	(78.43%)	(2.94%)

Table J1.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	1	7	16	25	37
	(1.16%)	(8.14%)	(18.6%)	(29.07%)	(43.02%)
Females	1	3	3	6	3
	(6.25%)	(18.75%)	(18.75%)	(37.5%)	(18.75%)
Total	2	10	19	31	40
	(1.96%)	(9.8%)	(18.63%)	(30.39%)	(39.22%)

Table J1.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	38	21	16	11
	(44.19%)	(24.42%)	(18.6%)	(12.79%)
Females	12	3		1
	(75.%)*	(18.75%)	0	(6.25%)
Total	50	24	16	12
	(49.02%)	(23.53%)	(15.69%)	(11.76%)

Table J1.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	18	21	29	18
	(20.93%)	(24.42%)	(33.72%)	(20.93%)
Females	6	4		6
	(37.5%)	(25.%)	0	(37.5%)
Total	24	25	29	24
	(23.53%)	(24.51%)	(28.43%)	(23.53%)

Table J1.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	Yes	No
Males	33 (37.93%)	54 (62.07%)
Females	8 (50.%)	8 (50.%)
Total	41 (39.81%)	62 (60.19%)

Table J1.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	32 (34.41%)	4 (22.22%)	36 (32.43%)
Running a red light	1 (1.08%)	0	1 (.9%)
Running a stop sign	0	0	0
Speeding	7 (7.53%)	4 (22.22%)	11 (9.91%)
Drunk driving	0	0	0
Lack of seatbelts use	10 (10.75%)	0	10 (9.01%)

Table J1.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	37 (44.05%)	26 (30.95%)	10 (11.9%)	4 (4.76%)	4 (4.76%)	3 (3.57%)
Females	12 (75.%)*	0	3 (18.75%)	0	1 (6.25%)	0
Total	49 (49.%)	26 (26.%)	13 (13.%)	4 (4.%)	5 (5.%)	3 (3.%)

Table J1.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	2 (2.15%)	0	2 (1.8%)
You could hardly keep your head on straight	1 (1.08%)	1 (5.56%)	2 (1.8%)
You had muscle cramps	4 (4.3%)	0	4 (3.6%)
You could hardly keep your eyes open	10 (10.75%)	1 (5.56%)	11 (9.91%)
You got stomach cramps	5 (5.38%)	0	5 (4.5%)
You could not focus on the road	3 (3.23%)	0	3 (2.7%)
Someone who was with you made you notice it	4 (4.3%)	1 (5.56%)	5 (4.5%)

Table J1.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. OVERCONDIFENT DRIVERS. People in this group are especially characterized by high scores on aggressive/angry-related subscales, compared to safe drivers. They are tolerant toward traffic code violations, and have rather high scores on sensation seeking. Similarly to the risky drivers, they show high scores on moral disengagement. They also seem to be aware of the negative effects of alcohol upon driving.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather low score on external Locus of Control. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

The three groups do not differ in terms of age or gender, though it should be noted that only few female drivers are included in the sample.
Figure J1.1 shows the profiles of the three groups of drivers on subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident, nor in terms of howmuch worried they are about that (Figure J1.2). Also, the three groups do not differ in terms of how much they feel supported or encouraged by their friends (Figure J1.3). Finally, the three groups of drivers do not differ on the estimated reactions of their parents for their reckless driving behaviour (Figure J1.4).

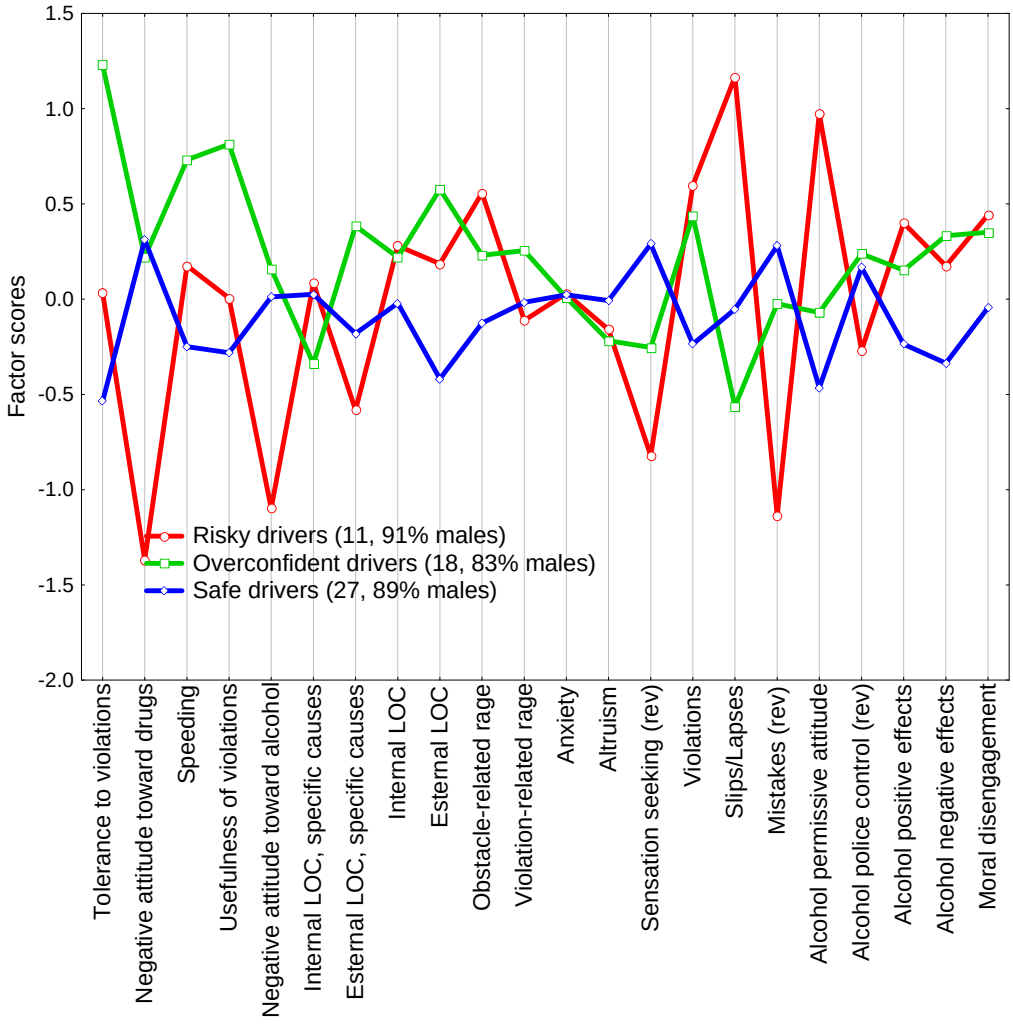


Figure J1.1. Average scores for each group on the subscales of the questionnaire.

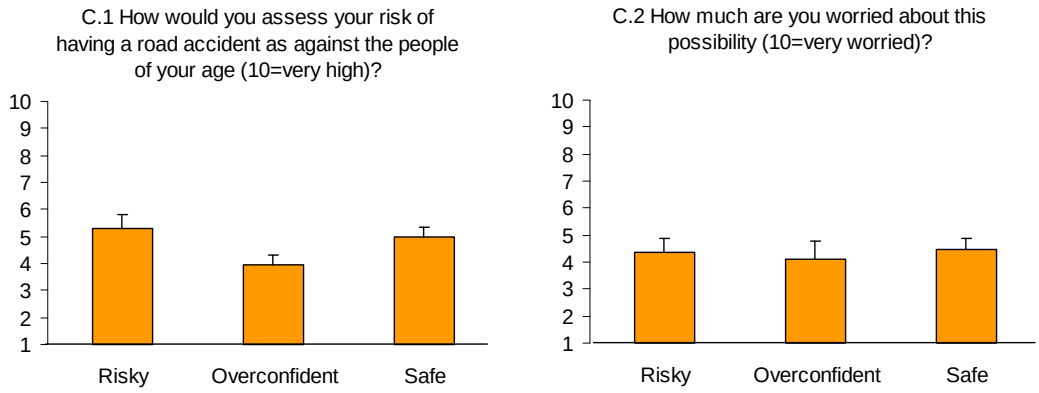


Figure 2. Average scores for each group on items concerning risk perception.

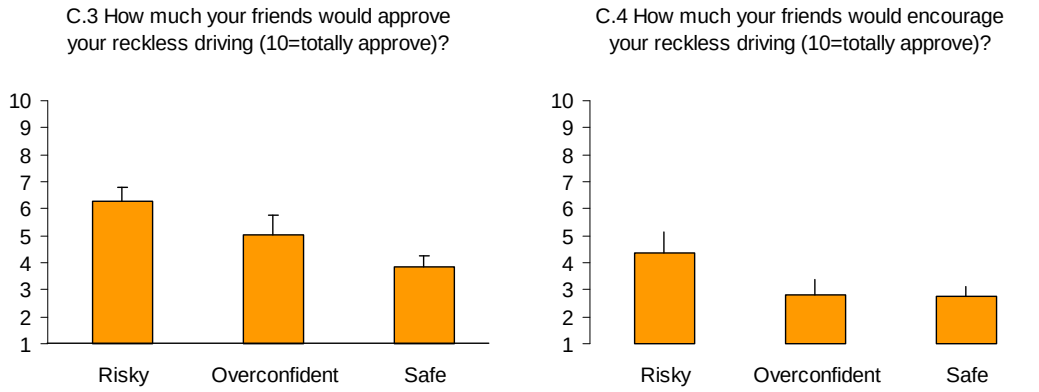


Figure 3. Average scores for each group on items concerning friends' attitude.

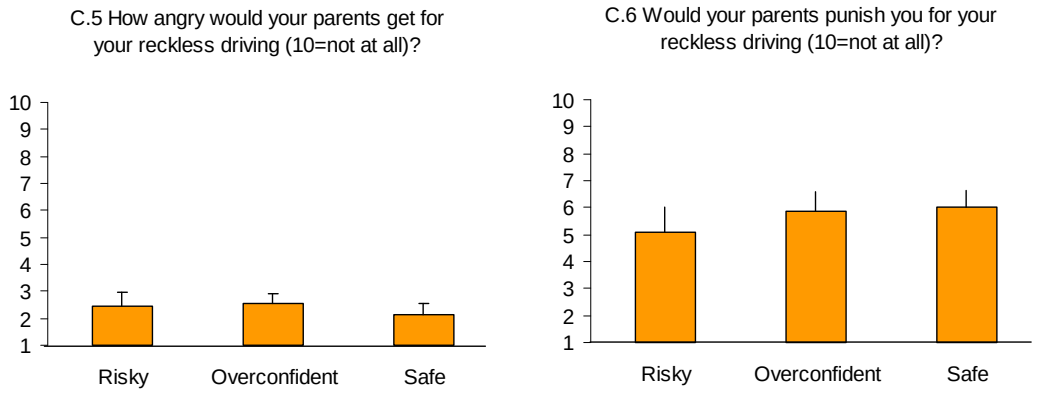


Figure 4. Average scores for each group on items concerning parents' attitude.

10.2. NON DRIVERS

10.2.1. Sample description

A total of 169 people answered the Section 3 of the questionnaire. Males were 76 (45.0% of the total sample) and females were 93 (55.0% of the total sample). Their mean age was 20.64 years (standard deviation 1.62), ranging between 18 and 24 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on neuroticism, and have more direct experiences of driving under the effect of alcohol.
2. ALCOHOL TOLERANT DRIVERS. People in this group have a very similar profile as those in the safe drivers group, with the exception that they are far less aware of the negative effects of driving after having drunk alcohol.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers show high scores on openness to experience. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

The three groups do not differ in terms of age or gender, though it should be noted that only few female drivers are included in the sample.
Figure K1.1 shows the profiles of the three groups of drivers on subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident, nor in terms of how much worried they are about that (Figure K1.2). However, risky and alcohol tolerant feel more approved and encouraged by their friends than safe drivers (Figure K1.3). Finally, risky and alcohol tolerant drivers are aware that their parents would not approve their reckless driving behaviour (Figure K1.4).

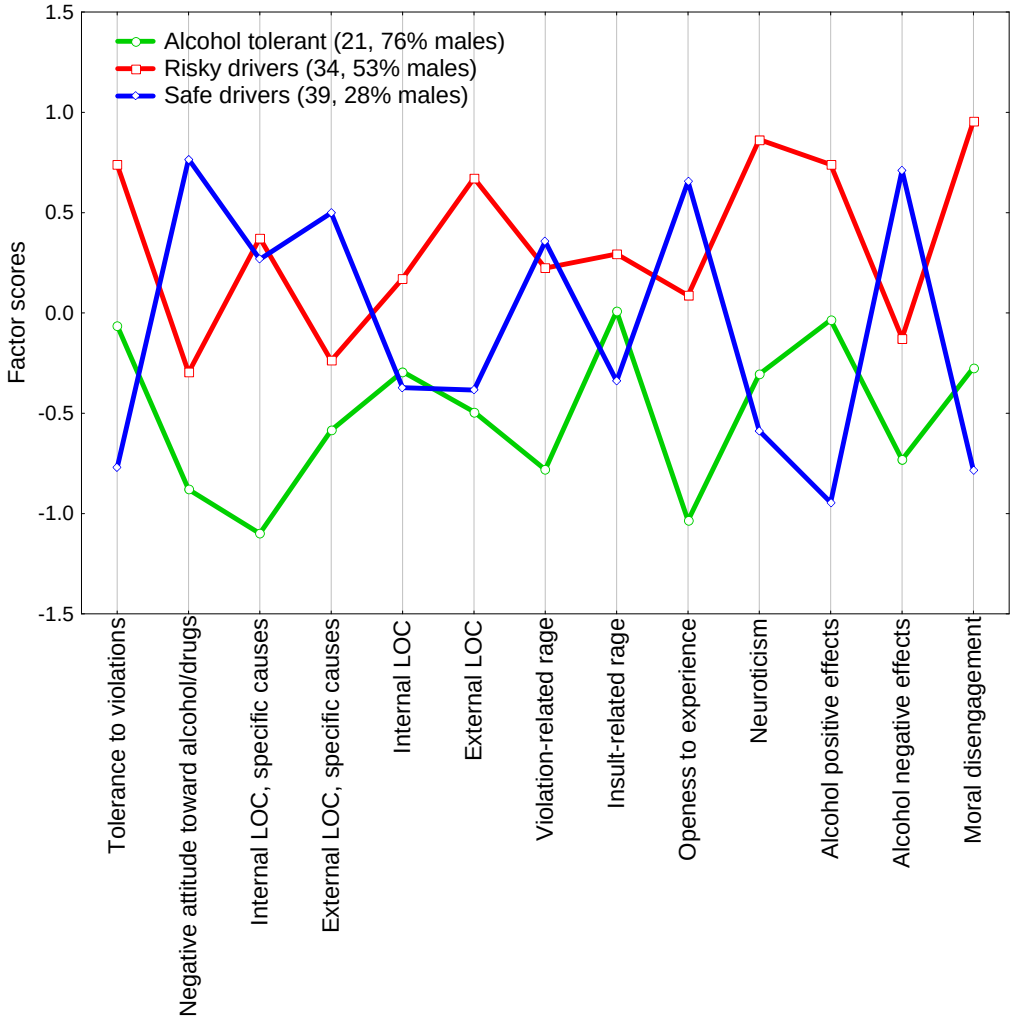


Figure K1.1. Average scores for each group on the subscales of the questionnaire.

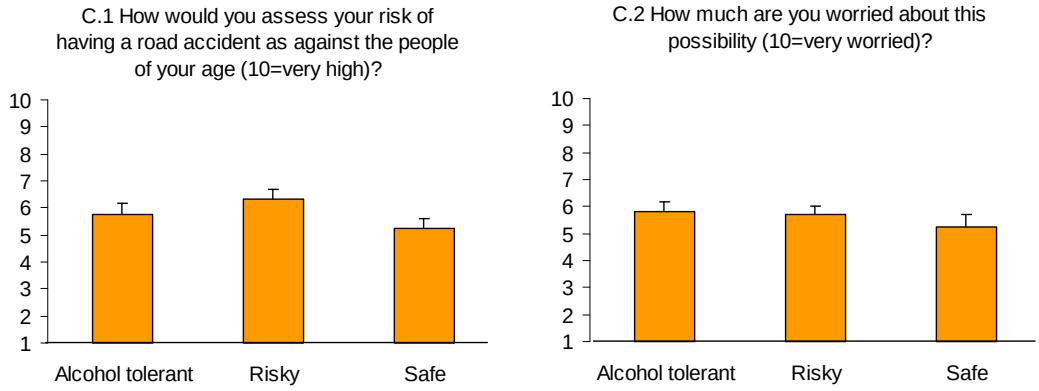


Figure K1.2. Average scores for each group on items concerning risk perception.

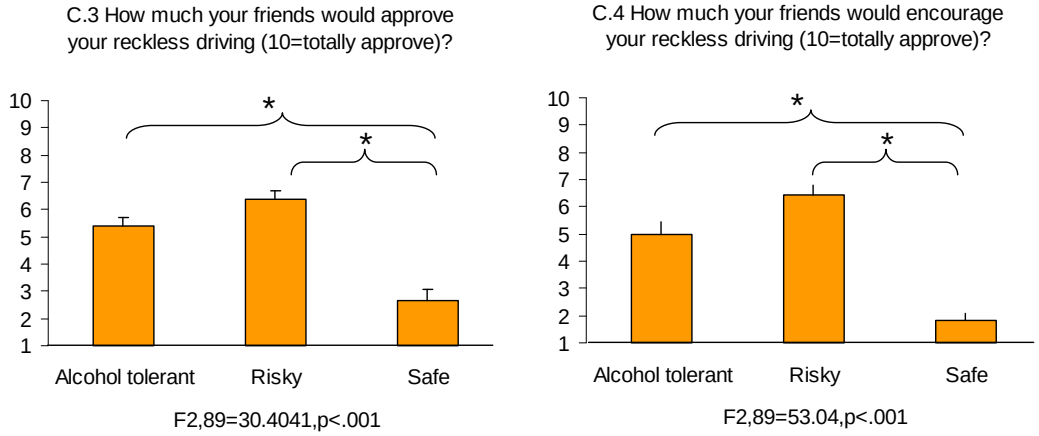


Figure K1.3. Average scores for each group on items concerning friends' attitude.

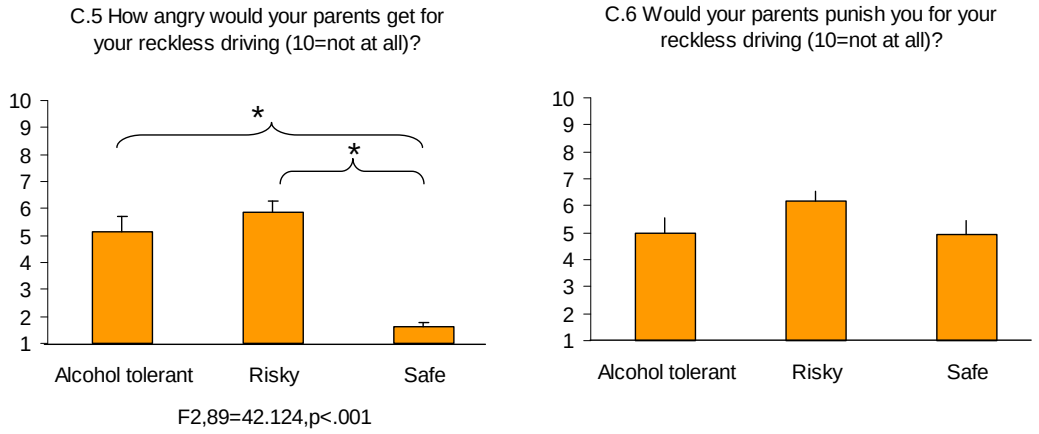


Figure K1.4. Average scores for each group on items concerning parents' attitude.

Chapter 11

Results from Poland

11.1. CAR DRIVERS (QUESTIONNAIRE SECTION 1)

11.1.1. Sample description

A total of 571 people answered the Section 1 of the questionnaire. Males were 344 (60.2% of the total sample) and females were 227 (39.8% of the total sample). Their mean age was 20.87 years (standard deviation 2.03), ranging between 18 and 26 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

11.1.2. Driving habits

Tables A1.1 to A1.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Relatively few respondents from Poland own a car (about 26% of the respondents), independently of the gender. They however refer to use a car on a regular basis (most of them drive everyday, again without a prevalence of one gender), and for relatively long trips (especially for male drivers). Both male and female drivers refer to drive after midnight on relatively few occasions (about 64% of them drive after midnight less than 2 times a week). Male drivers also refer to have received a traffic fine less often than female drivers, mostly for speeding.
Most of the respondents refer not to drive after having drunk alcohol (and it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol).
Summarizing, Polish young drivers seem to be characterized by being frequent drivers, not very experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	73 (21.22%)	271 (78.78%)*
Females	78 (34.36%)*	149 (65.64%)
Total	151 (26.44%)	420 (73.56%)

Table A1.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	20	48	37	155	11	
	0	(7.38%)	(17.71%)	(13.65%)	(57.2%)	(4.06%)
Females	17	25	19	71	16	
	0	(11.49%)	(16.89%)	(12.84%)	(47.97%)	(10.81%)*
Total	37	73	56	226	27	
	0	(8.83%)	(17.42%)	(13.37%)	(53.94%)	(6.44%)

Table A1.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	8	19	31	50	163
	(2.95%)	(7.01%)	(11.44%)	(18.45%)	(60.15%)*
Females	3	14	33	44	54
	(2.03%)	(9.46%)	(22.3%)*	(29.73%)*	(36.49%)
Total	11	33	64	94	217
	(2.63%)	(7.88%)	(15.27%)	(22.43%)	(51.79%)

Table A1.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	42	96	56	77
	(15.5%)	(35.42%)	(20.66%)	(28.41%)*
Females	42	59	25	22
	(28.38%)*	(39.86%)	(16.89%)	(14.86%)
Total	84	155	81	99
	(20.05%)	(36.99%)	(19.33%)	(23.63%)

Table A1.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	66	89	43	73
	(24.35%)	(32.84%)	(15.87%)	(26.94%)*
Females	55	58	15	20
	(37.16%)*	(39.19%)	(10.14%)	(13.51%)
Total	121	147	58	93
	(28.88%)	(35.08%)	(13.84%)	(22.2%)

Table A1.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	Yes	No
Males	159 (58.67%)	112 (41.33%)*
Females	105 (70.95%)*	43 (29.05%)
Total	264 (63.01%)	155 (36.99%)

Table A1.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	25 (7.27%)	13 (5.73%)	38 (6.65%)
Running a red light	5 (1.45%)	5 (2.2%)	10 (1.75%)
Running a stop sign	9 (2.62%)	3 (1.32%)	12 (2.1%)
Speeding	78 (22.67%)*	29 (12.78%)	107 (18.74%)
Drunk driving	1 (.29%)	0	1 (.18%)
Lack of seatbels use	32 (9.3%)*	9 (3.96%)	41 (7.18%)

Table A1.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	208 (76.75%)	49 (18.08%)*	6 (2.21%)	5 (1.85%)	1 (.37%)	2 (.74%)
Females	132 (89.19%)*	14 (9.46%)	1 (.68%)	1 (.68%)	0	0
Total	340 (81.15%)	63 (15.04%)	7 (1.67%)	6 (1.43%)	1 (.24%)	2 (.48%)

Table A1.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	13 (3.78%)*	1 (.44%)	14 (2.45%)
You could hardly keep your head on straight	7 (2.03%)	0	7 (1.23%)
You had muscle cramps	1 (.29%)	0	1 (.18%)
You could hardly keep your eyes open	4 (1.16%)	0	4 (.7%)
You got stomach cramps	2 (.58%)	0	2 (.35%)
You could not focus on the road	36 (10.47%)*	6 (2.64%)	42 (7.36%)
Someone who was with you made you notice it	15 (4.36%)	4 (1.76%)	19 (3.33%)

Table A1.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences ($p<.001$) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. AGGRESSIVE DRIVERS. People in this group are especially characterized by high scores on aggressive/angry-related subscales, compared to safe drivers. They are tolerant toward traffic code violations, and have rather high scores on sensation seeking and egocentrism. Similarly to the risky drivers, they show high scores on moral disengagement. They also seem to be aware of the negative effects of alcohol upon driving, though are less involved in preventing behaviours.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

The three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and aggressive drivers.
Figure A1.1 shows the profiles of the three groups of drivers on subscales. The three groups do differ in terms of their perception of risk of being involved in an accident. Namely, respondents in the risky drivers group rate their risk of being involved in a car accident as higher compared to both the other groups, and are slightly (albeit not significantly) less worried about this possibility (Figure A1.2). Also, respondents in the risky driver group perceive their parents as less angry for their reckless driving behaviour compared to the other two groups (Figure A1.4). Finally, respondents in the three groups

differ in terms of how supportive and encouraging their friends are perceived, with the risky drivers rating their friends as more supportive and encouraging (Figure A1.3).

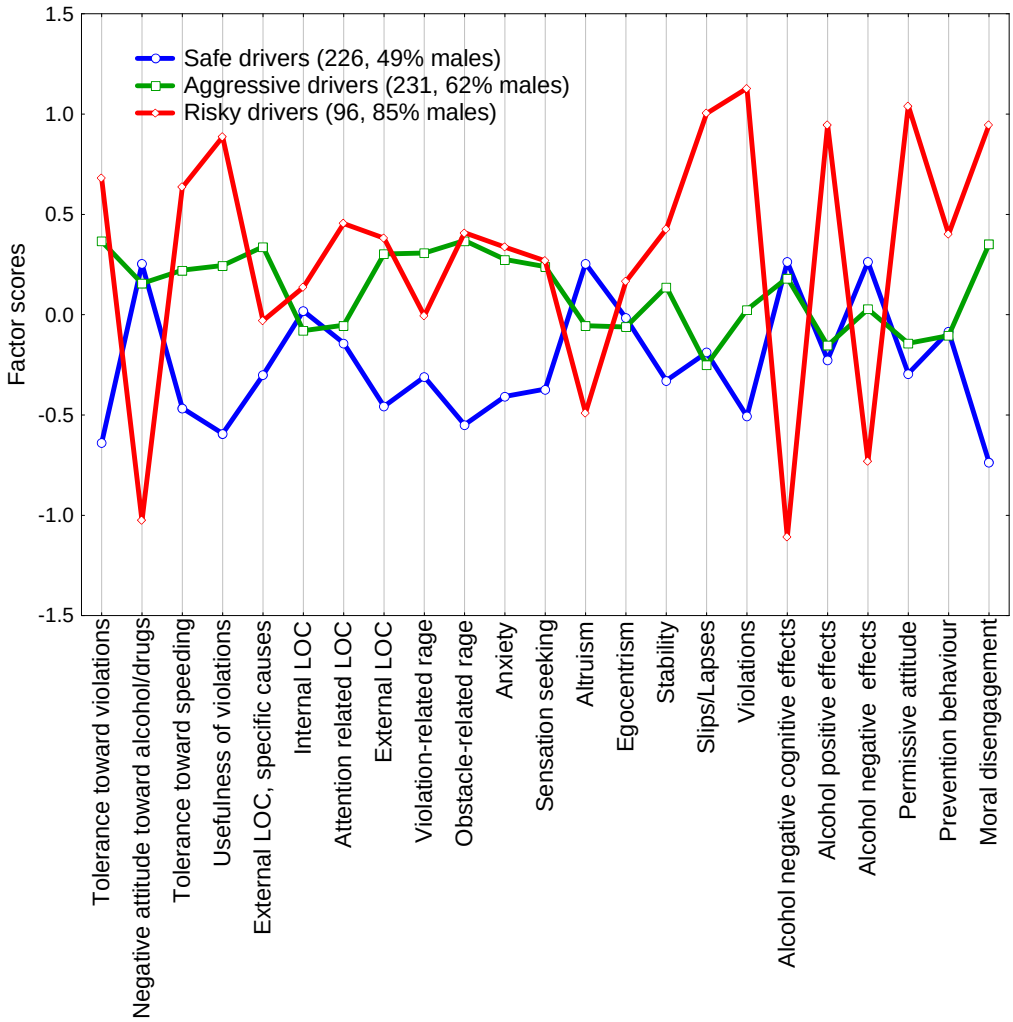


Figure A1.1. Average scores for each group on the subscales of the questionnaire.

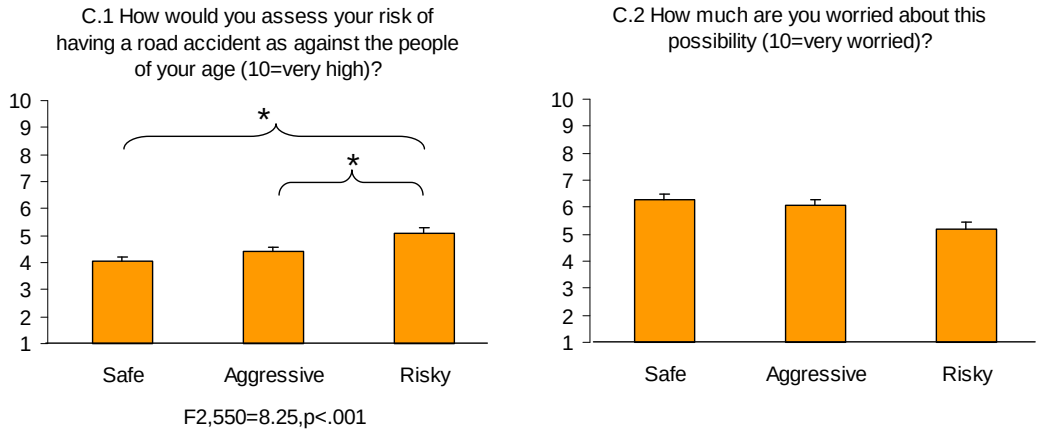


Figure A1.2. Average scores for each group on items concerning risk perception (* p<.001).

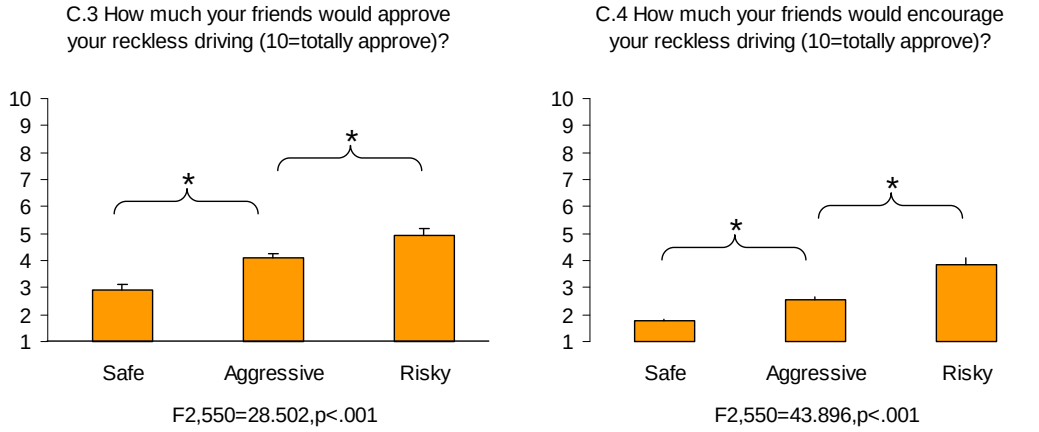


Figure A1.3. Average scores for each group on items concerning friends' attitude (* p<.001).

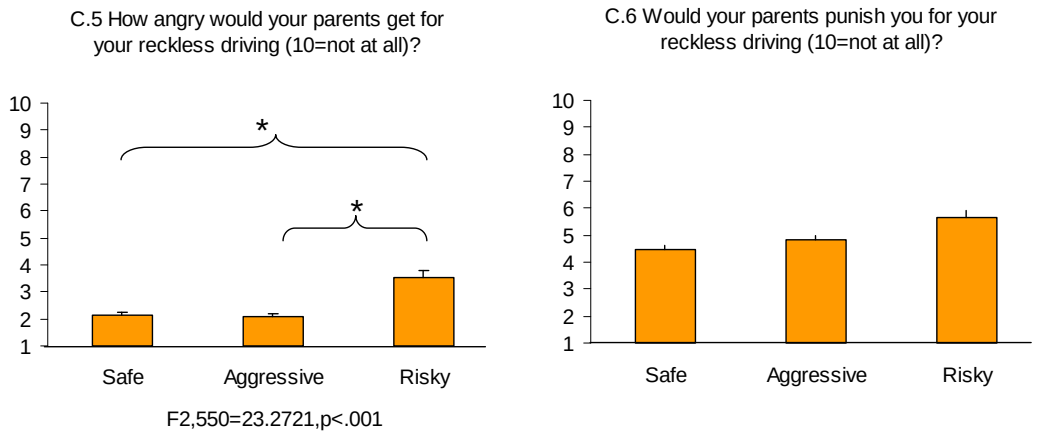


Figure A1.4. Average scores for each group on items concerning parents' attitude (* p<.001).

11.2. SCOOTER RIDERS

11.2.1. Sample description

A total of 159 people answered the Section 2 of the questionnaire. Males were 107 (67.3% of the total sample) and females were 52 (32.7% of the total sample). Their mean age was 20.9 years (standard deviation 3.67), ranging between 18 and 27 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

11.2.2. Driving habits

Tables B1.1 to B1.13 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Most Polish scooter male drivers refer to use scooters or motorbikes often often (about 32% everyday), whereas female drivers use a scooter on a very sparse base (about 70% of them use it 1 or 2 times a week). Their use of scooters is characterized by being very variable in term of number of kilometres travelled, from only few to more than 100 kilometres. Interestingly, male drivers refer to drive after 11.00 pm relatively not very often (less than 50% of them drive after 11:00 pm more than 2 times a week), where female drivers are far less likely to drive during night hours (about 78% of them do not drive after 11:00 pm at all). Polish scooter drivers also are not normally used to go on as passengers, except after 11:00 pm, when this habit becomes slightly more frequent. Male drivers also refer to have received a traffic fine more often than female drivers, mostly for driving without the helmet and speeding. Interestingly, scooter drivers refer not to have been involved in accidents both as drivers or passengers very often, and usually they refer to have had only material damages.

Less than half the sample (about 21% of the total sample) states that they have driven after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol). However, very few of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially difficulties on keeping focused on the road. This might suggest that a consistent number of young drivers are still unaware of the negative effects of driving under the effects of alcohol.

Summarizing, Polish young scooter drivers seem to be characterized by being regular drivers, not very experienced of driving during night hours (especially female drivers), and not very aware of the dangers associated with driving under the effects of alcohol.

	G1-6 How many times a week do you use a scooter?					
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	6	18	22	13	31	7
	(6.19%)	(18.56%)	(22.68%)	(13.4%)	(31.96%)*	(7.22%)
Females	2	26	6	2	1	0
	(5.41%)	(70.27%)*	(16.22%)	(5.41%)	(2.7%)	
Total	8	44	28	15	32	7
	(5.97%)	(32.84%)	(20.9%)	(11.19%)	(23.88%)	(5.22%)

Table B1.1. Frequency distribution of respondents for item G1.6 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-7 How many kilometres do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	10	20	12	22	33
	(10.31%)	(20.62%)	(12.37%)	(22.68%)	(34.02%)*
Females	15	9	8	4	1
	(40.54%)*	(24.32%)	(21.62%)	(10.81%)	(2.7%)
Total	25	29	20	26	34
	(18.66%)	(21.64%)	(14.93%)	(19.4%)	(25.37%)

Table B1.2. Frequency distribution of respondents for item G1.7 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-8 In the last three months, how many times have you driven after 11:00 pm?				
	Never	1-2 times	2-4 times	More than 4 times
Males	25	30	18	24
	(25.77%)	(30.93%)	(18.56%)	(24.74%)*
Females	29	7	0	1
	(78.38%)*	(18.92%)		(2.7%)
Total	54	37	18	25
	(40.3%)	(27.61%)	(13.43%)	(18.66%)

Table B1.3. Frequency distribution of respondents for item G1.8 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-9 How often in a week do you go on a scooter sitting behind?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the week end
Males	57	26	6	2	1	5
	(58.76%)	(26.8%)*	(6.19%)	(2.06%)	(1.03%)	(5.15%)
Females	34	2	0	1	0	0
	(91.89%)*	(5.41%)		(2.7%)		
Total	91	28	6	3	1	5
	(67.91%)	(20.9%)	(4.48%)	(2.24%)	(.75%)	(3.73%)

Table B1.4. Frequency distribution of respondents for item G1.9 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-10 In the last three months how often you accepted a lift on a scooter after 11 pm?				
	Never	1-2 times a month	2-4 times in a month	More than 4 times in a month
Males	73	13	5	6
	(75.26%)	(13.4%)	(5.15%)	(6.19%)
Females	34	3	0	0
	(91.89%)*	(8.11%)		
Total	107	16	5	6
	(79.85%)	(11.94%)	(3.73%)	(4.48%)

Table B1.5. Frequency distribution of respondents for item G1.10 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-11 Have you ever been fined?		
	Yes	No
Males	28	69
	(28.87%)	(71.13%)
Females	13	24
	(35.14%)	(64.86%)
Total	41	93
	(30.6%)	(69.4%)

Table B1.6. Frequency distribution of respondents for item G1.11 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
Running a stop sign	3	3	6
	(2.8%)	(5.77%)	(3.77%)
Running a red light	3	2	5
	(2.8%)	(3.85%)	(3.14%)
No parking	9	1	10
	(8.41%)	(1.92%)	(6.29%)
Passenger	1	0	1
	(.93%)		(.63%)
Drunk driving	3	1	4
	(2.8%)	(1.92%)	(2.52%)
Driving without the helmet	9	10	19
	(8.41%)	(19.23%)*	(11.95%)
Speeding	15	2	17
	(14.02%)	(3.85%)	(10.69%)

Table B1.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-21 Have you ever been involved in an accident as a driver?			
	Yes	No	No but I was close to
Males	26	66	5
	(26.8%)*	(68.04%)	(5.15%)
Females	2	32	3
	(5.41%)	(86.49%)*	(8.11%)
Total	28	98	8
	(20.9%)	(73.13%)	(5.97%)

Table B1.8. Frequency distribution of respondents for item G1.21 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-23 What were the consequences?			
	Material damages	Personal injuries	Both
Males	17	1	10
	(73.91%)	(4.35%)	(43.48%)
Females	1	0	1
	(25.%)		(25.%)
Total	18	1	11
	(66.67%)	(3.7%)	(40.74%)

Table B1.9. Frequency distribution of respondents for item G1.23 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-24 Have you ever been involved in an accident as a passenger?			
	Yes	No	No but I was close to
Males	30	60	7
	(30.93%)*	(61.86%)	(7.22%)
Females	2	34	1
	(5.41%)	(91.89%)*	(2.7%)
Total	32	94	8
	(23.88%)	(70.15%)	(5.97%)

Table B1.10. Frequency distribution of respondents for item G1.24 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-26 What were the consequences?			
	Material damages	Personal injuries	Both
Males	21	2	10
	(63.64%)	(6.06%)	(30.3%)
Females	3	0	1
	(75.%)		(25.%)
Total	24	2	11
	(64.86%)	(5.41%)	(29.73%)

Table B1.11. Frequency distribution of respondents for item G1.26 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-27 Have you ever driven after drinking alcoholic drinks?		
	Yes	No
Males	25	72
	(25.77%)*	(74.23%)
Females	3	34
	(8.11%)	(91.89%)*
Total	28	106
	(20.9%)	(79.1%)

Table B1.12. Frequency distribution of respondents for item G1.27 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the road	9 (8.41%)	0	9 (5.66%)
You could hardly keep your head on straight	6 (5.61%)	0	6 (3.77%)
You had muscle cramps	3 (2.8%)	0	3 (1.89%)
You could hardly keep your eyes open	5 (4.67%)	0	5 (3.14%)
You got stomach cramps	2 (1.87%)	2 (3.85%)	4 (2.52%)
You could not focus on the road	12 (11.21%)*	1 (1.92%)	13 (8.18%)
Someone who was with you made you notice it	2 (1.87%)	0	2 (1.26%)

Table B1.13. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. ALCOHOL EFFECTS AWARE DRIVERS. People in this group have a very similar profile as those in the risky drivers group, with the exception that they are aware of the negative effects of driving after having drunk alcohol.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky drivers.
Figure B1.1 shows the profiles of the three groups of drivers on subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure B1.2). Also, the three groups do not differ in terms of how much angry their parents would be for their reckless driving (Figure B1.4). However, respondents in the alcohol aware and risky drivers groups feel more supported and encouraged in their reckless driving behaviour than respondents in the safe drivers group (Figure B1.3).

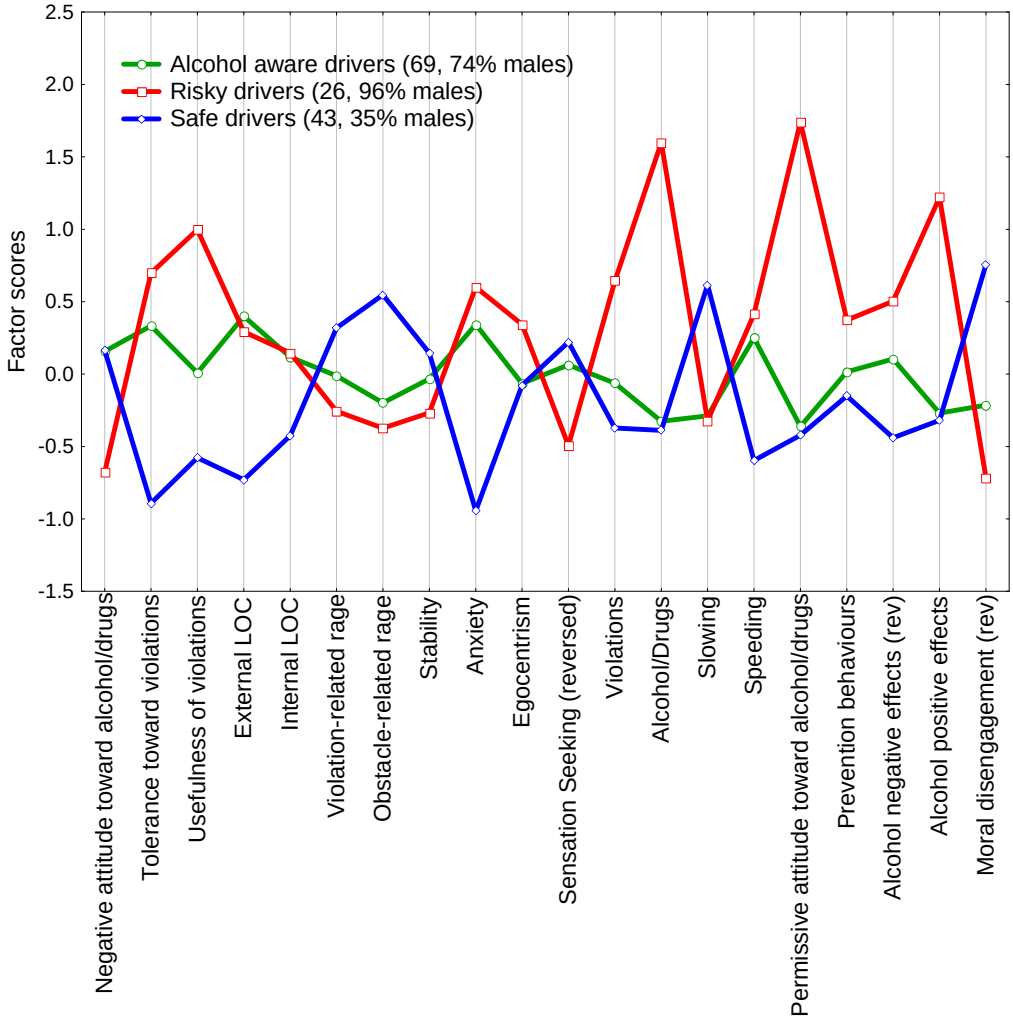


Figure B1.1. Average scores for each group on the subscales of the questionnaire.

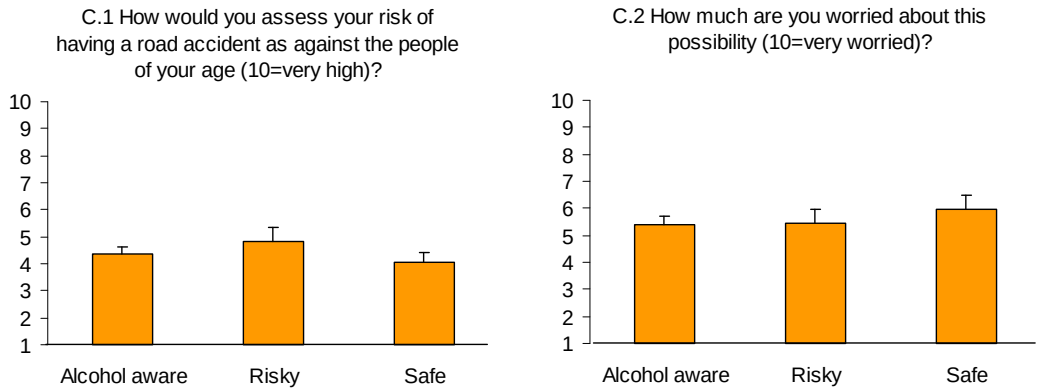


Figure B1.2. Average scores for each group on items concerning risk perception.

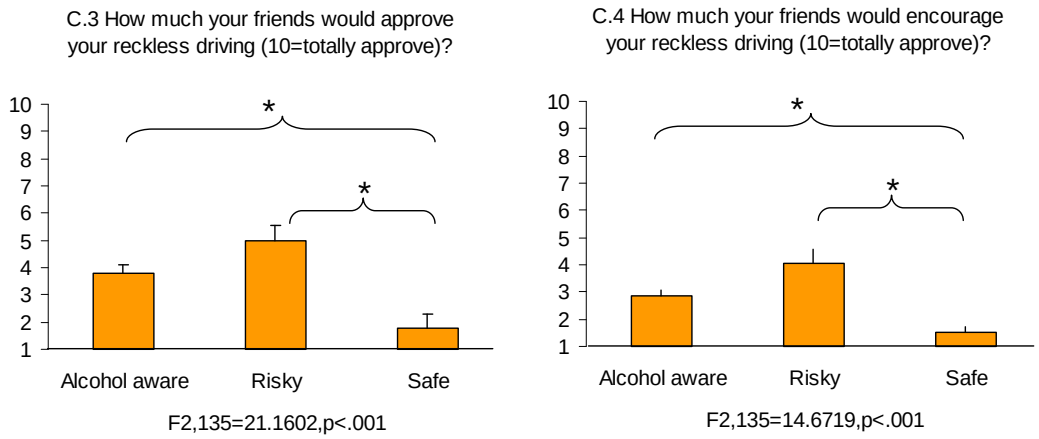


Figure B1.3. Average scores for each group on items concerning friends' attitude.

Figure B1.4. Average scores for each group on items concerning parents' attitude.

11.3. NON DRIVERS

11.3.1. Sample description

A total of 212 people answered the Section 3 of the questionnaire. Males were 111 (52.36% of the total sample) and females were 101 (47.6% of the total sample). Their mean age was 18.9 years (standard deviation 1.36), ranging between 17 and 25 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking and aggressive driving, and have more direct experiences of driving under the effect of alcohol.
2. ALCOHOL TOLERANT DRIVERS. People in this group have a very similar profile as those in the risky drivers group, with the exception that they are not aware of the negative effects of driving after having drunk alcohol.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the alcohol tolerant drivers.
Figure C1.1 shows the profiles of the three groups of drivers on subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure C1.2). However, respondents in the alcohol tolerant group feel to be supported and encouraged by their friends more than respondents in the other two groups (Figure C1.3). The same respondents consider their parents would not be angry at their driving behaviour more than the other respondents (Figure C1.4).

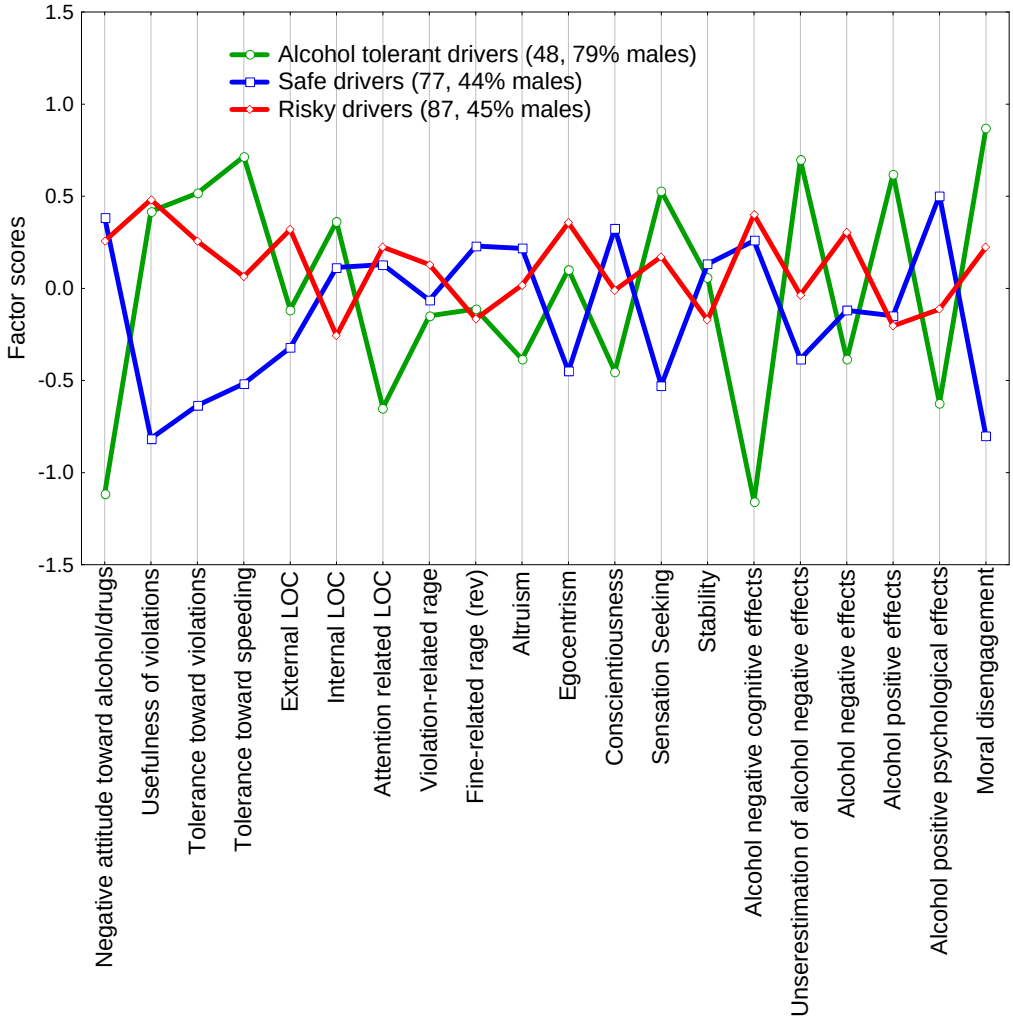


Figure C1.1. Average scores for each group on the subscales of the questionnaire.

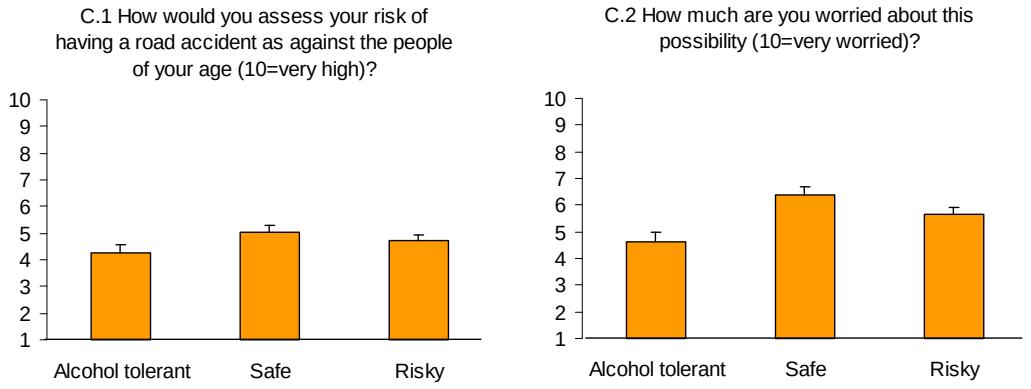


Figure C1.2. Average scores for each group on items concerning risk perception (* p<.001).

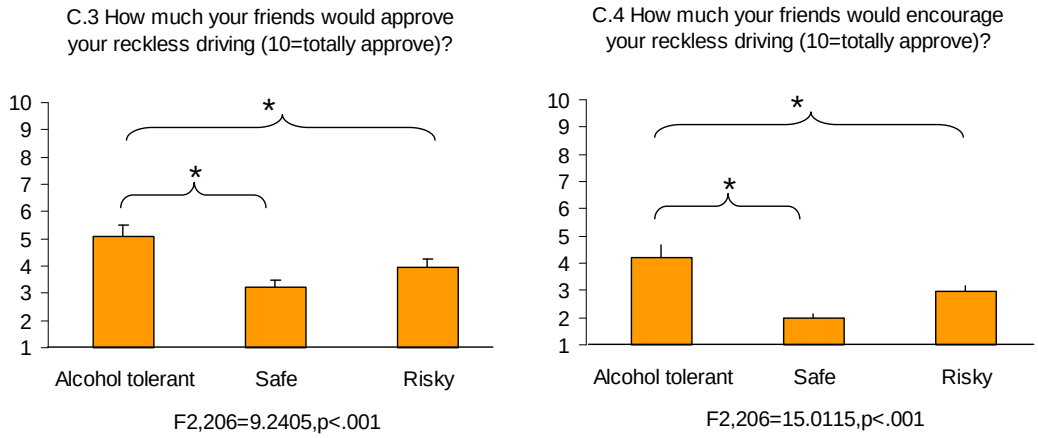


Figure C1.3. Average scores for each group on items concerning friends' attitude (* p<.001).

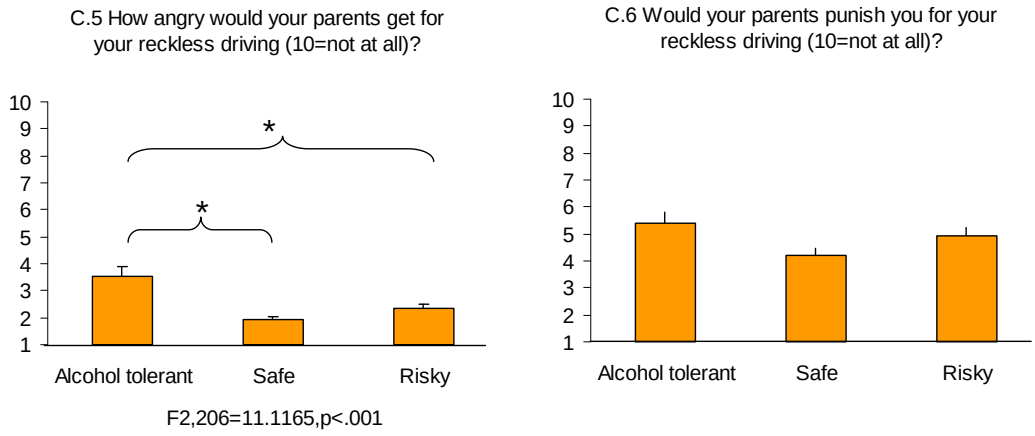


Figure C1.4. Average scores for each group on items concerning parents' attitude (* p<.001).

Chapter 12

Results from Slovakia

12.1. CAR DRIVERS

12.1.1. Sample description

A total of 338 people answered the Section 1 of the questionnaire. Males were 191 (56.5% of the total sample) and females were 147 (43.5% of the total sample). Their mean age was 19.3 years (standard deviation .09), ranging between 17 and 25 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

12.1.2. Driving habits

Tables D1.1 to D1.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. On average, about half of the respondents refer they own a car, but female drivers are far more likely to own a car than male drivers. All of the respondents, however, refer to use a car on a regular basis (the major part of them drive everyday, again with a prevalence of male drivers compared to female drivers), and for relatively long trips. Most respondents do not drive after midnight, though male drivers are more used at it than female drivers. Male drivers also refer to have received a traffic fine more often than female drivers, mostly for having parked where it was forbidden, and for speeding.
Virtually no respondent refer to drive after having drunk some alcohol (it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol).
Summarizing, young drivers from Slovakia seem to be characterized by being relatively frequent drivers, not experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	75 (39.27%)	116 (60.73%)*
Females	91 (61.9%)*	56 (38.1%)
Total	166 (49.11%)	172 (50.89%)

Table D1.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	3	17	20	16	53	6
	(2.61%)	(14.78%)	(17.39%)	(13.91%)	(46.09%)*	(5.22%)
Females	5	12	13	7	16	2
	(9.09%)	(21.82%)	(23.64%)	(12.73%)	(29.09%)	(3.64%)
Total	8	29	33	23	69	8
	(4.71%)	(17.06%)	(19.41%)	(13.53%)	(40.59%)	(4.71%)

Table D1.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	5	15	15	27	53
	(4.35%)	(13.04%)	(13.04%)	(23.48%)	(46.09%)*
Females	10	7	14	14	10
	(18.18%)*	(12.73%)	(25.45%)*	(25.45%)	(18.18%)
Total	15	22	29	41	63
	(8.82%)	(12.94%)	(17.06%)	(24.12%)	(37.06%)

Table D1.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	43	37	20	15
	(37.39%)	(32.17%)	(17.39%)	(13.04%)*
Females	36	14	4	1
	(65.45%)*	(25.45%)	(7.27%)	(1.82%)
Total	79	51	24	16
	(46.47%)	(30.%)	(14.12%)	(9.41%)

Table D1.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	43	26	21	25
	(37.39%)	(22.61%)	(18.26%)	(21.74%)
Females	26	18	5	6
	(47.27%)	(32.73%)	(9.09%)	(10.91%)
Total	69	44	26	31
	(40.59%)	(25.88%)	(15.29%)	(18.24%)

Table D1.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	No	Yes
Males	75 (65.22%)	40 (34.78%)*
Females	50 (90.91%)*	5 (9.09%)
Total	125 (73.53%)	45 (26.47%)

Table D1.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
No parking	11 (5.76%)*	2 (1.36%)	13 (3.85%)
Running a red light	5 (2.62%)	0	5 (1.48%)
Running a stop sign	7 (3.66%)	3 (2.04%)	10 (2.96%)
Speeding	14 (7.33%)*	3 (2.04%)	17 (5.03%)
Drunk driving	3 (1.57%)	0	3 (.89%)
Lack of seatbels use	8 (4.19%)	2 (1.36%)	10 (2.96%)

Table D1.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	94 (81.74%)	9 (7.83%)	4 (3.48%)	5 (4.35%)	0	3 (2.61%)
Females	53 (96.36%)*	1 (1.82%)	0	1 (1.82%)	0	0
Total	147 (86.47%)	10 (5.88%)	4 (2.35%)	6 (3.53%)	0	3 (1.76%)

Table D1.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	2 (1.05%)	0	2 (.59%)
You could hardly keep your head on straight	2 (1.05%)	0	2 (.59%)
You had muscle cramps	1 (.52%)	0	1 (.3%)
You could hardly keep your eyes open	1 (.52%)	0	1 (.3%)
You got stomach cramps	1 (.52%)	0	1 (.3%)
You could not focus on the road	3 (1.57%)	0	3 (.89%)
Someone who was with you made you notice it	3 (1.57%)	0	3 (.89%)

Table D1.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. ANXIOUS DRIVERS. People in the second group are characterized by being similar, to a certain extent, to the safe drivers, with the most notable exception that they have rather high scores on anxiety and rage subscales. Interestingly, they are especially intolerant toward speeding.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky and overconfident drivers.
Figure D1.1 shows the profiles of the three groups of drivers on the questionnaire subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident (Figure D1.2). Similarly, the three groups of respondents do not differ in term of perception of friends' support and encouragement for their reckless driving behaviour (Figure D1.3). Instead, respondents in the risky driver group think their parents would punish them for their reckless driving behaviour less than respondents in the other two groups (Figure D1.4).

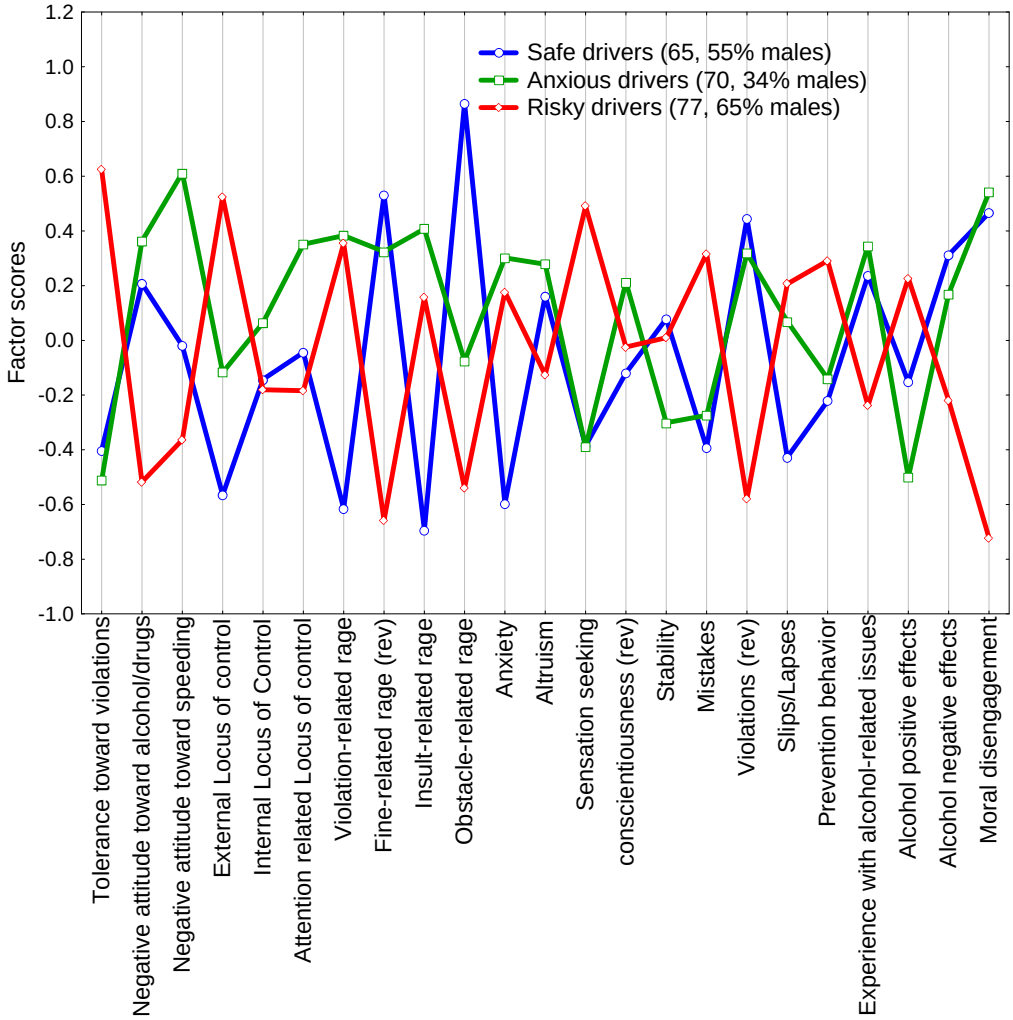


Figure D1.1. Average scores for each group on selected subscales of the questionnaire.

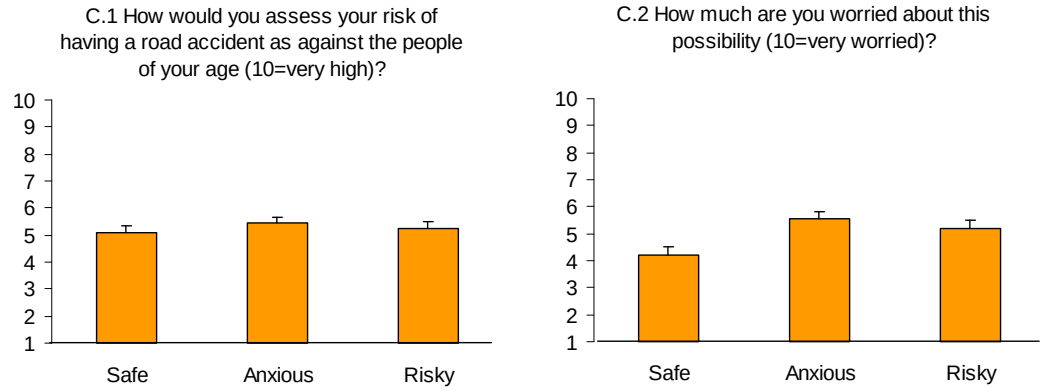


Figure D1.2. Average scores for each group on items concerning risk perception (* p<.001).

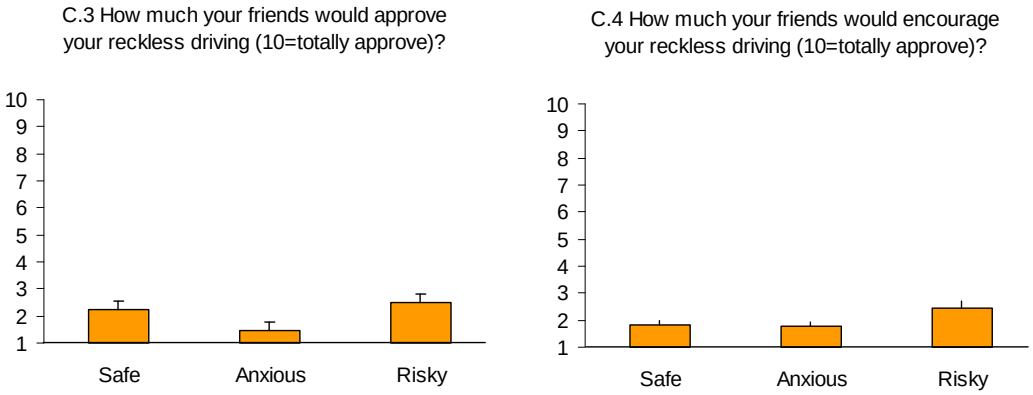


Figure D1.3. Average scores for each group on items concerning friends' attitude (* p<.001).

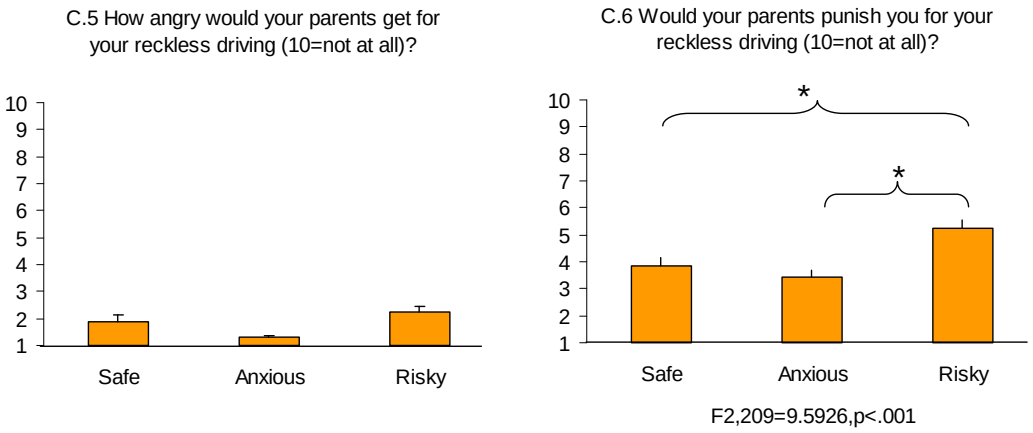


Figure D1.4. Average scores for each group on items concerning parents' attitude (* p<.001).

12.2. SCOOTER RIDERS

12.2.1. Sample description

A total of 175 people answered the Section 2 of the questionnaire. Males were 83 (47.4% of the total sample) and females were 92 (52.6% of the total sample). Their mean age was 18.6 years (standard deviation 1.59), ranging between 16 and 21 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

12.2.2. Driving habits

Tables E1.1 to E1.13 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Most scooter drivers from Slovakia refer to use scooters or motorbikes not very often (only about 15% everyday). Their use of scooters is characterized by being very variable in term of number of kilometres travelled, from only few to more than 100 kilometres. Interestingly, male drivers refer to drive after 11.00 pm not very often (less than 50% of them drive after 11:00 pm more than 2 times a week), where female drivers are far less likely to drive during night hours (about 54% of them do not drive after 11:00 pm at all). Scooter drivers also are not normally used to go on as passengers. Male drivers also refer to have received a traffic fine more often than female drivers, mostly for driving without the helmet and speeding. Interestingly, scooter drivers refer not to have been involved in accidents both as drivers or passengers very often, and they refer to have had only material damages.
Less than half the sample (about 21% of the total sample) states that they have driven after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol). However, very few of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially difficulties on follow the road. This might suggest that a consistent number of young drivers are still unaware of the negative effects of driving under the effects of alcohol.
Summarizing, young scooter drivers from Slovakia seem to be characterized by not being regular drivers, not very experienced of driving during night hours (especially female drivers), and not very aware of the dangers associated with driving under the effects of alcohol.

	G1-6 How many times a week do you use a scooter?					
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	3	12	9	5	8	5
	(7.14%)	(28.57%)	(21.43%)	(11.9%)	(19.05%)	(11.9%)
Females	4	8	3	2	2	5
	(16.67%)	(33.33%)	(12.5%)	(8.33%)	(8.33%)	(20.83%)
Total	7	20	12	7	10	10
	(10.61%)	(30.3%)	(18.18%)	(10.61%)	(15.15%)	(15.15%)

Table E1.1. Frequency distribution of respondents for item G1.6 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-7 How many kilometres do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	8	11	5	12	6
	(19.05%)	(26.19%)	(11.9%)	(28.57%)	(14.29%)
Females	8	5	5	4	2
	(33.33%)	(20.83%)	(20.83%)	(16.67%)	(8.33%)
Total	16	16	10	16	8
	(24.24%)	(24.24%)	(15.15%)	(24.24%)	(12.12%)

Table E1.2. Frequency distribution of respondents for item G1.7 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-8 In the last three months, how many times have you driven after 11:00 pm?				
	Never	1-2 times	2-4 times	More than 4 times
Males	19	9	4	10
	(45.24%)	(21.43%)	(9.52%)	(23.81%)
Females	13	3	2	6
	(54.17%)	(12.5%)	(8.33%)	(25.%)
Total	32	12	6	16
	(48.48%)	(18.18%)	(9.09%)	(24.24%)

Table E1.3. Frequency distribution of respondents for item G1.8 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-9 How often in a week do you go on a scooter sitting behind?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the week end
Males	20	16	4	1	0	1
	(47.62%)	(38.1%)	(9.52%)	(2.38%)		(2.38%)
Females	6	16	1	0	1	0
	(25.%)	(66.67%)*	(4.17%)		(4.17%)	
Total	26	32	5	1	1	1
	(39.39%)	(48.48%)	(7.58%)	(1.52%)	(1.52%)	(1.52%)

Table E1.4. Frequency distribution of respondents for item G1.9 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-10 In the last three months how often you accepted a lift on a scooter after 11 pm?				
	Never	1-2 times a month	2-4 times in a month	More than 4 times in a month
Males	37	3	0	2
	(88.1%)	(7.14%)		(4.76%)
Females	18	4	1	1
	(75.%)	(16.67%)	(4.17%)	(4.17%)
Total	55	7	1	3
	(83.33%)	(10.61%)	(1.52%)	(4.55%)

Table E1.5. Frequency distribution of respondents for item G1.10 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-11 Have you ever been fined?		
	Yes	No
Males	9	33
	(21.43%)	(78.57%)
Females	1	23
	(4.17%)	(95.83%)
Total	10	56
	(15.15%)	(84.85%)

Table E1.6. Frequency distribution of respondents for item G1.11 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
Running a stop sign	1	0	1
	(1.2%)		(.57%)
Running a red light	1	0	1
	(1.2%)		(.57%)
No parking	1	0	1
	(1.2%)		(.57%)
Passenger	1	0	1
	(1.2%)		(.57%)
Drunk driving	0	0	0
Driving without the helmet	3	0	3
	(3.61%)		(1.71%)
Speeding	2	1	3
	(2.41%)	(1.09%)	(1.71%)

Table E1.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-21 Have you ever been involved in an accident as a driver?			
	Yes	No	No but I was close to
Males	7	27	8
	(16.67%)	(64.29%)	(19.05%)
Females	2	21	1
	(8.33%)	(87.5%)*	(4.17%)
Total	9	48	9
	(13.64%)	(72.73%)	(13.64%)

Table E1.8. Frequency distribution of respondents for item G1.21 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-23 What were the consequences?			
	Material damages	Personal injuries	Both
Males	6 (42.86%)	0	1 (7.14%)
Females	3 (75.%)	0	0
Total	9 (50.%)	0	1 (5.56%)

Table E1.9. Frequency distribution of respondents for item G1.23 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-24 Have you ever been involved in an accident as a passenger?			
	Yes	No	No but I was close to
Males	12 (28.57%)	24 (57.14%)	6 (14.29%)
Females	4 (16.67%)	17 (70.83%)	3 (12.5%)
Total	16 (24.24%)	41 (62.12%)	9 (13.64%)

Table E1.10. Frequency distribution of respondents for item G1.24 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-26 What were the consequences?			
	Material damages	Personal injuries	Both
Males	9 (69.23%)	3 (23.08%)	1 (7.69%)
Females	4 (100.%)	0	0
Total	13 (76.47%)	3 (17.65%)	1 (5.88%)

Table E1.11. Frequency distribution of respondents for item G1.26 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-27 Have you ever driven after drinking alcoholic drinks?		
	Yes	No
Males	7 (16.67%)	35 (83.33%)
Females	0	24 (100.%)
Total	28 (20.9%)	106 (79.1%)

Table E1.12. Frequency distribution of respondents for item G1.27 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the road	2 (2.41%)	0	2 (1.14%)
You could hardly keep your head on straight	0	0	0
You had muscle cramps	0	0	0
You could hardly keep your eyes open	0	0	0
You got stomach cramps	1 (1.2%)	0	1 (.57%)
You could not focus on the road	0	0	0
Someone who was with you made you notice it	0	0	0

Table E1.13. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. ANXIOUS DRIVERS. People in the second group are especially characterized by having higher scores on anxiety scale and on driving rage scales, both violation- and obstacle-related. However, they are not tolerant toward violations of the traffic rules. Similarly to the risky drivers, however, they show high scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky drivers.
Figure E1.1 shows the profiles of the three groups of drivers on selected subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident (Figure E1.2), or in terms of perception of parents' and friends' support and encouragement for their reckless driving behaviour (Figures E1.3 and E1.4).

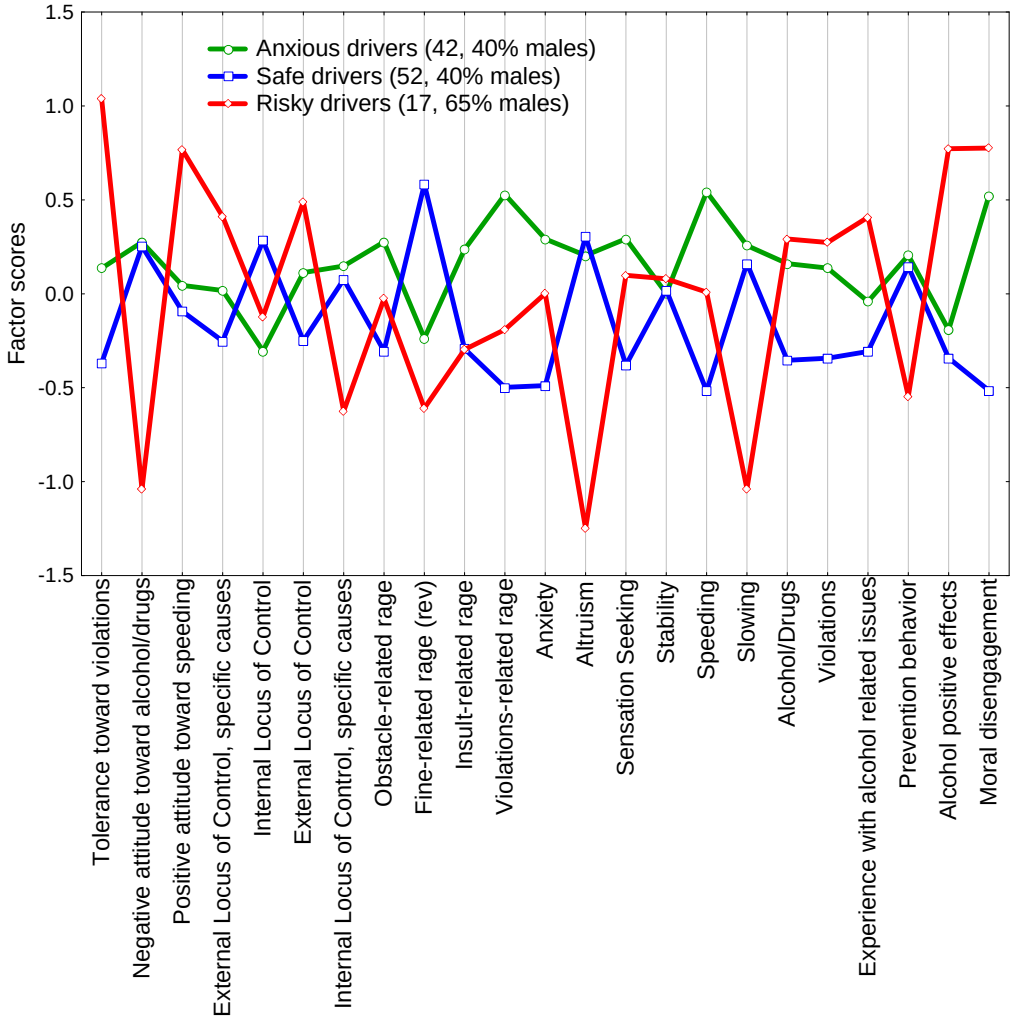
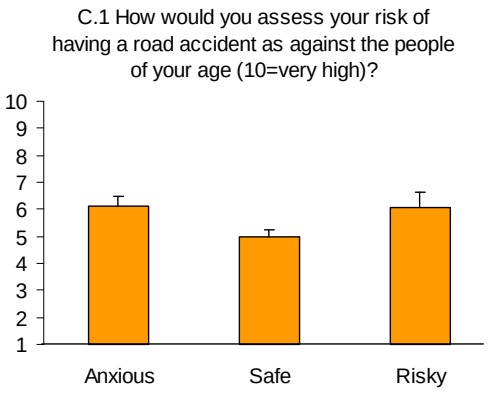


Figure E1.1. Average scores for each group on selected subscales of the questionnaire.



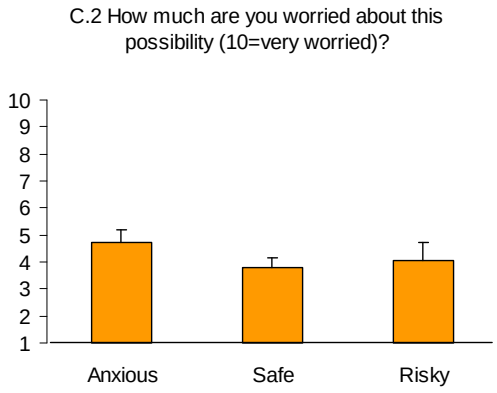
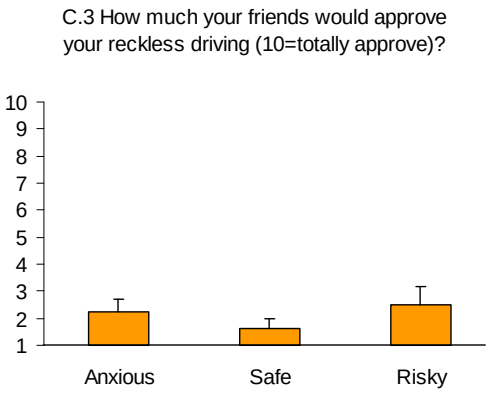


Figure E1.2. Average scores for each group on items concerning risk perception.



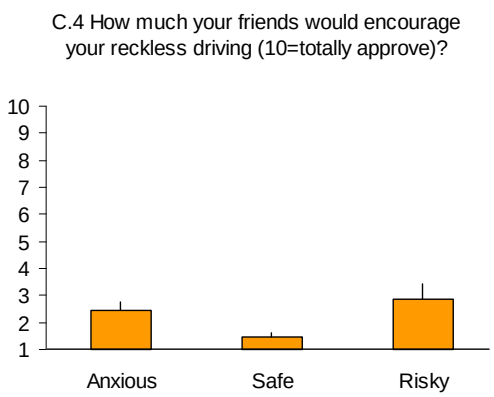
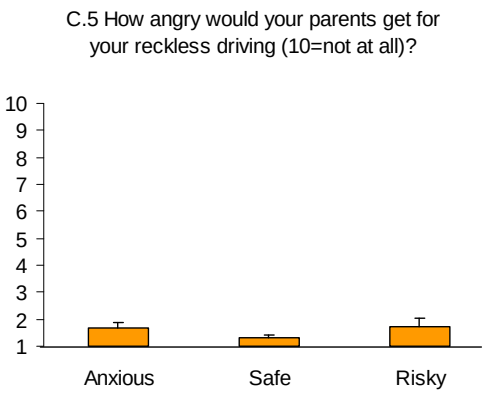


Figure E1.3. Average scores for each group on items concerning friends' attitude.



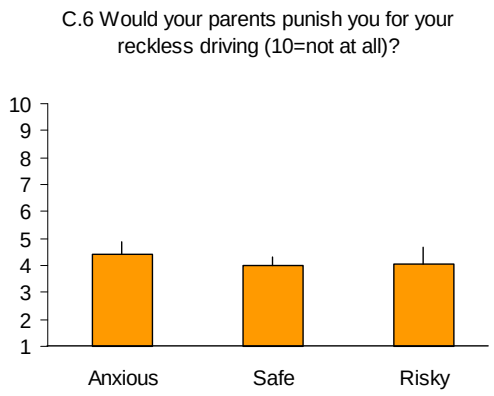


Figure E1.4. Average scores for each group on items concerning parents' attitude.

12.3. NON DRIVERS

12.3.1. Sample description

A total of 325 people answered the Section 3 of the questionnaire. Males were 147 (45.23% of the total sample) and females were 176 (54.15% of the total sample). Their mean age was 18.60 years (standard deviation 1.50), ranging between 17 and 24 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. ANGRY DRIVERS. People in the second group are especially characterized by having higher scores on the rage-related subscales being. Interestingly, compared to people in the other two groups they are characterized by an external Locus of Control rather than internal, meaning that they consider accidents as essentially due to external causes and factors. Furthermore, these people have rather high scores on the anxiety subscale. Similarly to the risky drivers, however, they show high scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky drivers.
Figure F1.1 shows the profiles of the three groups of drivers on the subscales.

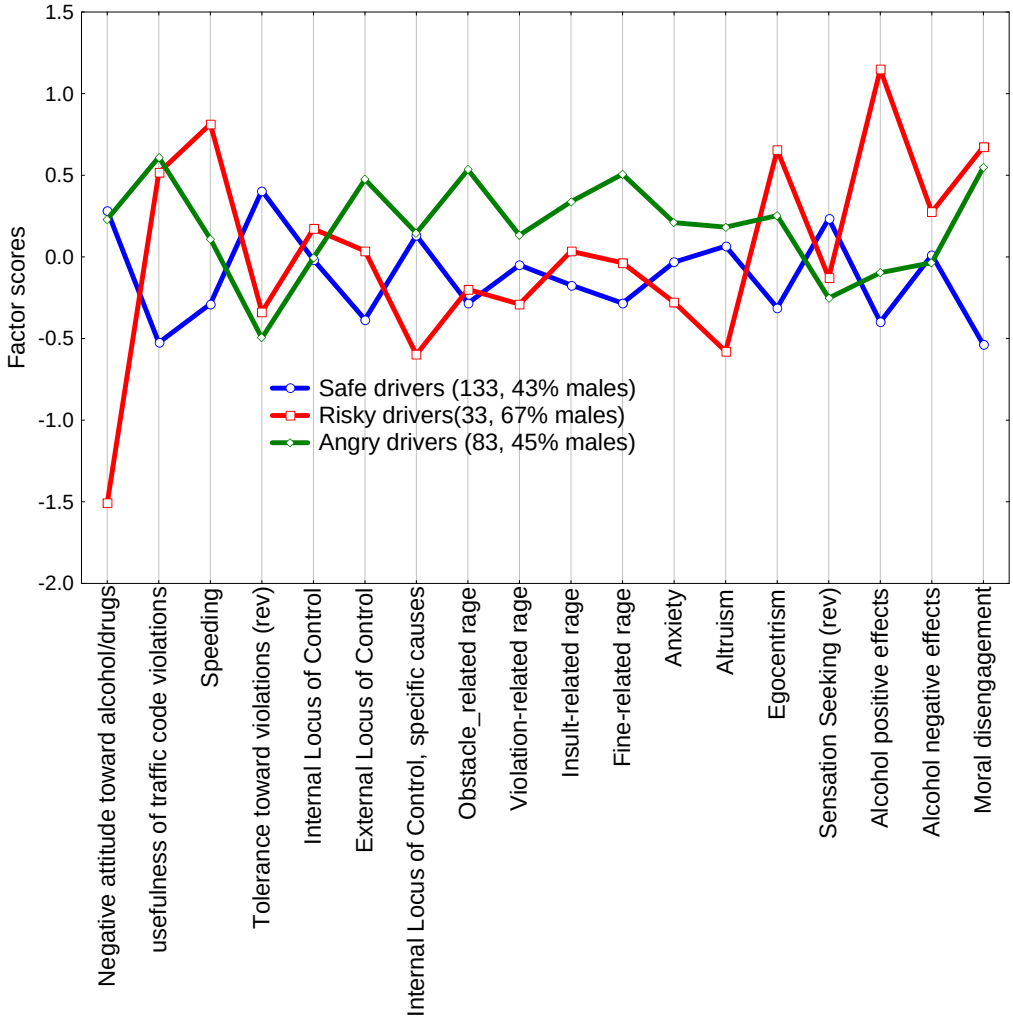


Figure F1.1. Average scores for each group on selected subscales of the questionnaire.

Chapter 13

Results from Slovenia

13.1. CAR DRIVERS

12.1.1. Sample description

A total of 538 people answered the Section 1 of the questionnaire. Males were 306 (56.9% of the total sample) and females were 232 (43.1% of the total sample). Their mean age was 19.0 years (standard deviation 1.03), ranging between 17 and 26 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

13.1.2. Driving habits

Tables G1.1 to G1.9 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Relatively few respondents from Slovenia own a car (about 34% of the respondents), independently of the gender. They however refer to use a car on a regular basis (many of them drive everyday, again without a prevalence of one gender), and for relatively long trips. Both male and female drivers refer to drive after midnight on relatively few occasions (about 69% of them drive after midnight less than 2 times a week). Male drivers also refer to have received a traffic fine more often than female drivers, mostly for speeding.
Most of the respondents refer not to drive after having drunk alcohol (and it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol).
Summarizing, Slovenian young drivers seem to be characterized by being frequent drivers, not very experienced of driving during night hours, and very aware of the dangers associated with driving under the effects of alcohol.

H-4 Do you own a car?		
	Yes	No
Males	101 (35.44%)	184 (64.56%)
Females	69 (31.8%)	148 (68.2%)
Total	170 (33.86%)	332 (66.14%)

Table G1.1. Frequency distribution of respondents for item H4 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-5 How many times a week do you use the car?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	5	49	65	51	118	9
	(1.68%)	(16.5%)	(21.89%)	(17.17%)	(39.73%)	(3.03%)
Females	3	47	54	36	77	7
	(1.34%)	(20.98%)	(24.11%)	(16.07%)	(34.38%)	(3.13%)
Total	8	96	119	87	195	16
	(1.54%)	(18.43%)	(22.84%)	(16.7%)	(37.43%)	(3.07%)

Table G1.2. Frequency distribution of respondents for item H5 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-6 How many kilometers do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	15	44	62	58	116
	(5.08%)	(14.92%)	(21.02%)	(19.66%)	(39.32%)*
Females	22	47	55	51	48
	(9.87%)*	(21.08%)	(24.66%)	(22.87%)	(21.52%)
Total	37	91	117	109	164
	(7.14%)	(17.57%)	(22.59%)	(21.04%)	(31.66%)

Table G1.3. Frequency distribution of respondents for item H6 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-7 In the last three months, how often have you driven for more that 2 hours uninterruptedly?				
	Never	1-2 times	2-4 times	More than 4 times
Males	106	93	55	36
	(36.55%)	(32.07%)	(18.97%)*	(12.41%)*
Females	107	69	27	14
	(49.31%)*	(31.8%)	(12.44%)	(6.45%)
Total	213	162	82	50
	(42.01%)	(31.95%)	(16.17%)	(9.86%)

Table G1.4. Frequency distribution of respondents for item H7 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-8 In the last three months, how often have you happened to drive between midnight and 5:00 in the morning?				
	Never	1-2 times	2-4 times	More than 4 times
Males	100	71	52	39
	(38.17%)	(27.1%)	(19.85%)	(14.89%)
Females	91	58	35	18
	(45.05%)	(28.71%)	(17.33%)	(8.91%)
Total	191	129	87	57
	(41.16%)	(27.8%)	(18.75%)	(12.28%)

Table G1.5. Frequency distribution of respondents for item H8 as a function of gender. * refers to significant differences (p<.001) between males and females.

H-9 Have you ever got a traffic fine?		
	Yes	No
Males	36 (12.2%)*	259 (87.8%)
Females	9 (4.%)	216 (96.%)*
Total	45 (8.65%)	475 (91.35%)

Table G1.6. Frequency distribution of respondents for item H9 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
No parking	11 (100.%)	2 (100.%)	13 (100.%)
Running a red light	4 (100.%)	1 (100.%)	5 (100.%)
Running a stop sign	4 (100.%)	0	4 (100.%)
Speeding	19 (100.%)	3 (100.%)	22 (100.%)
Drunk driving	2 (100.%)	0	2 (100.%)
Lack of seatbelts use	9 (100.%)	0	9 (100.%)

Table G1.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

H-18 Have you ever driven after drinking alcoholic drink?						
	Never					Often
Males	229 (78.69%)	37 (12.71%)	10 (3.44%)*	8 (2.75%)	3 (1.03%)	4 (1.37%)
Females	197 (87.95%)*	19 (8.48%)	1 (.45%)	5 (2.23%)	2 (.89%)	0
Total	426 (82.72%)	56 (10.87%)	11 (2.14%)	13 (2.52%)	5 (.97%)	4 (.78%)

Table G1.8. Frequency distribution of respondents for item H18 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the trajectory	6 (100.%)	2 (100.%)	8 (100.%)
You could hardly keep your head on straight	3 (100.%)	0	3 (100.%)
You had muscle cramps	0	0	0
You could hardly keep your eyes open	4 (100.%)	2 (100.%)	6 (100.%)
You got stomach cramps	1 (100.%)	1 (100.%)	2 (100.%)
You could not focus on the road	5 (100.%)	0	5 (100.%)
Someone who was with you made you notice it	0	3 (100.%)	3 (100.%)

Table G1.9. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. The first group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. OVERCONFIDENT DRIVERS. People in the second group are characterized by being rather overconfident on their abilities as drivers. Interestingly, compared to people in the other two groups they are characterized by an internal Locus of Control rather than external, meaning that they consider accidents as essentially due to drivers' errors and mistakes. However, they are tolerant toward violations of the traffic rules, significantly less anxious than the other groups, but they show higher levels of rage, both violation- and obstacle-related. Interestingly enough, differently from risky drivers, people in this group do not consider violations of the traffic code as useful for keeping traffic flowing. Similarly to the risky drivers, however, they show high scores on moral disengagement.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a slight (not significant) prevalence of males can be observed among the risky and overconfident drivers.
Figure G1.1 shows the profiles of the three groups of drivers on the subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident, or

on how much they are worried about this possibility (Figure G1.2). Also, respondents in the risky driver group perceive their parents as less angry for their reckless driving behaviour compared to the other two groups (Figure G1.4). Finally, respondents in the three groups differ in terms of how supportive and encouraging their friends are perceived, with the risky drivers rating their friends as more supportive and encouraging (Figure G1.3).

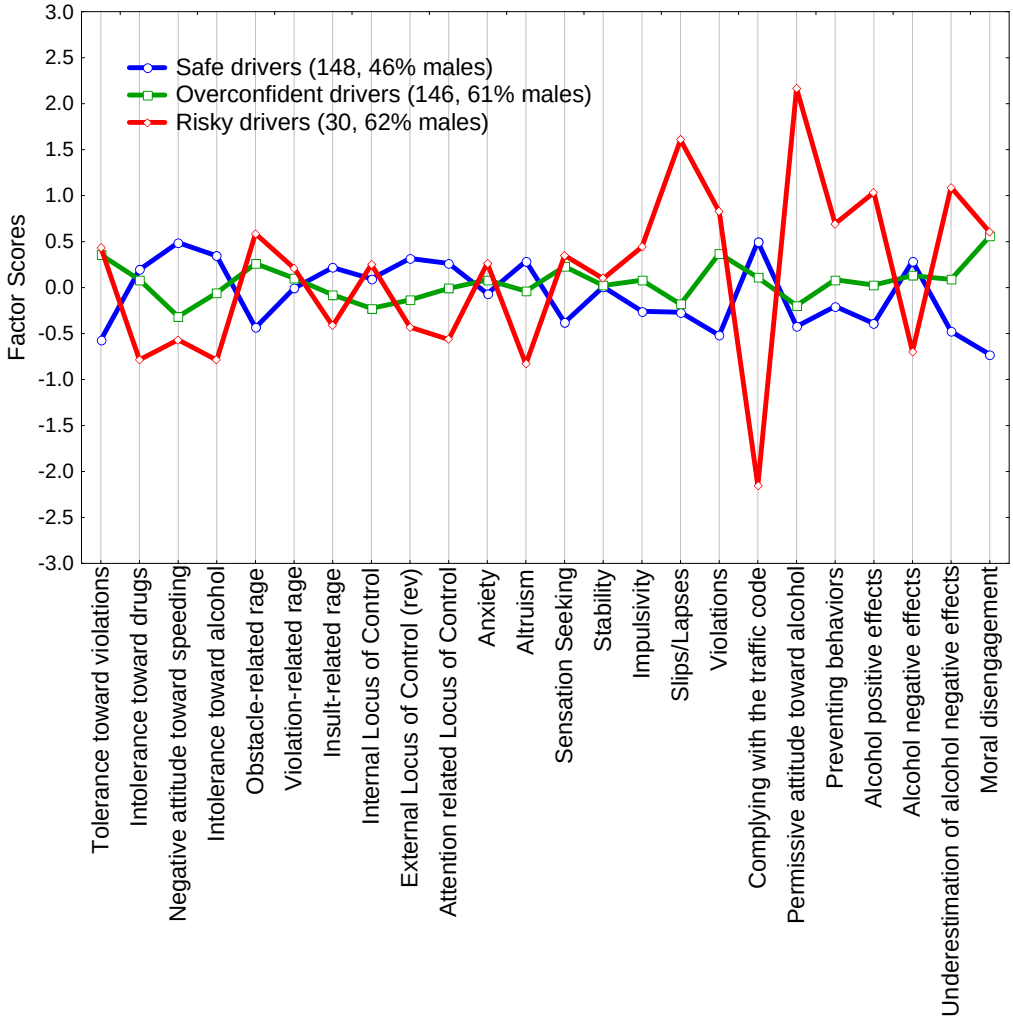


Figure G1.1. Average scores for each group on selected subscales of the questionnaire.

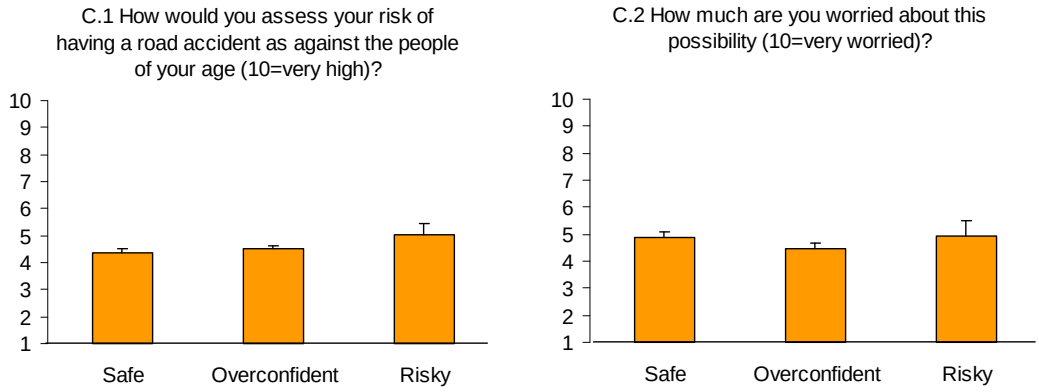


Figure G1.2. Average scores for each group on items concerning risk perception (* p<.001).

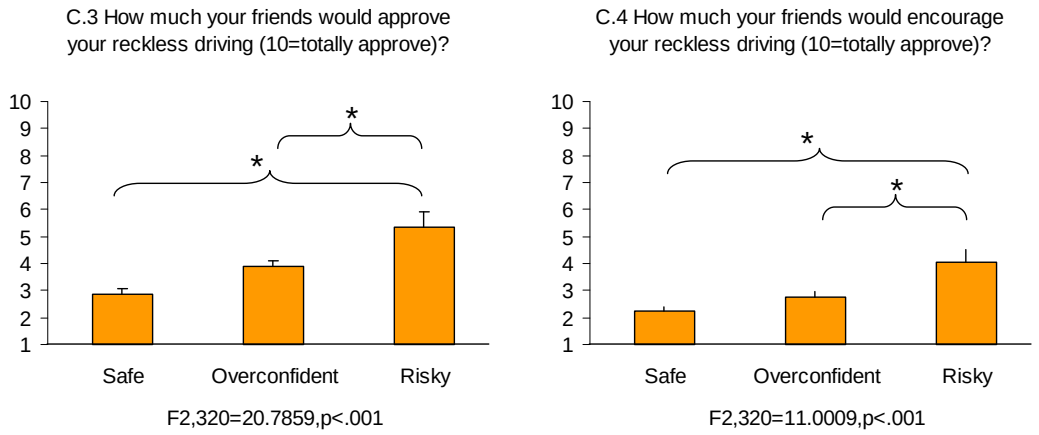


Figure G1.3. Average scores for each group on items concerning friends' attitude (* p<.001).

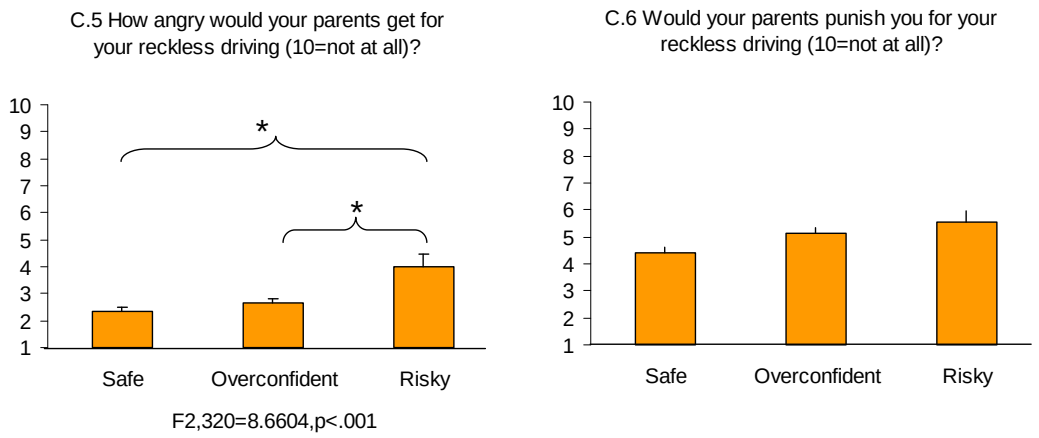


Figure G1.4. Average scores for each group on items concerning parents' attitude (* p<.001).

13.2. SCOOTER RIDERS

13.2.1. Sample description

A total of 188 people answered the Section 2 of the questionnaire. Males were 141 (75% of the total sample) and females were 47 (25% of the total sample). Their mean age was 18.2 years (standard deviation .89), ranging between 16 and 20 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

13.2.2. Driving habits

Tables H1.1 to H1.13 show the distribution as a function of gender of the answers to items concerning the driving habits and experiences. Most Slovenian scooter male drivers refer to use scooters or motorbikes relatively often (about 40% 5 or more times a week), whereas female drivers use a scooter on a very sparse base (about 45% of them use it 1 or 2 times a week). Their use of scooters is characterized by being very variable in term of number of kilometres travelled, from only few to more than 100 kilometres. Interestingly, male drivers refer to drive after 11.00 pm relatively not very often (less than 50% of them drive after 11:00 pm more than 2 times a week), where female drivers are far less likely to drive during night hours (about 70% of them do not drive after 11:00 pm at all). Slovenian scooter drivers also are not normally used to go on as passengers. Male drivers also refer to have received a traffic fine more often than female drivers, mostly for driving without the helmet and speeding. Interestingly, scooter drivers refer not to have been involved in accidents both as drivers or passengers very often, and usually they refer to have had only material damages.

More than half the male drivers sample states that they have driven after having drunk alcohol (though it must be noticed that the item do not refer to being drunk, but only to driving after having drunk some alcohol), whereas female drivers are far less likely to ride a scooter after having drunk alcohol. However, few of them refer of having recognized some of the symptoms associated with driving under the effects of alcohol, especially difficulties on keeping focused on the road. This might suggest that a number of young drivers are still unaware of the negative effects of driving under the effects of alcohol.

Summarizing, Slovenian young scooter drivers seem to be characterized by being regular drivers, not very experienced of driving during night hours (especially female drivers), and not very aware of the dangers associated with driving under the effects of alcohol.

	G1-6 How many times a week do you use a scooter?					
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend
Males	4	31	34	26	27	10
	(3.03%)	(23.48%)	(25.76%)	(19.7%)	(20.45%)*	(7.58%)
Females	7	12	13	6	3	3
	(15.91%)*	(27.27%)	(29.55%)	(13.64%)	(6.82%)	(6.82%)
Total	11	43	47	32	30	13
	(6.25%)	(24.43%)	(26.7%)	(18.18%)	(17.05%)	(7.39%)

Table H1.1. Frequency distribution of respondents for item G1.6 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-7 How many kilometres do you drive in a week?					
	1-10 Km	11-30 Km	31-50 Km	51-100 Km	More than 100 Km
Males	22	32	29	29	20
	(16.67%)	(24.24%)	(21.97%)	(21.97%)	(15.15%)
Females	15	10	11	4	3
	(34.88%)*	(23.26%)	(25.58%)	(9.3%)	(6.98%)
Total	37	42	40	33	23
	(21.14%)	(24.%)	(22.86%)	(18.86%)	(13.14%)

Table H1.2. Frequency distribution of respondents for item G1.7 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-8 In the last three months, how many times have you driven after 11:00 pm?				
	Never	1-2 times	2-4 times	More than 4 times
Males	41	51	18	21
	(31.3%)	(38.93%)*	(13.74%)	(16.03%)
Females	31	7	4	2
	(70.45%)*	(15.91%)	(9.09%)	(4.55%)
Total	72	58	22	23
	(41.14%)	(33.14%)	(12.57%)	(13.14%)

Table H1.3. Frequency distribution of respondents for item G1.8 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-9 How often in a week do you go on a scooter sitting behind?						
	Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the week end
Males	89	26	6	3	1	7
	(67.42%)	(19.7%)	(4.55%)	(2.27%)	(.76%)	(5.3%)
Females	28	11	3	1		1
	(63.64%)	(25.%)	(6.82%)	(2.27%)	0	(2.27%)
Total	117	37	9	4	1	8
	(66.48%)	(21.02%)	(5.11%)	(2.27%)	(.57%)	(4.55%)

Table H1.4. Frequency distribution of respondents for item G1.9 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-10 In the last three months how often you accepted a lift on a scooter after 11 pm?				
	Never	1-2 times a month	2-4 times in a month	More than 4 times in a month
Males	106	18	4	4
	(80.3%)	(13.64%)	(3.03%)	(3.03%)
Females	41	2		1
	(93.18%)*	(4.55%)	0	(2.27%)
Total	147	20	4	5
	(83.52%)	(11.36%)	(2.27%)	(2.84%)

Table H1.5. Frequency distribution of respondents for item G1.10 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-11 Have you ever been fined?		
	Yes	No
Males	25 (19.08%)*	106 (80.92%)
Females	1 (2.13%)	46 (97.87%)*
Total	26 (14.61%)	152 (85.39%)

Table H1.6. Frequency distribution of respondents for item G1.11 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	**Females**	**Total**
Running a stop sign	3 (100.%)	1 (100.%)	4 (100.%)
Running a red light	4 (100.%)	1 (100.%)	5 (100.%)
No parking	4 (100.%)	0	4 (100.%)
Passenger	0	0	0
Drunk driving	4 (100.%)	1 (100.%)	5 (100.%)
Driving without the helmet	9 (100.%)	1 (100.%)	10 (100.%)
Speeding	8 (100.%)	0	8 (100.%)

Table H1.7. Frequency distribution of respondents for kinds of violations as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-21 Have you ever been involved in an accident as a driver?			
	Yes	No	No but I was close to
Males	16 (12.31%)*	85 (65.38%)	29 (22.31%)
Females	1 (2.13%)	41 (87.23%)*	5 (10.64%)
Total	17 (9.6%)	126 (71.19%)	34 (19.21%)

Table H1.8. Frequency distribution of respondents for item G1.21 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-23 What were the consequences?			
	Material damages	Personal injuries	Both
Males		6	9
	0	(17.14%)	(25.71%)
Females			1
	0	0	(20.%)
Total		6	10
	0	(15.%)	(25.%)

Table H1.9. Frequency distribution of respondents for item G1.23 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-24 Have you ever been involved in an accident as a passenger?			
	Yes	No	No but I was close to
Males	28	78	21
	(22.05%)	(61.42%)	(16.54%)
Females	11	28	7
	(23.91%)	(60.87%)	(15.22%)
Total	39	106	28
	(22.54%)	(61.27%)	(16.18%)

Table H1.10. Frequency distribution of respondents for item G1.24 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-26 What were the consequences?			
	Material damages	Personal injuries	Both
Males	19	4	5
	(67.86%)	(14.29%)	(17.86%)
Females	8	1	2
	(72.73%)	(9.09%)	(18.18%)
Total	27	5	7
	(69.23%)	(12.82%)	(17.95%)

Table H1.11. Frequency distribution of respondents for item G1.26 as a function of gender. * refers to significant differences (p<.001) between males and females.

G1-27 Have you ever driven after drinking alcoholic drinks?		
	Yes	No
Males	66	59
	(52.8%)*	(47.2%)
Females	14	29
	(32.56%)	(67.44%)*
Total	80	88
	(47.62%)	(52.38%)

Table H1.12. Frequency distribution of respondents for item G1.27 as a function of gender. * refers to significant differences (p<.001) between males and females.

	Males	Females	Total
You could hardly follow the road	14 (100.%)	3 (100.%)	17 (100.%)
You could hardly keep your head on straight	2 (100.%)	3 (100.%)	5 (100.%)
You had muscle cramps	3 (100.%)	1 (100.%)	4 (100.%)
You could hardly keep your eyes open	8 (100.%)	4 (100.%)	12 (100.%)
You got stomach cramps	5 (100.%)	1 (100.%)	6 (100.%)
You could not focus on the road	11 (100.%)	3 (100.%)	14 (100.%)
Someone who was with you made you notice it	2 (100.%)	1 (100.%)	3 (100.%)

Table H1.13. Frequency distribution of respondents for alcohol effects as a function of gender. * refers to significant differences (p<.001) between males and females.

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. The first group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not that much aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving. They are also quite tolerant toward violations of the traffic code and speeding and, more interestingly, they see reasons why the traffic code should be violated, as such violations are useful to keep traffic flowing smoothly. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement.
2. ANGRY DRIVERS. People in this group are characterized by having high scores on the rage subscales. With regards to this subscales, indeed, they are not that different from the risky drivers, whereas they differ fro them on almost all the other subscales.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on external Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a slight (not significant) prevalence of males can be observed among the risky and angry drivers.
Figure H1.1 shows the profiles of the three groups of drivers on selected subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident, or on how much they are worried about this possibility (Figure H1.2). Also, respondents do not differ on how they rate their parents' reactions for their reckless driving behaviour (Figure H1.4). However, respondents in the three groups differ in terms of how supportive and encouraging their friends are perceived, with the risky drivers rating their friends as more supportive and encouraging (Figure H1.3).

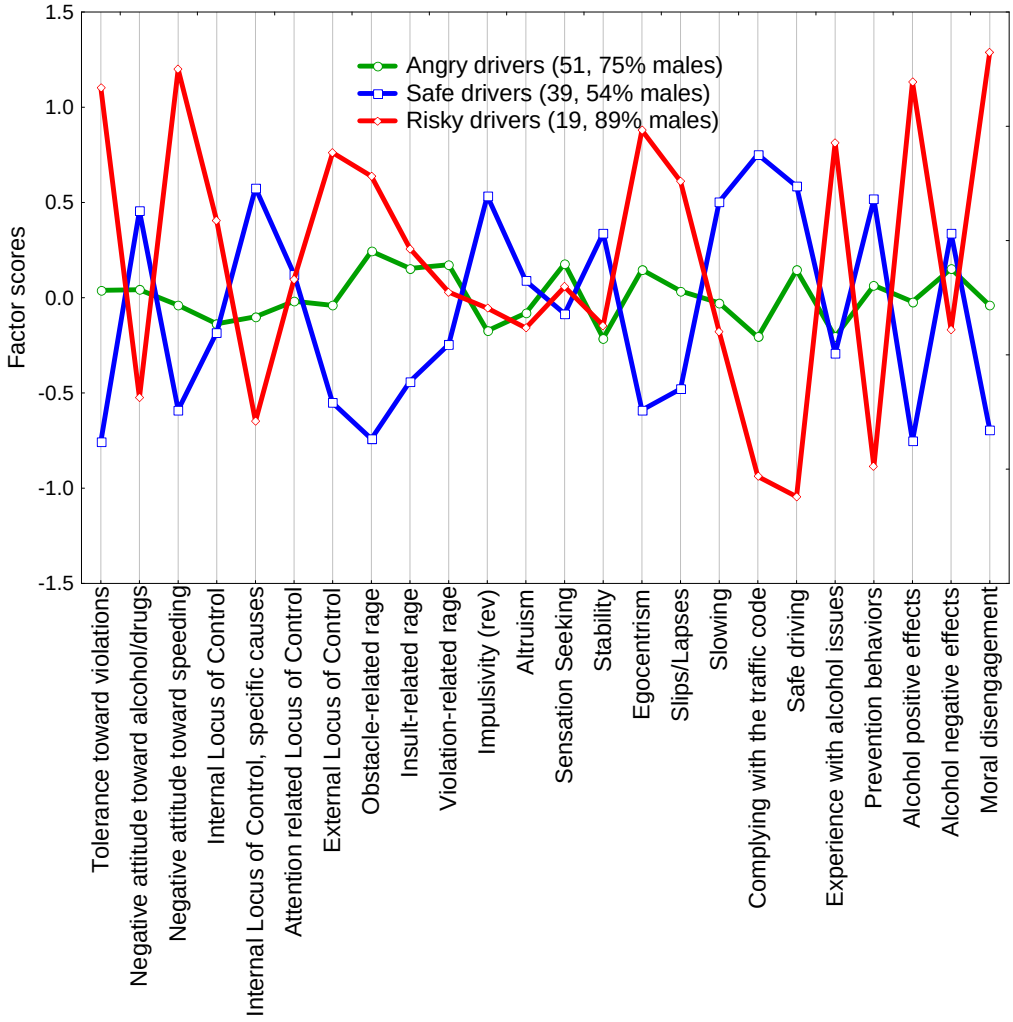


Figure H1.1. Average scores for each group on selected subscales of the questionnaire.

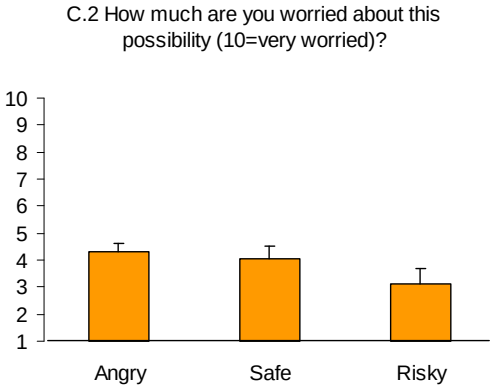
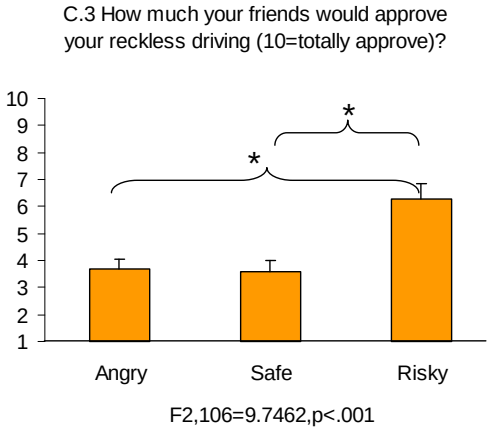


Figure H1.2. Average scores for each group on items concerning risk perception (* p<.001).



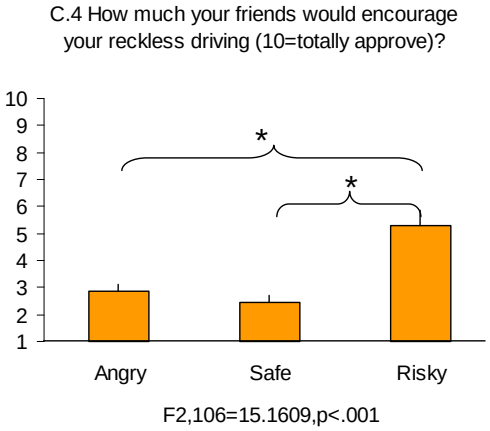


Figure H1.3. Average scores for each group on items concerning friends' attitude (* p<.001).

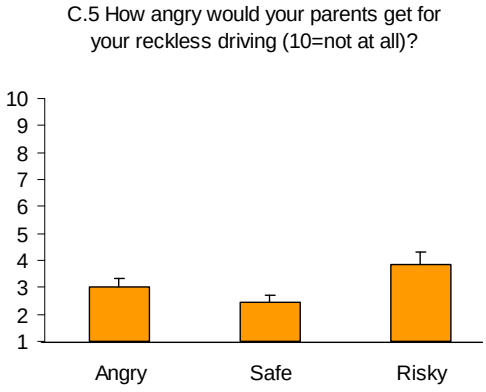


Figure H1.4. Average scores for each group on items concerning parents' attitude (* p<.001).

13.3. NON DRIVERS

13.3.1. Sample description

A total of 304 people answered the Section 3 of the questionnaire. Males were 125 (41.12% of the total sample) and females were 179 (58.88% of the total sample). Their mean age was 18.00years (standard deviation 0.66), ranging between 16 and 21 years. Age was no significantly different between males and females. Not all the respondents answered all the items of the questionnaire, thus each analysis was run on the largest sample available for that analysis (missing values were not estimated).

Results of the cluster analyses showed three separate groups of respondents.

1. RISKY DRIVERS. One group can be identified as composed of risky drivers. They have a permissive attitude toward driving under the effect of alcohol and recreational drugs, and are not aware of the negative effects of alcohol upon driving. They also refer not to have a correct behaviour during driving, and indeed they are quite tolerant toward violations of the traffic code and speeding. Furthermore, risky drivers have high scores on driving related rage, especially due to obstacles, and high scores on moral disengagement. Compared to safe drivers, risky drivers have higher scores on sensation seeking, impulsivity, and egocentrism, and are less aware of the negative effects of alcohol upon driving.
2. ANGRY/ANXIOUS DRIVERS. People in this group are characterized by having high scores on the rage subscales, and on anxiety. With regards to these subscales, indeed, they are not that different from the risky drivers, whereas they differ from them on almost all the other subscales.
3. SAFE DRIVERS. Safe drivers are instead characterized by being not tolerant toward driving under the effects of alcohol and drugs, toward violations of traffic rules and speeding. Safe drivers have a rather high score on attention-related Locus of Control, and show intermediate levels of anxiety. They are also aware o the alcohol negative effects upon driving, and do not feel rage during driving. People in the safe drivers group show low scores on moral disengagement.

Interestingly, the three groups do not differ in terms of age or gender, though a prevalence of males can be observed among the risky drivers.
Figure I1.1 shows the profiles of the three groups of drivers on subscales. The three groups do not differ in terms of their perception of risk of being involved in an accident and of how much they worry about this possibility (Figure I1.2). However, respondents in the risky drivers group feel to be supported and encouraged by their friends more than respondents in the other two groups (Figure I1.3). The same respondents consider their parents would not be angry at their driving behaviour more than the other respondents (Figure I1.4).

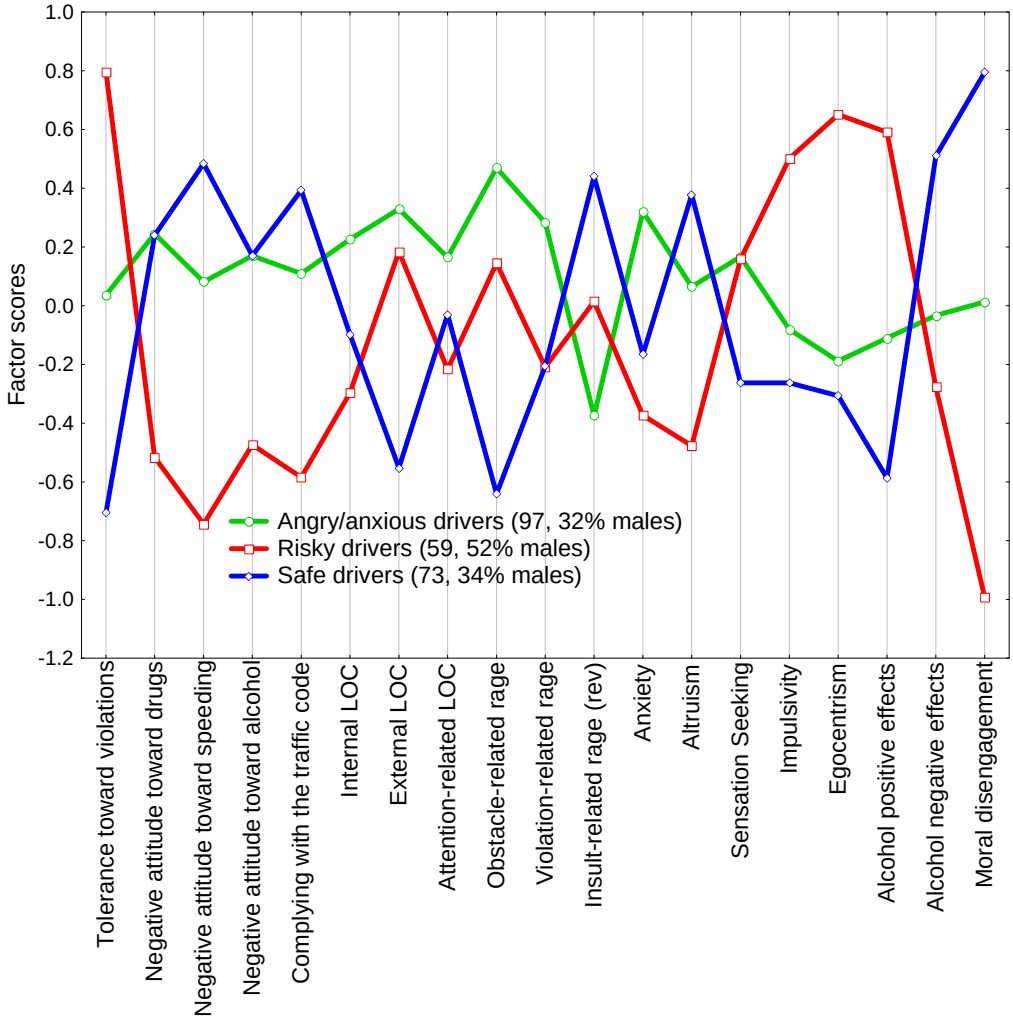


Figure I1.1. Average scores for each group on the subscales of the questionnaire.

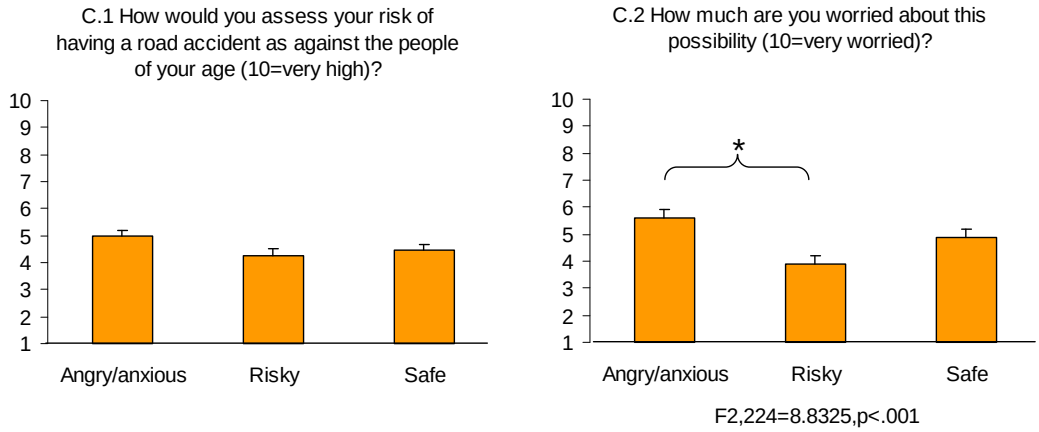


Figure I1.2. Average scores for each group on items concerning risk perception.

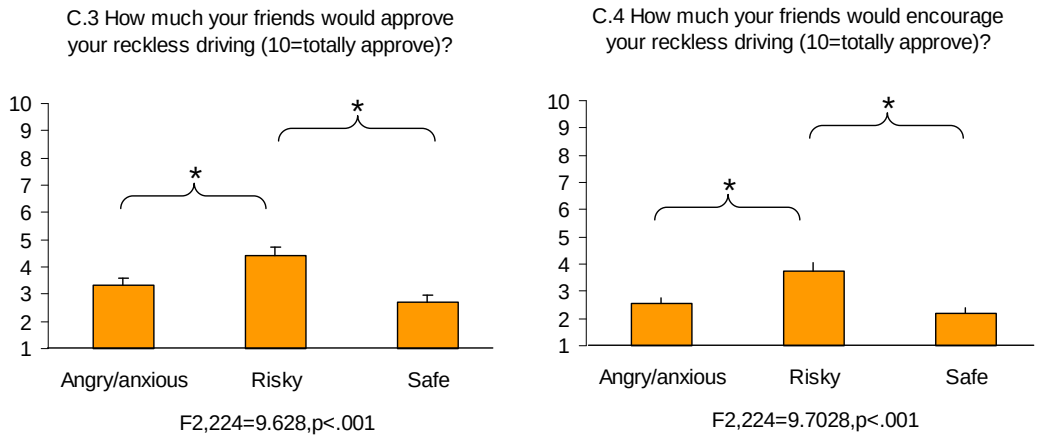


Figure I1.3. Average scores for each group on items concerning friends' attitude.

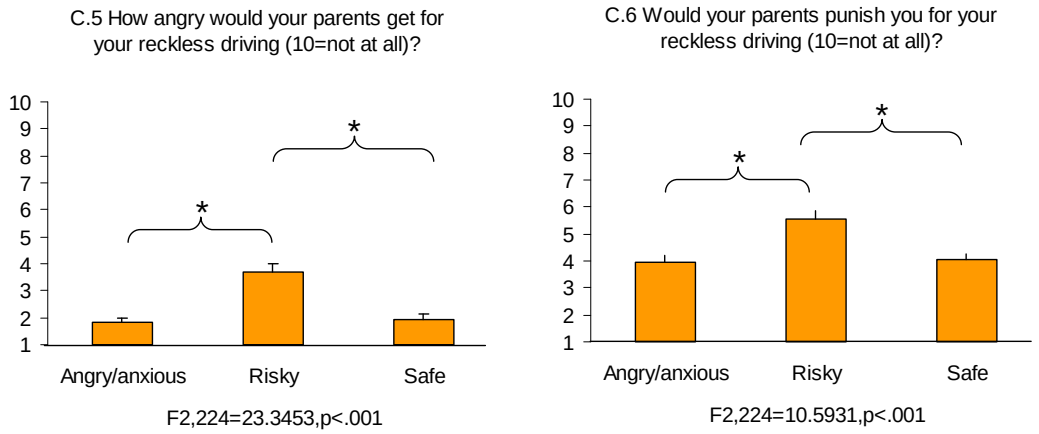


Figure I1.4. Average scores for each group on items concerning parents' attitude.

Part 3
Road safety education programs

Chapter 1

Report on road safety education

One of the aims of ICARUS Project was to compare programs of road safety education amongst European Countries. For this purpose a questionnaire (see Appendix 2) on the topic was designed, realized and distributed to Traffic Police Forces of several European Countries, including those who choose not to participate in the research phase.
Eighteen questionnaires were filled from the following Countries: Austria, Bulgaria, Cyprus, Denmark, Estonia, France, Germany, Hellas, Ireland, Italy, Lithuania, Malta, Poland, Slovakia, Slovenia, Spain, Sweden, Switzerland.
In this chapter will be presented the results of the questionnaire that are helpful in framing a picture of several aspects of road safety Education in Europe, including; institutions involved, training methodology, self evaluation and future directions hoped.

3.1. Road safety education in Europe: Actors and topics

From the answers to a first group of questions it is possible to outline how is road safety education organized in the majority of the European Countries, that took part in this part of the research. Schools, driving schools and Police forces are the institutions mainly involved in road safety education, with the involvement of teachers, professionals in the sector (*e.g.*: driving instructors), and Police Officers (Figure 1 and 2).

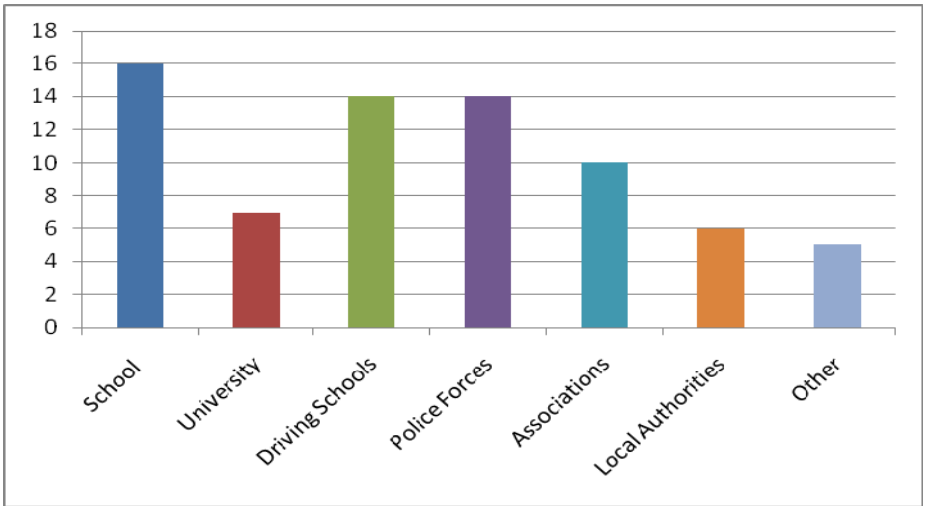


Figure 1. Frequencies of item selected for Question N.1: "*In your country, which institutions or organisations are responsible for providing education in road safety*?"

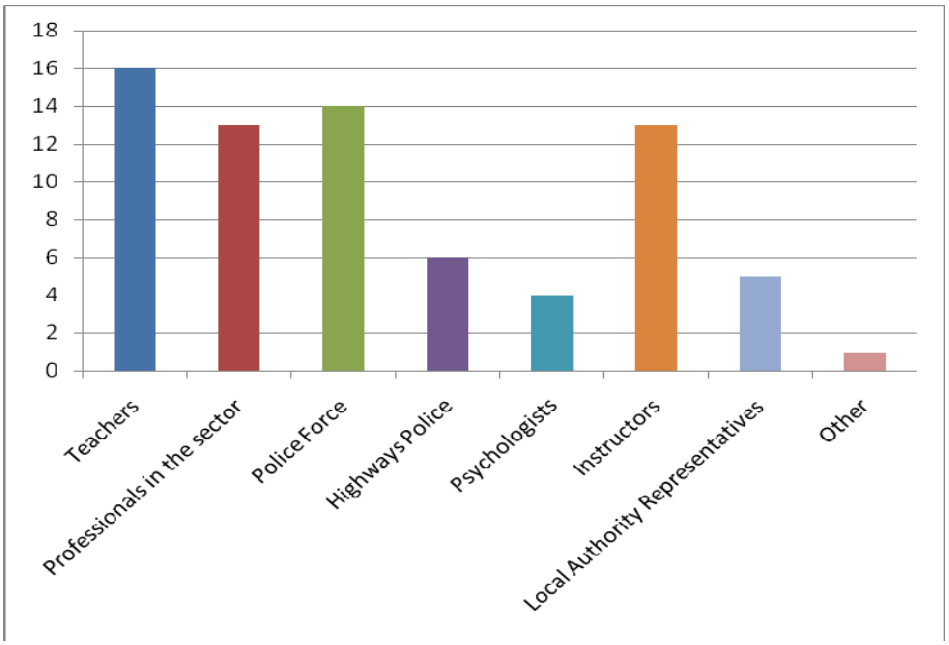


Figure 2. Frequencies of item selected for Question n. 2: "*Which professional figures are responsible for providing education in road safety?"*

In most of the Countries road safety education starts very early (age 3-11 years), and in many Countries (not in all of them, however) it is part of the regular school curriculum (Figure 3 and 4).

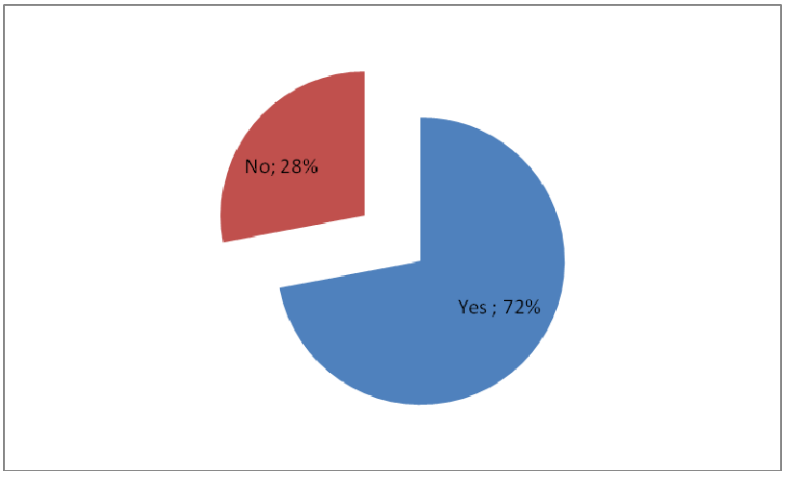


Figure 3. Percentage frequencies of answers to Question n. 3:*"Is road safety part of the school curriculum in your country?"*

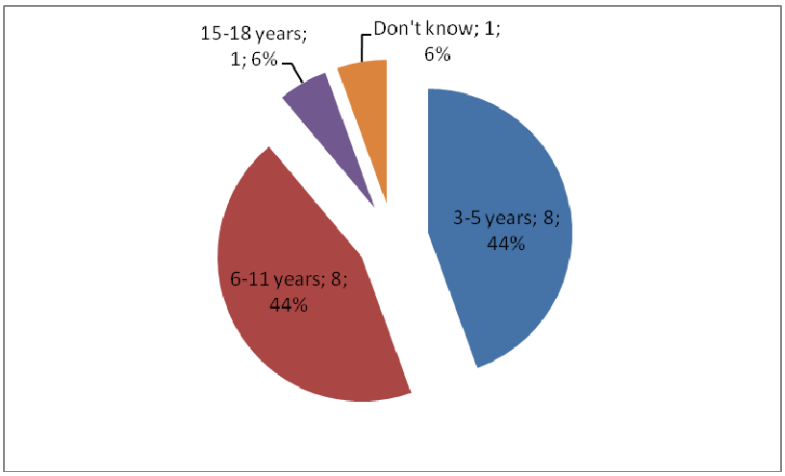


Figure 4. Frequencies and percentage frequencies of answers to Question n. 4: *"At what age does road safety education begin?"*

Training is focused on behavioral and regulatory aspects, but a very important cultural change is happening in the European Union: indeed, more and more attention is given on the personal conduct of the drivers, on the respect of rules as a way of moral and responsible driving (Figure 5).

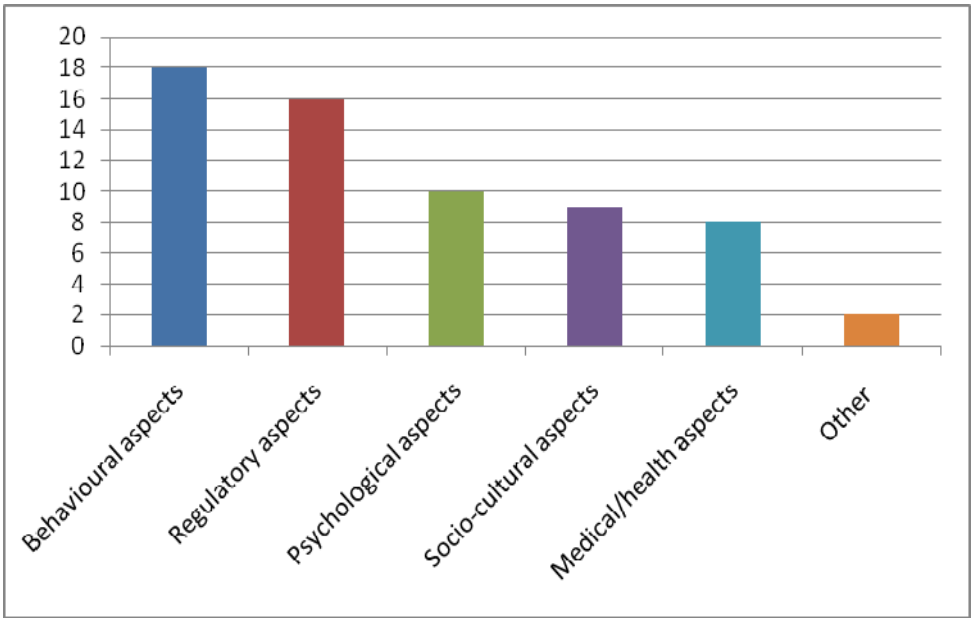


Figure 5. Frequencies of selected answers to Question n. 6: "*Which aspects of road safety are usually considered to be important in the education provided in your country? (you may select more than one answer)*

The answers to the open question N.7 summarizes most of the aspects described with the previous figures, highlightening, besides, what is considered relevant in each Country (Table 1).

Germany	At first this belongs on the age of the pupils. We start in (kinder garten) nursery school and primary school with aspects of a safety way to school and the "basics" of right behaviour in traffic. At the end of primary school (about 10 years old) we train all children going by bicycle. There are theoretic lessons in school (teachers) and practical training (about five times; police officers). Also we are present in the further education with other themes like way to school a way to move, bus-school, alcohol, drugs, dangerous behaviour in groups and so on. In attach you will find e.g. the regulation to do preventive measures from the police of Baden-Württemberg. The other states of Germany have nearly the same regulations.
Austria	Blame and consequences
Bulgaria	Road safety, automobile construction, practical training for automotive service and repair
Slovenia	Driving schools. Police force. Council for the prevention and education in road safety.
Cyprus	The subjects usually considered to be important in road safety education are driving under the influence of alcohol-drugs, speeding, seat-belts and helmets.
Poland	Technical exercises, Physical education, Education for safety.
Estonia	Regulatory aspects and behavioural aspects. More information on the web: http://www.mnt.ee/atp/?id=464 http://www.mnt.ee/atp/failid/MNT_aastaraamat2009_eng.pdf Side 64
Lithuania	Education of children. It's important indeed to train a child and to form his safe behaviour habits. Total public education. Education, training and forming the habits of safe behaviour on road of the persons who are still learning to drive. We meet this problem constantly because new drivers are trained all the time.
Malta	Through education campaigns provided in schools, turn drivers and pedestrians in understanding better the driving skills and consequences followed an traffic accident i.e. Court proceedings, (criminal/civil) injuries and also the interest of the victim/s. Obviously one must not forget the interest of the public in general of how traffic offences and accidents are affecting the state.
Slovakia	Practical; education…
Hellas	Road signs, places for moving-parking for disabled persons, regulations for the movement of vehicles and pedestrians, driving under the use of alcohol, drugs and medication, drivers' behaviour in case of a road traffic accident.
Spain	Behaviour. Traffic regulations. Psychology. Medical/Health
Sweden	Driving training is undergoing a change. Earlier the focus been on the skill, now is more personal understanding of the personal conduct.
Switzerland	To learn the rules, to be careful
Italia	Main behavioral rules (speed, safety belt, distraction, alcohol drugs, tiredness)
Denmark	Safe and secure driving, socio-cultural behavior; speed, alcohol drugs, safety belt
Ireland	Collision causes : speed, driving under influence, non use of seat belts, fatigue, distractions and young drivers. Peer pressure, consequences of bad behaviour on roads – legal and social

Table 1. Answers to question n. 7: "*Which subjects are usually considered to be important in road safety education?"* (Open answers)

In almost every Country, traffic Police is involved in road safety education (Question 14, Yes=17; No=1), and they work in collaboration with other institutions, mainly schools. Sometimes they are trained, but their training seems to be not so widespread (only 66% of cases; Figure 6). This is an element to improve in order to increase road safety education effectiveness. Countries that train policemen focus their activities on:

- Training for trainers
- Training on communication with children and basic child psychology
- Training on communication with citizens and media
- Training on traffic legislation

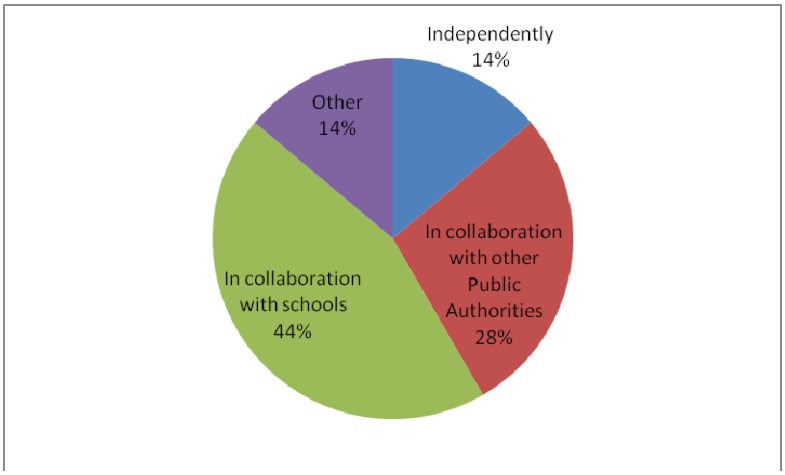


Figure 6. Percentage frequencies of answers to Question n. 14: *"Is your country's Police Force involved in person in road safety training? If yes, how?"*

To summarize, road safety education is expected to be early (starting since childhood), massive (reach all the population), practical, focused on responsible driving and on disrespect of rules as causes of accidents, mainly those regarding speed and alcohol.

Institutions	Professionals	When	What
• Schools • Driving schools • Police force • Part of school curricula (72%)	• Teachers • Professionals • Instructors • Police force	• 3-11 years	• Behavioral • Regulatory aspects

Table 2. Summary of road safety training features in the European Countries participating in this phase of the research.

3.2. Training methodology.

By a methodological perspective, traditional training with lessons, videos and exercises, and the aid of illustrated textbooks, already implemented in almost every Country involved, is going to be improved with new technologies such as e-learning, role playing, and books with interactive routes.

TRAINING	Traditional classroom lessons Exercises Videos
WIDE SPREAD USE OF TEXTBOOKS	Illustrated With texts and exercises
STARTING TO SPREAD	Discussions Simulation E-learning Books with interactive routes

Table 3. Summary of the used and hoped training tools

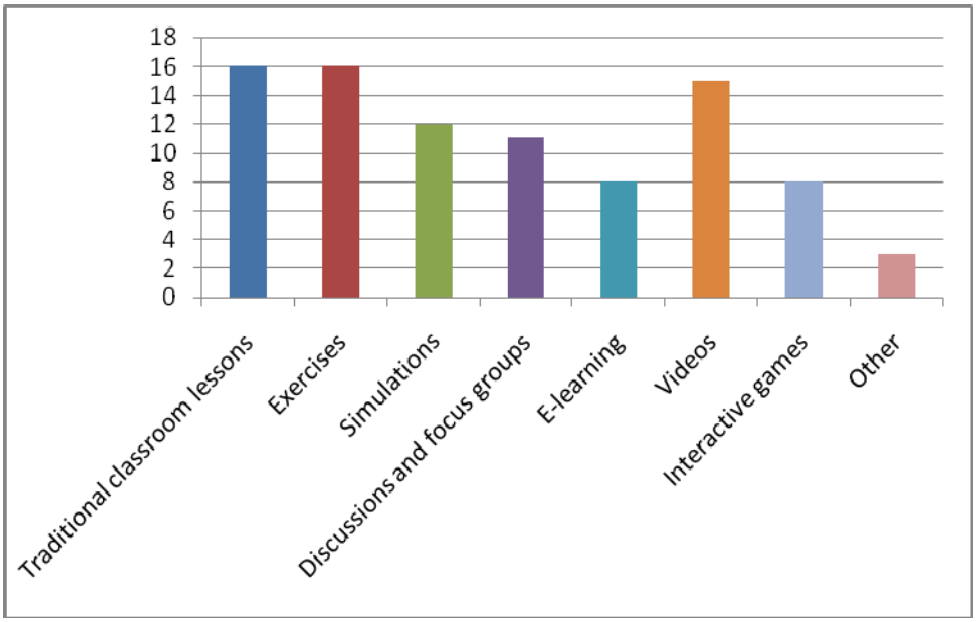


Figure 7. Frequencies of selected answers to Question n. 8**:** *"How is road safety taught?"*

Referring to the question n. 9 *"Is road safety education organised with the help of textbooks or guides?",* most of the Countries (16) answered affermatively;, nobody choose the "No".

option, so it is possible to say that textbook are wide spread tools and, as revealed from answers to question n.9.1, maily caracterized by illustrations and exercises.(Figure 8).

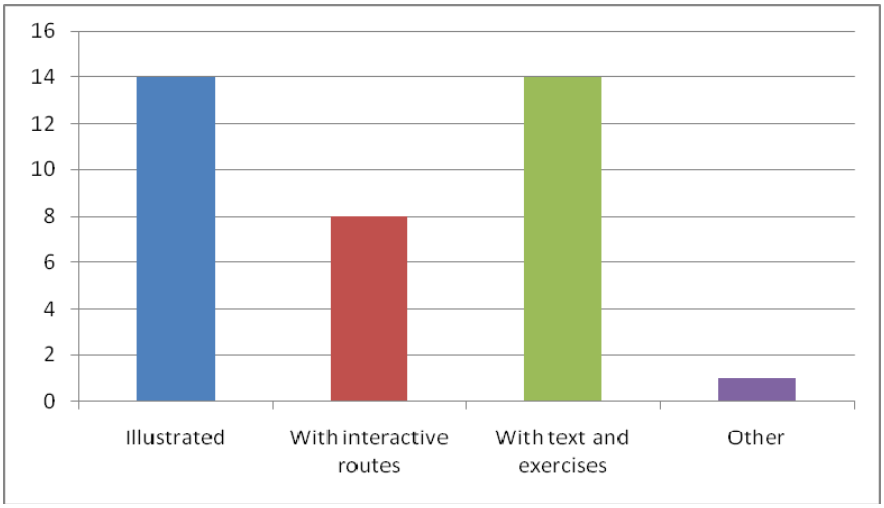


Figure 8. Frequencies of selected answers to Question n. 9 and 9.1: *"Is road safety education organised with the help of textbooks or guides? If yes, what type?"*.

The evaluation of the effect of training, albeit spread in most of the Countries (67% of cases), still needs to be improved in mainstreaming, as well as in harmonization of goals and instruments. Range of assessment goals of traning effects goes from the simple evaluation of the interest raised by the activity in classroom to the remote target of education: reduction of car accident (See the answers to the open Question N°11.1).

Germany	Normally in projects, before setting them on scene. In attach you'll find a guide to assess such projects.
Bulgaria	Class work training control, Interviews and analysis of the results.
Slovenia	By analysis.
Poland	School opinion. Licence to drive bike or moped. Police statistics.
Estonia	Yes periodically. More information on the web: www.mnt.ee
Lithuania	In recent years, the statistics on road traffic accidents have signally got better, it is evident and thanks to the improved system of education of children and society in general. But still lots of work is to do in the future.
Malta	By carrying few writing tests, questions and simulation exercise.
Slovakia	Number of traffic accidents of children is decreasing each year.
Sweden	Different studies of road safety education.
Italy	Toward a survey, unique in institutional context, with 5000 questionnaires, using control schede and effectiveness before and after interventions.
Ireland	Attitude survey currently being carried out on 16 to 18 year olds by Psychology postgrad student.
France	By means of research programmes based on samples of population. However non nationwide, regular assessment programmes

Table 5. Answer to Question n. 11 and 11.1: *"Have the effects of road safety education ever been assessed? If yes, how?"*

3.3. Self-evaluation

European Countries involved in the research give an average good evaluation of their own road safety education programmes but, at the same time, they stress the opportunity to improve their efforts to progress more and more the level of quality and effectiveness. This data suggest that road safety education is a core topic for European Countries that, even though have been concentrating a lot of resources on the matter, still feel the need to develop it.

Excellent	Very good	Good	OK	Insufficient	Bad	Very bad
7	6	5	4	3	2	1

N	Min.	Max.	Average	Std.dev.
18	3	6	5, 06	,802

Figure 9. Average score of road safety training self-evaluation given on a Likert Scale. *Question n.10: "How efficient do you think the road safety training provided is?"*

Interestingly, the strength points that Countries recognize to their own safety education system, are similar to those that they stress as those that need improvement: earliness, wide range diffusion, improving relationship between young population and police officers, increasing collaboration amongst different Institutions. Progress is hoped also in assessment of results and in the use of advanced training tools. European Countries seem to be aware to be in the right direction, but not jet at the arrival point.

Germany	Starting very early in (kindergarten) nursery school and try to reach all pupils different times while they have to go to school with different subjects. Very important is also to use different didactical methods and if it is possible to involve the pupils in action.
Austria	The acceptance between policemen and children. The acceptance of the authority.
Bulgaria	The training documentation corresponds to EU Directives. Practical purpose of the training.
Slovenia	It is compulsory
Cipro	The strong points of the road safety training provided are the four main causes of fatal/serious road traffic accidents. We focus on them by showing films, images and statistical data to the audience. We explain how accidents occurred and how they could be avoided.
Poland	They give a background to be aware participants of road traffic. Within last 10 years 50% road accidents with children less.
Estonia	For the children: traffic safety; safe behaviour and previse risks in the field of traffic emanate from childs environment and home naberhood. For the adults: traffic safety; safe behaviour, psychologic of traffic and previse risks in the field of traffic.
Lituania	Training and preparing new traffic participants, i. e. drivers, and well-

	balanced work of the Traffic Supervision Service of the Lithuanian public police office.
Malta	Understanding driving skills, understanding responsibility, maturity.
Slovakia	Practical training improvement…
Hellas	Students' education of the traffic regulations and behaviour, farmers (drivers) education on the traffic regulation and behaviour, immigrants' education on the traffic regulation and behaviour.
Spain	La Educación Vial que se instrumenta a través de la aplicación en las escuelas del currículo escolar. (The School Curriculum) La puesta en práctica en los Parques Infantiles de Tráfico (P.I.T.) de los conocimientos de educación vial aprendidos por los niños en las escuelas. (Practice provided by the Infantile Traffic Parks) La Formación Vial dirigida a los conductores de todo tipo de vehículos: examinadores, profesores de formación vial, centros e instituciones públicas y privadas relacionadas con la seguridad vial. Las campañas de Divulgación de la Seguridad Vial a través de los medios de comunicación: Prensa, Radio, Televisión, Internet, SMS, Revistas especializadas del motor; la Revista de Tráfico y Seguridad Vial de la DGT, etc. (The Road Safety Campaigns)
Sweden	Can not judge this. Hopefully the new risk education in driving school give a positive impact.
Switzerland	Don't drink +drive; Speed; Attention
Italy	Richness of intervention, ongoing and continuus research of new languages for young people
Denmark	Speeding, alchol drugs, safety belts, safe mantaining of the vehicle, critical judgement of the trafic,Toughtfullness and responsible driving
Ireland	Interaction with An Garda Síochána the police force and other emergency services Fire Brigade and medical staff, and victims of crashes.
France	a. An early start with the primary school syllabus, b. A generic "continuum" throughout secondary school (12-16y.), c. An experimental programme for 16 to 20y. old, d. Improvement of the theory test of the driving licence: questions shall have a stronger emphasis on risk and road safety.

Table 6. Answers to questions n. 12: "*What are the strong points of the road safety training provided in your country?*"

Germany	In the last few years, the accidents with young drivers decreased in a very good way. Also there is a lot to do.
Austria:	Better sustainability
Bulgaria	Enhancing the usage of interactive training in a simulative environment
Slovenia	With renewed legislation
Cyprus	The road safety training could be improved by the securing of new films, according to the Cyprus reality, the training of more people who will be able to give training/ information to the public. Local authorities could help to this direction, according to a decision taken by the Road Safety Council and there is an intention to involve local authorities, in the future, in this sector.
Poland	More and better equipment for schools
Estonia	No data
Lituania	By improving material facilities at schools.
Malta	Through periodically tests (which is not the case in Malta) and through penalty points which is working good in Malta
Slovakia	Increase accessibility of practical training for more children
Hellas	In order to improve the road safety training, the introduction of a special lesson in schools for road safety is being under consideration.
Spain	Con una labor de potenciación de la Educación y de la Formación Vial, dirigida no sólo a disminuir la accidentalidad y mejorar la seguridad vial, sino también a lograr un comportamiento vial más cívico y educado de peatones y conductores. Potenciando la seguridad vial a través del control de la velocidad, de controles de alcoholemia, cinturón de seguridad, teléfono móvil, GPS, etc. (Increasing the referred activities)
Sweden	Introduction road safety training (education) in schools
Switzerland	With programmes according to age
Italy	Improving coordination between different involved subjects
Denmark	Extend the education to young school level to better prepare young people to act as adults in a way as described above (personal opinion)
Ireland	No data
France	Better assessment should be taken of psychological and behavioural aspects [level 4 of the GDE (Goals for Education) matrix] together with risk awareness for young drivers.

Table 7. Answers to Question n .13: "*How could it be improved?"*

To summarize road safety education is, and has to be more and more: early and massive, multidisciplinary, interactive and involving, focused on rules as guidelines for safety behavior and assessed, in order to face the threat of the accidents' causes perceived by almost every Country: speed, alcohol, disrespect of rules.

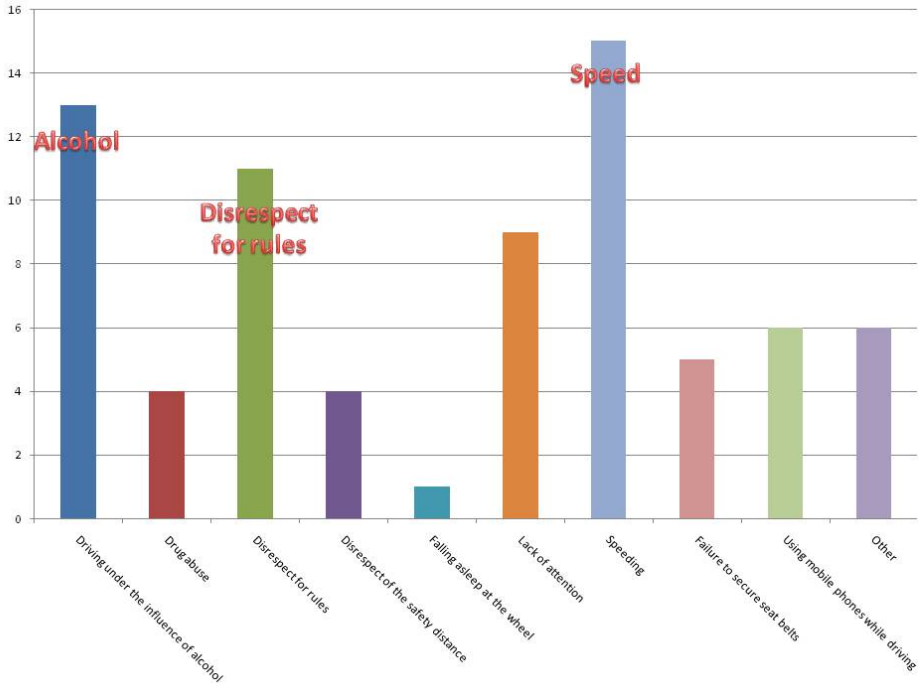


Figure 10. Frequencies of selected answers to Question n .15: "*What are the main causes of accidents among young people?*"

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Appendix

ICARUS QUESTIONNAIRE

ICARUS
Inter-Cultural Approaches for Road Users Safety

ICARUS QUESTIONNAIRE CODE _____

Date of compilation __/__/____ (dd/mm/yyyy)

PERSONAL DETAILS

Gender ☐ Male ☐ Female

Marital status _____

City and Country of birth _____

Year of birth ____ (yyyy)

City of residence _____

How many years do you live in your city of residence? _____

Where do you live? ☐ With your family of origin ☐ On your own ☐ Institute/Community

Highest level of schooling completed _____

School attended _____

University attended _____

Class/Year attended _____

Father's age _____

Father's highest level of schooling _____

Mother's age _____

Mother's highest level of schooling _____

How many books are there in your home? (There are usually about 40 books per metre of shelving. Do not include magazines or newspapers.)

☐	☐	☐	☐	☐	☐
0-10	11-25	26-100	101-200	201-500	More than 500

IF YOU DRIVE A CAR (EVEN IF YOU ALSO DRIVE A SCOOTER) FILL IN <u>SECTION 1</u> ONLY

IF YOU DO NOT DRIVE A CAR BUT A SCOOTER FILL IN <u>SECTION 2</u> ONLY

IF YOU DRIVE NEITHER A CAR NOR A SCOOTER FILL IN <u>SECTION 3</u> ONLY

SECTION 1

IF YOU DRIVE A CAR (EVEN IF YOU ALSO DRIVE A SCOOTER)

SCALE A

Read carefully the following statements and indicate with a cross your level of agreement with each of them using the scale from 0 (strongly disagree) to 5 (strongly agree) you can find near each statement.

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

A.1	To keep traffic smooth-flowing you should ignore many of the road traffic rules.	**0**	**1**	**2**	**3**	**4**	**5**
A.2	It is reasonable to exceed speed limits to overtake slow or inexperienced drivers.	**0**	**1**	**2**	**3**	**4**	**5**
A.3	The road traffic code has to be observed regardless of road and weather conditions.	**0**	**1**	**2**	**3**	**4**	**5**
A.4	Speed limit cannot be observed because it is too restrictive.	**0**	**1**	**2**	**3**	**4**	**5**
A.5	It is reasonable to pass when traffic light is going from yellow to red.	**0**	**1**	**2**	**3**	**4**	**5**
A.6	Running risks and breaking a few rules does not necessarily mean that you are a bad driver.	**0**	**1**	**2**	**3**	**4**	**5**
A.7	It is acceptable to run risks when driving if other persons are not involved.	**0**	**1**	**2**	**3**	**4**	**5**
A.8	The road traffic code is often too complicated to be observed.	**0**	**1**	**2**	**3**	**4**	**5**
A.9	High-speed driving is reasonable if you are a good driver	**0**	**1**	**2**	**3**	**4**	**5**
A.10	High-speed driving is possible if road conditions are good and there is nobody around.	**0**	**1**	**2**	**3**	**4**	**5**
A.11	Sanctions for speeding should be harsher.	**0**	**1**	**2**	**3**	**4**	**5**
A.12	It is ok to go by car with a fast driver if it is the only way to go back home at night.	**0**	**1**	**2**	**3**	**4**	**5**
A.13	It is ok to go by car with a fast driver if also the others do the same.	**0**	**1**	**2**	**3**	**4**	**5**
A.14	I do not want to risk my life and health going by car with a reckless driver.	**0**	**1**	**2**	**3**	**4**	**5**
A.15	I would never drive after drinking alcoholic drinks.	**0**	**1**	**2**	**3**	**4**	**5**
A.16	I would never go by car with a driver who is under the influence of alcohol.	**0**	**1**	**2**	**3**	**4**	**5**
A.17	I would never drive under the influence of narcotic drugs.	**0**	**1**	**2**	**3**	**4**	**5**
A.18	I would never go by car with a driver who is under the influence of narcotic drugs.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE B

The following are statements made by drivers when discussing the causes of road accidents. Read carefully the following statements and indicate with a cross your level of agreement with each of them using the scale from 0 (strongly disagree) to 5 (strongly agree) you can find near each statement.

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

B.1	Driving without accidents is mainly a question of good luck.	**0**	**1**	**2**	**3**	**4**	**5**
B.2	Accidents occur mainly due to unpredictable causes.	**0**	**1**	**2**	**3**	**4**	**5**
B.3	To prevent an accident a driver can only observe road traffic rules.	**0**	**1**	**2**	**3**	**4**	**5**
B.4	Accidents occur due to so many reasons that nobody can understand the most important one.	**0**	**1**	**2**	**3**	**4**	**5**
B.5	Frequent drivers who have no accidents are only lucky persons and are not more careful than others.	**0**	**1**	**2**	**3**	**4**	**5**
B.6	A careful driver can prevent any accident.	**0**	**1**	**2**	**3**	**4**	**5**
B.7	When a driver is involved in an accident it is because he does not drive the way he should.	**0**	**1**	**2**	**3**	**4**	**5**
B.8	When a driver is involved in an accident it is because he/she is not so careful in driving.	**0**	**1**	**2**	**3**	**4**	**5**
B.9	Accidents are always caused by drivers' mistakes.	**0**	**1**	**2**	**3**	**4**	**5**
B.10	In case of accident it is almost always the driver's fault.	**0**	**1**	**2**	**3**	**4**	**5**
B.11	It is difficult to prevent accidents when you drive in bad conditions, such as darkness, rain, narrow roads, bends, etc.	**0**	**1**	**2**	**3**	**4**	**5**
B.12	Most accidents occur due to road bad conditions, lack of adequate signals, etc.	**0**	**1**	**2**	**3**	**4**	**5**
B.13	It is very difficult to prevent accidents when pedestrians emerge suddenly from between parked cars.	**0**	**1**	**2**	**3**	**4**	**5**
B.14	It is difficult to prevent accidents involving children since they are unpredictable when in the street.	**0**	**1**	**2**	**3**	**4**	**5**
B.15	It is really difficult to prevent accidents involving elderly people since they may not hear and see well.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE B (continue…)

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

B.16	Accidents occur because drivers have not learnt to be careful enough when driving.	**0**	**1**	**2**	**3**	**4**	**5**
B.17	It is always possible to foresee what occurs on the road. Therefore, almost all accidents could be prevented.	**0**	**1**	**2**	**3**	**4**	**5**
B.18	Accidents occur when a driver is not careful enough of what the other drivers are doing.	**0**	**1**	**2**	**3**	**4**	**5**
B.19	Accidents occur when a driver is not careful enough of all possible causes of danger.	**0**	**1**	**2**	**3**	**4**	**5**
B.20	If it is bound to happen, an accident occurs anyway and does not depend on a driver's behaviour.	**0**	**1**	**2**	**3**	**4**	**5**
B.21	Many accidents occur due to a lack of knowledge or the driver's laziness.	**0**	**1**	**2**	**3**	**4**	**5**
B.22	Accidents often occur also to drivers who observe the road traffic rules since it is the other drivers who do not observe them.	**0**	**1**	**2**	**3**	**4**	**5**
B.23	A driver never gets enough control over what occurs on the road.	**0**	**1**	**2**	**3**	**4**	**5**
B.24	Most accidents occur due to mechanical problems.	**0**	**1**	**2**	**3**	**4**	**5**
B.25	Accidents will always occur independently of drivers' efforts to prevent them.	**0**	**1**	**2**	**3**	**4**	**5**
B.26	Many accidents occur if drivers do not consider all possible behaviours of pedestrians.	**0**	**1**	**2**	**3**	**4**	**5**
B.27	Driving without accidents depends on drivers' abilities to pay attention to what happens on the road and pavements.	**0**	**1**	**2**	**3**	**4**	**5**
B.28	Drivers can always foresee what is going to occur. This is why on the road there is no room for surprises.	**0**	**1**	**2**	**3**	**4**	**5**
B.29	It is possible to prevent accidents also in adverse conditions, such as darkness, narrow roads, rain, etc.	**0**	**1**	**2**	**3**	**4**	**5**
B.30	Accident prevention depends only on the driver and his/her characteristics, not on external factors.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE C

C.1 **If you drive a car, how would you assess your risk of having a road accident as against the persons of your age?**

Very low — Very high

1	2	3	4	5	6	7	8	9	10

C.2 **How much are you worried about this possibility?**

A little worried — Very worried

1	2	3	4	5	6	7	8	9	10

C.3 Now think of the **friends you consider important:** how much would they approve if YOU undertook reckless behaviours when driving?

They would not approve at all — They would totally approve

1	2	3	4	5	6	7	8	9	10

C.4 Continue to think of the **friends you consider important**: how much would they encourage you to undertake reckless behaviours when driving?

They would not encourage me at all — They would totally encourage me

1	2	3	4	5	6	7	8	9	10

C.5 Think now of **your parents:** how angry would they get if they knew that YOU undertook reckless behaviours when driving?

They would get extremely angry — They would not get angry at all

1	2	3	4	5	6	7	8	9	10

C.6 Continue to think of **your parents**: do you think they would punish you if they knew you undertook reckless behaviours when driving?

They would punish me severely — They would not punish me at all

1	2	3	4	5	6	7	8	9	10

SCALE D

Imagine that each of the situations described below occurs to you when driving. Try to assess your rage level for each of them using the scale from 0 (I would not get angry at all) to 5 (I would get extremely angry)

I would get angry

0	1	2	3	4	5
Not at all					**Extremely**

D.1	Somebody in front of you zigzags through the traffic.	**0**	**1**	**2**	**3**	**4**	**5**
D.2	A vehicle going slowly on a mountain road does not pull in to let you pass over.	**0**	**1**	**2**	**3**	**4**	**5**
D.3	Somebody reverses just in front of you without looking back.	**0**	**1**	**2**	**3**	**4**	**5**
D.4	Somebody does not stop at a red traffic light or a stop sign.	**0**	**1**	**2**	**3**	**4**	**5**
D.5	You passed by a speed camera.	**0**	**1**	**2**	**3**	**4**	**5**
D.6	Somebody speeds up while you are trying to overtake him/her.	**0**	**1**	**2**	**3**	**4**	**5**
D.7	Somebody is slow in parking and blocks the traffic.	**0**	**1**	**2**	**3**	**4**	**5**
D.8	You are trapped in a traffic jam.	**0**	**1**	**2**	**3**	**4**	**5**
D.9	Somebody makes an obscene gesture for your way of driving.	**0**	**1**	**2**	**3**	**4**	**5**
D.10	Somebody sounds the horn for your way of driving.	**0**	**1**	**2**	**3**	**4**	**5**
D.11	A cyclist is moving in the middle of the road and slows down traffic	**0**	**1**	**2**	**3**	**4**	**5**
D.12	A policeman approaches you.	**0**	**1**	**2**	**3**	**4**	**5**
D.13	Sand or gravel falls down from a lorry in front of your car.	**0**	**1**	**2**	**3**	**4**	**5**
D.14	You are driving behind a huge lorry blocking your view.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE E

Read the following statements and indicate your level of agreement with each of them using the scale from 0 (Strongly disagree) to 5 (Strongly agree) near each statement.

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

E.1	It is ok to break the rules until you are caught.	**0**	**1**	**2**	**3**	**4**	**5**
E.2	It is ok to circumvent laws and regulations as long as you do not break them directly.	**0**	**1**	**2**	**3**	**4**	**5**
E.3	If something allows you to achieve the result you want it is not important whether it is right or wrong.	**0**	**1**	**2**	**3**	**4**	**5**
E.4	There are things that are not crimes which, however, must not be done.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE F

Below you will find various statements. Assess your level of agreement or disagreement with each of them. To express your assessment use the 0 to 5 scale near each statement:

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

F.1	I am not a person who worries.	**0**	**1**	**2**	**3**	**4**	**5**
F.2	I often get angry about the way people treat me.	**0**	**1**	**2**	**3**	**4**	**5**
F.3	Some people think I am egoist and egocentric.	**0**	**1**	**2**	**3**	**4**	**5**
F.4	I often wish exciting things.	**0**	**1**	**2**	**3**	**4**	**5**
F.5	I easily panic.	**0**	**1**	**2**	**3**	**4**	**5**
F.6	I am tranquil and not irritable.	**0**	**1**	**2**	**3**	**4**	**5**
F.7	I try to be kind with all the persons I meet.	**0**	**1**	**2**	**3**	**4**	**5**
F.8	I would not like to spend my vacations in a place, such as Las Vegas or Montecarlo.	**0**	**1**	**2**	**3**	**4**	**5**
F.9	I am seldom frightened and anxious.	**0**	**1**	**2**	**3**	**4**	**5**
F.10	I am known as a passionate and hot-blooded person.	**0**	**1**	**2**	**3**	**4**	**5**
F.11	Some persons consider me as cool-headed and self-seeking.	**0**	**1**	**2**	**3**	**4**	**5**
F.12	Sometimes I did things only for excitement and thrill.	**0**	**1**	**2**	**3**	**4**	**5**
F.13	I often feel tense and nervous.	**0**	**1**	**2**	**3**	**4**	**5**
F.14	I am not considered susceptible or irritable.	**0**	**1**	**2**	**3**	**4**	**5**
F.15	I often try to be attentive and thoughtful.	**0**	**1**	**2**	**3**	**4**	**5**
F.16	I tend to avoid scary and shocking movies.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE F (continue…)

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

F.17	I seldom worry about the future.	**0**	**1**	**2**	**3**	**4**	**5**
F.18	I am often disgusted by the persons I deal with.	**0**	**1**	**2**	**3**	**4**	**5**
F.19	The others think I am not very generous.	**0**	**1**	**2**	**3**	**4**	**5**
F.20	I enjoy being in an active environment.	**0**	**1**	**2**	**3**	**4**	**5**
F.21	I often worry about things that can go wrong.	**0**	**1**	**2**	**3**	**4**	**5**
F.22	It takes a lot to make me angry.	**0**	**1**	**2**	**3**	**4**	**5**
F.23	Most of the people I know like me.	**0**	**1**	**2**	**3**	**4**	**5**
F.24	I love the thrill of roller-coaster.	**0**	**1**	**2**	**3**	**4**	**5**
F.25	I have fewer fears than most people.	**0**	**1**	**2**	**3**	**4**	**5**
F.26	Sometimes I felt disappointed and resentful.	**0**	**1**	**2**	**3**	**4**	**5**
F.27	I think I am generous with who is in trouble.	**0**	**1**	**2**	**3**	**4**	**5**
F.28	I am attracted by bright colours and showy styles	**0**	**1**	**2**	**3**	**4**	**5**
F.29	Sometimes frightening thoughts cross my mind.	**0**	**1**	**2**	**3**	**4**	**5**
F.30	Even the smallest inconvenience can be frustrating to me.	**0**	**1**	**2**	**3**	**4**	**5**
F.31	If I can I do my utmost to help the others.	**0**	**1**	**2**	**3**	**4**	**5**
F.32	During sports events I like to be part of the crowd.	**0**	**1**	**2**	**3**	**4**	**5**
F.33	I am a reliable worker	**0**	**1**	**2**	**3**	**4**	**5**
F.34	I tend to be lazy	**0**	**1**	**2**	**3**	**4**	**5**
F.35	I tend to persevere until the task is finished	**0**	**1**	**2**	**3**	**4**	**5**
F.36	I make plans and follow through with them	**0**	**1**	**2**	**3**	**4**	**5**
F.37	I am easily distracted	**0**	**1**	**2**	**3**	**4**	**5**

SCALE G

G.1 In the last few months **have you driven a scooter/motorbike?** ☐Yes ☐No

G.2 **If Yes**, which of them have you driven more often? ☐ Scooter ☐ Motorbike

G.3 Do you have a scooter driving **licence**? ☐Yes ☐No

If Yes, for how long?

G.4 years:_____

G.5 months:_____

Thinking of the last three months……(Answer the following questions considering the vehicle you have driven more often)

G.6 …**how many times** in the week **do you use a scoote/motorbike**?

☐ Never ☐ 1-2 time/s ☐ 3-4 times ☐ 5-6 times ☐ Everyday ☐ Only in the weekend

G.7 …**how many kilometers do you drive along** approximately during the week?

☐ From 1 to 10 Km ☐ From 11 to 30 Km ☐ From 31 to 50 Km ☐ From 51 to 100 Km ☐ More than 100 Km

G.8 In the last three months, how many times have you **driven after 11:00 p.m.**?

☐ Never ☐ 1- 2 time/s in a month ☐ Between 2 and 4 times in a month ☐ More than 4 times in a month

G.9 …How often in a week **do you go on a scooter/motorbike sitting behind a friend**?

☐ Never ☐ 1-2 time/s ☐ 3-4 times ☐ 5-6 times ☐ Everyday ☐ Only in the weekend

G.10 In the last three months how often **have you accepted a lift** on a scooter/motorbike sitting behind a friend **after 11:00 p.m.**?

☐ Never ☐ 1- 2 time/s in a month ☐ Between 2 and 4 times in a month ☐ More than 4 times in a month

SCALE G (continue …)

Think <u>of your experience as a driver</u> (refer to the time passed since you have used the scooter/motorbike until now)

G.11 Have you ever been **fined**? ☐ YES☐ NO

G.12 **<u>If Yes</u>**, how many times?_____

<u>If Yes</u>, for what violation/s? (you can choose more than one)

G.13. ☐ You did not respect a stop sign
G.14. ☐ You drove through a red light
G.15 ☐ No parking
G.16 ☐ Transport of a second person (if forbidden by the law)
G.17 ☐ Drunk driving
G.18 ☐ You were not wearing the helmet
G.19 ☐ Speeding
G.20 ☐ Other (please, specify)_____

G.21 Have you ever been involved in an **accident as a driver?**

☐ YES ☐ NO ☐ No, but I was close to it

G.22 **<u>If Yes</u>**, how many accidents did you have?_____

G.23 **<u>If Yes</u>**, what were their consequences?

☐ Material damages ☐ Personal injuries ☐ Both

G.24 Have you ever been involved in an **accident as a passenger**?

☐ Yes ☐ NO ☐ NO, but we were close to it

G.25 **<u>If Yes</u>**, How many times?_____

G.26 **<u>If Yes</u>**, what consequences did you suffer?

☐ Material damages ☐ Personal injuries ☐ Both

SCALE H

How long do you hold a car driving licence?

H.1 years:_____

H.2 months:____

H.3 ☐ I still have a temporary driving permit / learner permit

H.4 Do you own a car? ☐ Yes ☐ No

Thinking of the last three months…

H5. …**How many times** in a week **do you use the car**?

☐	☐	☐	☐	☐	☐
Never	1-2 times	3-4 times	5-6 times	Everyday	Only in the weekend

H.6…**How many kilometers do you drive** approximately in a week?

☐	☐	☐	☐	☐
From 1 to 10 Km	From 11 to 30 Km	From 31 to 50 Km	From 51 to 100 Km	More than 100 Km

H.7 In general, in the last three months how often have you **driven for more than 2 hours uninterruptedly**?

☐	☐	☐	☐
Never	1- 2 time/s in a month	between 2 and 4 times in a month	More than 4 times in a month

H.8 Again in the last three months, how often have you happened **to drive between midnight and 5:00 in the morning**?

☐	☐	☐	☐
Never	1- 2 time/s in a month	between 2 and 4 times in a month	More than 4 times in a month

SCALE H (continue…)

Thinking about <u>your driving experience</u> …(therefore considering the period starting from the moment you got your driving licence or a temporary driving permit, until now)

H.9 Have you ever got a traffic fine? ☐ YES ☐ NO

H.10 **<u>If YES</u>**, How many fines did you get?_____

<u>If YES</u>, for which type of traffic violation/s? (you can choose more than one)

H.11. ☐ No parking
H.12. ☐ Running a red light
H.13 ☐ Running a stop sign
H.14 ☐ Speeding
H.15 ☐ Drunk driving
H.16 ☐ Lack of seatbelts use
H.17 ☐ Other (please, specify)_____

H18. Have you ever driven after drinking alcoholic drinks (including beer)?

☐ ☐ ☐ ☐ ☐ ☐
Never Very often

H.19 **<u>If YES</u>**, How many times?_____

<u>If YES</u>, What were the effects? (you can choose more than one option)

H.20. ☐ You could hardly follow the trajectory of the road
H.21. ☐ You could hardly keep your head on straight
H.22 ☐ You had muscle cramps
H.23 ☐ You could hardly keep your eyes open
H.24 ☐ You got stomach cramps
H.25 ☐ You could not focus on the road
H.26 ☐ Someone who was in the car with you made you notice it.
H.27 ☐ Other (please, specify)_____

SCALE I

Nobody is perfect! Even the best driver can make mistakes or commit violations, some of which may be irrelevant but some others are potentially dangerous. The questionnaire is very simple. It contains a list of mistakes and violations that people commit or notice while driving. You are kindly asked to specify how often you have exhibited the behaviours specified below. Please, use the following answering scale:

0	1	2	3	4	5
Never	**Almost never**	**Every now and then**	**Fairly often**	**Often**	**Almost always**

HOW OFTEN HAVE YOU DONE EACH OF THE FOLLOWING…

I.1	Overtaken a slow car from the right side	**0**	**1**	**2**	**3**	**4**	**5**
I.2	Run a red light.	**0**	**1**	**2**	**3**	**4**	**5**
I.3	Got angry at the behaviour of another driver and given him/her a piece of your mind	**0**	**1**	**2**	**3**	**4**	**5**
I.4	Exceeded speed limits on the motorway	**0**	**1**	**2**	**3**	**4**	**5**
I.5	Exceeded speed limits on an urban road	**0**	**1**	**2**	**3**	**4**	**5**
I.6	Driven in spite of being aware that you had drank more than the maximum allowed.	**0**	**1**	**2**	**3**	**4**	**5**
I.7	Got angry at another driver and shown him/her that you were angry (with an obscene gesture or verbal insult, etc)	**0**	**1**	**2**	**3**	**4**	**5**
I.8	Realised that the lane you were driving in was getting blocked and forced your way into the other lane.	**0**	**1**	**2**	**3**	**4**	**5**
I.9	At a crossroads, pushed your way ahead forcing the driver with the right of way to slow down and let you in.	**0**	**1**	**2**	**3**	**4**	**5**
I.10	Driven without keeping a safe distance	**0**	**1**	**2**	**3**	**4**	**5**
I.11	Accelerated fast from a traffic light to beat the driver who was next to you.	**0**	**1**	**2**	**3**	**4**	**5**
I.12	Honked the horn at another driver to show your irritation.	**0**	**1**	**2**	**3**	**4**	**5**
I.13	Driven a short distance without wearing the seatbelts	**0**	**1**	**2**	**3**	**4**	**5**
I.14	Driven a long distance without wearing the seatbelts.	**0**	**1**	**2**	**3**	**4**	**5**
I.15	Driven while talking on the mobile without wearing ear-plugs.	**0**	**1**	**2**	**3**	**4**	**5**
I.16	Parked in a no-parking area or double-parked.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE I (continue …)

0	1	2	3	4	5
Never	**Almost never**	**Every now and then**	**Fairly often**	**Often**	**Almost always**

HOW OFTEN HAVE YOU DONE EACH OF THE FOLLOWING…

I.17	Parked in a pay-parking area without paying the ticket	**0**	**1**	**2**	**3**	**4**	**5**
I.18	Forgot where you had parked your car.	**0**	**1**	**2**	**3**	**4**	**5**
I.19	Turned on a device while you actually wanted to turn on another device, for instance, turned on the headlights instead of the wind wipers.	**0**	**1**	**2**	**3**	**4**	**5**
I.20	Realized that you couldn't recall a road you had just driven on.	**0**	**1**	**2**	**3**	**4**	**5**
I.21	While approaching a crossroads, moved into the wrong lane	**0**	**1**	**2**	**3**	**4**	**5**
I.22	Misread the road signs and took the wrong exit at the roundabout.	**0**	**1**	**2**	**3**	**4**	**5**
I.23	While reversing, you hit something you hadn't noticed.	**0**	**1**	**2**	**3**	**4**	**5**
I.24	Realised you were taking off from a traffic light in third gear.	**0**	**1**	**2**	**3**	**4**	**5**
I.25	Realised you had taken the wrong road because you had distractedly taken the usual road while you actually had to go somewhere else.	**0**	**1**	**2**	**3**	**4**	**5**
I.26	Realised you were driving with your headlights switched off while they should have been switched on.	**0**	**1**	**2**	**3**	**4**	**5**
I.27	Realised you were trying to overtake someone who had already flicked on the indicator	**0**	**1**	**2**	**3**	**4**	**5**
I.28	Entered a side road without realising that some pedestrians were crossing.	**0**	**1**	**2**	**3**	**4**	**5**
I.29	While turning, found right beside you a cyclist you had not seen, thus running the risk of knocking him/her down	**0**	**1**	**2**	**3**	**4**	**5**
I.30	While trying to enter a main road, you were so focussed on the traffic along it that you run the risk of ramming into the car in front of you.	**0**	**1**	**2**	**3**	**4**	**5**
I.31	While overtaking another car you realised that you miscalculated the speed of the on-coming car	**0**	**1**	**2**	**3**	**4**	**5**
I.32	Run the risk of causing an accident at the crossroads because you did not give way as necessary.	**0**	**1**	**2**	**3**	**4**	**5**
I.33	You did not check your rear mirror before changing lanes, turning, etc.	**0**	**1**	**2**	**3**	**4**	**5**
I.34	Braked sharply on a slippery road or did another wrong manoeuvre causing the car to skid.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE J

<u>Imagine</u> that you are in the following situation:

"You have to visit some friends and you are a bit late. You have to reach your friends' place by driving your own car"

Please, examine each of the situations listed below and indicate how likely you think it is that you will perform the behaviour described.
Please answer by using the scale from 0 (most unlikely) to 5 (most likely) on the right side of the page.

0	1	2	3	4	5
Most unlikely					**Most likely**

J.1	You exceed the speed limit by 10 Km/h	**0**	**1**	**2**	**3**	**4**	**5**
J.2	You overtake the car in front of you even though it is going at an adequate speed.	**0**	**1**	**2**	**3**	**4**	**5**
J.3	You violate traffic rules in order to move more smoothly	**0**	**1**	**2**	**3**	**4**	**5**
J.4	You violate traffic rules in order to go faster.	**0**	**1**	**2**	**3**	**4**	**5**
J.5	You drive fast in order to be on time at the appointment.	**0**	**1**	**2**	**3**	**4**	**5**
J.6	You drive so close to the car in front of you that you would not be able to stop if it were to brake sharply.	**0**	**1**	**2**	**3**	**4**	**5**
J.7	You are distracted by what is happening around you while driving.	**0**	**1**	**2**	**3**	**4**	**5**
J.8	You create dangerous situations because you are not attentive enough	**0**	**1**	**2**	**3**	**4**	**5**
J.9	You drive without keeping a safe distance	**0**	**1**	**2**	**3**	**4**	**5**
J.10	You keep on driving even if you are tired and need a rest.	**0**	**1**	**2**	**3**	**4**	**5**
J.11	You drive short distances without wearing the seatbelts.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE J (continue …)

0	1	2	3	4	5
Most unlikely					**Most likely**

J.12	You drive long distances without wearing the seatbelts.	**0**	**1**	**2**	**3**	**4**	**5**
J.13	You slow down to let the car behind you overtake you more easily	**0**	**1**	**2**	**3**	**4**	**5**
J.14	You slow down when approaching a danger sign	**0**	**1**	**2**	**3**	**4**	**5**
J.15	You slow down in case of bad conditions (road, weather, etc,) even if you are driving within the speed limit.	**0**	**1**	**2**	**3**	**4**	**5**
J.16	You slow down and drive below speed limit when the road is slippery.	**0**	**1**	**2**	**3**	**4**	**5**
J.17	You drive after having had a glass of beer/wine.	**0**	**1**	**2**	**3**	**4**	**5**
J.18	You drive after having drunk, even though you are not sure you have sobered up.	**0**	**1**	**2**	**3**	**4**	**5**
J.19	You slow down when street signs indicate that you are in a children's play area.	**0**	**1**	**2**	**3**	**4**	**5**
J.20	You slow down in a children's play area even if there is nobody in sight.	**0**	**1**	**2**	**3**	**4**	**5**
J.21	You drive within speed limits.	**0**	**1**	**2**	**3**	**4**	**5**
J.22	You drive under the effect of drugs.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE K

The following is a list of behaviours linked to driving under the effect of alcohol. You are kindly asked to indicate how often you have exhibited the behaviours described below. Please answer by using the following scale:

0	1	2	3	4	5
Never	**Almost never**	**Every now and then**	**Fairly often**	**Often**	**Almost always**

HOW OFTEN HAVE YOU DONE THE FOLLOWING…

K.1	You drove less then two hours after having drunk alcohol	**0**	**1**	**2**	**3**	**4**	**5**
K.2	You drove although your blood alcohol level might have been above the legal limit.	**0**	**1**	**2**	**3**	**4**	**5**
K.3	You prevented someone you knew from driving under the effect of alcohol	**0**	**1**	**2**	**3**	**4**	**5**
K.4	You saw someone you knew driving under the effect of alcohol.	**0**	**1**	**2**	**3**	**4**	**5**
K.5	You were travelling in a car with someone who was driving under the effect of alcohol	**0**	**1**	**2**	**3**	**4**	**5**
K.6	You were the designated driver	**0**	**1**	**2**	**3**	**4**	**5**
K.7	You travelled in a car with a designated driver	**0**	**1**	**2**	**3**	**4**	**5**
K.8	You were driving a car and you were stopped by the police for an alcohol test.	**0**	**1**	**2**	**3**	**4**	**5**
K.9	You were a passenger in a car and you were stopped by the police for an alcohol test to the driver.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE L

Below you will find several statements regarding the effects of alcohol while driving. Assess whether you agree or disagree with each of them.
Please answer by using the scale from 1 to 5 on the right site of the page:

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

L.1	Alcohol increases concentration capacity	**0**	**1**	**2**	**3**	**4**	**5**
L.2	Alcohol decreases the level of attention	**0**	**1**	**2**	**3**	**4**	**5**
L.3	Alcohol reduces sensory capacity.	**0**	**1**	**2**	**3**	**4**	**5**
L.4	Alcohol makes you more active and alert	**0**	**1**	**2**	**3**	**4**	**5**
L.5	Alcohol makes your driving more sportive and brilliant	**0**	**1**	**2**	**3**	**4**	**5**
L.6	Alcohol reduces the effects of tiredness.	**0**	**1**	**2**	**3**	**4**	**5**
L.7	Alcohol makes you feel sleepy	**0**	**1**	**2**	**3**	**4**	**5**
L.8	Alcohol makes you feel more secure	**0**	**1**	**2**	**3**	**4**	**5**
L.9	Alcohol makes you feel euphoric	**0**	**1**	**2**	**3**	**4**	**5**
L.10	Alcohol helps you be more prudent	**0**	**1**	**2**	**3**	**4**	**5**
L.11	Alcohol slows down reaction time	**0**	**1**	**2**	**3**	**4**	**5**
L.12	Alcohol improves reaction time	**0**	**1**	**2**	**3**	**4**	**5**
L.13	Alcohol makes you overestimate your own capacities	**0**	**1**	**2**	**3**	**4**	**5**
L.14	Alcohol makes you less capable of assessing the risks	**0**	**1**	**2**	**3**	**4**	**5**
L.15	Alcohol blurs your vision	**0**	**1**	**2**	**3**	**4**	**5**
L.16	Alcohol effects depend solely on how much you usually drink	**0**	**1**	**2**	**3**	**4**	**5**
L.17	Alcohol has little effect on you	**0**	**1**	**2**	**3**	**4**	**5**
L.18	Even after having had alcohol you can drive better than many other persons.	**0**	**1**	**2**	**3**	**4**	**5**
L.19	After drinking it is sufficient to drive more prudently in order to avoid unpleasant accidents.	**0**	**1**	**2**	**3**	**4**	**5**
L.20	Drunk driving dangers are overestimated	**0**	**1**	**2**	**3**	**4**	**5**

END OF QUESTIONNAIRE

THANK YOU FOR YOUR COOPERATION!

YOU CAN GIVE BACK THE QUESTIONNAIRE

SECTION 2

IF YOU DO NOT DRIVE A CAR BUT A SCOOTER

SCALE A1

Read carefully the following statements and indicate with a cross your level of agreement with each of them using the scale from 0 (strongly disagree) to 5 (strongly agree) you can find near each statement.

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

A1.1	To keep traffic smooth-flowing you should ignore many of the road traffic rules.	**0**	**1**	**2**	**3**	**4**	**5**
A1.2	It is reasonable to exceed speed limits to overtake slow or inexperienced drivers.	**0**	**1**	**2**	**3**	**4**	**5**
A1.3	The road traffic code has to be observed regardless of road and weather conditions.	**0**	**1**	**2**	**3**	**4**	**5**
A1.4	Speed limit cannot be observed because it is too restrictive.	**0**	**1**	**2**	**3**	**4**	**5**
A1.5	It is reasonable to pass when traffic light is going from yellow to red.	**0**	**1**	**2**	**3**	**4**	**5**
A1.6	Running risks and breaking a few rules does not necessarily mean that you are a bad driver.	**0**	**1**	**2**	**3**	**4**	**5**
A1.7	It is acceptable to run risks when driving if other persons are not involved.	**0**	**1**	**2**	**3**	**4**	**5**
A1.8	The road traffic code is often too complicated to be observed.	**0**	**1**	**2**	**3**	**4**	**5**
A1.9	High-speed driving is reasonable if you are a good driver	**0**	**1**	**2**	**3**	**4**	**5**
A1.10	High-speed driving is possible if road conditions are good and there is nobody around.	**0**	**1**	**2**	**3**	**4**	**5**
A1.11	Sanctions for speeding should be harsher.	**0**	**1**	**2**	**3**	**4**	**5**
A1.12	It is ok to go by car with a fast driver if it is the only way to go back home at night.	**0**	**1**	**2**	**3**	**4**	**5**
A1.13	It is ok to go by car with a fast driver if also the others do the same.	**0**	**1**	**2**	**3**	**4**	**5**
A1.14	I do not want to risk my life and health going by car with a reckless driver.	**0**	**1**	**2**	**3**	**4**	**5**
A1.15	I would never drive after drinking alcoholic drinks.	**0**	**1**	**2**	**3**	**4**	**5**
A1.16	I would never go by car with a driver who is under the influence of alcohol.	**0**	**1**	**2**	**3**	**4**	**5**
A1.17	I would never drive under the influence of narcotic drugs.	**0**	**1**	**2**	**3**	**4**	**5**
A1.18	I would never go by car with a driver who is under the influence of narcotic drugs.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE B1

The following are statements made by drivers when discussing the causes of road accidents. Read carefully the following statements and indicate with a cross your level of agreement with each of them using the scale from 0 (strongly disagree) to 5 (strongly agree) you can find near each statement.

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

B1.1	Driving without accidents is mainly a question of good luck.	**0**	**1**	**2**	**3**	**4**	**5**
B1.2	Accidents occur mainly due to unpredictable causes.	**0**	**1**	**2**	**3**	**4**	**5**
B1.3	To prevent an accident a driver can only observe road traffic rules.	**0**	**1**	**2**	**3**	**4**	**5**
B1.4	Accidents occur due to so many reasons that nobody can understand the most important one.	**0**	**1**	**2**	**3**	**4**	**5**
B1.5	Frequent drivers who have no accidents are only lucky persons and are not more careful than others.	**0**	**1**	**2**	**3**	**4**	**5**
B1.6	A careful driver can prevent any accident.	**0**	**1**	**2**	**3**	**4**	**5**
B1.7	When a driver is involved in an accident it is because he does not drive the way he should.	**0**	**1**	**2**	**3**	**4**	**5**
B1.8	When a driver is involved in an accident it is because he/she is not so careful in driving.	**0**	**1**	**2**	**3**	**4**	**5**
B1.9	Accidents are always caused by drivers' mistakes.	**0**	**1**	**2**	**3**	**4**	**5**
B1.10	In case of accident it is almost always the driver's fault.	**0**	**1**	**2**	**3**	**4**	**5**
B1.11	It is difficult to prevent accidents when you drive in bad conditions, such as darkness, rain, narrow roads, bends, etc.	**0**	**1**	**2**	**3**	**4**	**5**
B1.12	Most accidents occur due to road bad conditions, lack of adequate signals, etc.	**0**	**1**	**2**	**3**	**4**	**5**
B1.13	It is very difficult to prevent accidents when pedestrians emerge suddenly from between parked cars.	**0**	**1**	**2**	**3**	**4**	**5**
B1.14	It is difficult to prevent accidents involving children since they are unpredictable when in the street.	**0**	**1**	**2**	**3**	**4**	**5**
B1.15	It is really difficult to prevent accidents involving elderly people since they may not hear and see well.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE B1 (continue…)

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

B1.16	Accidents occur because drivers have not learnt to be careful enough when driving.	**0**	**1**	**2**	**3**	**4**	**5**
B1.17	It is always possible to foresee what occurs on the road. Therefore, almost all accidents could be prevented.	**0**	**1**	**2**	**3**	**4**	**5**
B1.18	Accidents occur when a driver is not careful enough of what the other drivers are doing.	**0**	**1**	**2**	**3**	**4**	**5**
B1.19	Accidents occur when a driver is not careful enough of all possible causes of danger.	**0**	**1**	**2**	**3**	**4**	**5**
B1.20	If it is bound to happen, an accident occurs anyway and does not depend on a driver's behaviour.	**0**	**1**	**2**	**3**	**4**	**5**
B1.21	Many accidents occur due to a lack of knowledge or the driver's laziness.	**0**	**1**	**2**	**3**	**4**	**5**
B1.22	Accidents often occur also to drivers who observe the road traffic rules since it is the other drivers who do not observe them.	**0**	**1**	**2**	**3**	**4**	**5**
B1.23	A driver never gets enough control over what occurs on the road.	**0**	**1**	**2**	**3**	**4**	**5**
B1.24	Most accidents occur due to mechanical problems.	**0**	**1**	**2**	**3**	**4**	**5**
B1.25	Accidents will always occur independently of drivers' efforts to prevent them.	**0**	**1**	**2**	**3**	**4**	**5**
B1.26	Many accidents occur if drivers do not consider all possible behaviours of pedestrians.	**0**	**1**	**2**	**3**	**4**	**5**
B1.27	Driving without accidents depends on drivers' abilities to pay attention to what happens on the road and pavements.	**0**	**1**	**2**	**3**	**4**	**5**
B1.28	Drivers can always foresee what is going to occur. This is why on the road there is no room for surprises.	**0**	**1**	**2**	**3**	**4**	**5**
B1.29	It is possible to prevent accidents also in adverse conditions, such as darkness, narrow roads, rain, etc.	**0**	**1**	**2**	**3**	**4**	**5**
B1.30	Accident prevention depends only on the driver and his/her characteristics, not on external factors.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE C1

C1.1 **How would you assess your risk of having a road accident as against the persons of your age?**

Very low									Very high
1	2	3	4	5	6	7	8	9	10

C1.2 **How much are you worried about this possibility?**

A little worried									Very worried
1	2	3	4	5	6	7	8	9	10

C1.3 Now think of the **friends you consider important:** how much would they approve if YOU undertook reckless behaviours when driving?

They would not approve at all									They would totally approve
1	2	3	4	5	6	7	8	9	10

C1.4 Continue to think of the **friends you consider important**: how much would they encourage you to undertake reckless behaviours when driving?

They would not encourage me at all									They would totally encourage me
1	2	3	4	5	6	7	8	9	10

C1.5 Think now of **your parents:** how angry would they get if they knew that YOU undertook reckless behaviours when driving?

They would get extremely angry									They would not get angry at all
1	2	3	4	5	6	7	8	9	10

C1.6 Continue to think of **your parents**: do you think they would punish you if they knew you undertook reckless behaviours when driving?

They would punish me severely									They would not punish me at all
1	2	3	4	5	6	7	8	9	10

SCALE D1

Imagine that each of the situations described below occurs to you when driving. Try to assess your rage level for each of them using the scale from 0 (I would not get angry at all) to 5 (I would get extremely angry)

I would get angry

0	1	2	3	4	5
Not at all					**Extremely**

D1.1	Somebody in front of you zigzags through the traffic.	**0**	**1**	**2**	**3**	**4**	**5**
D1.2	A vehicle going slowly on a mountain road does not pull in to let you pass over.	**0**	**1**	**2**	**3**	**4**	**5**
D1.3	Somebody reverses just in front of you without looking back.	**0**	**1**	**2**	**3**	**4**	**5**
D1.4	Somebody does not stop at a red traffic light or a stop sign.	**0**	**1**	**2**	**3**	**4**	**5**
D1.5	You passed by a speed camera.	**0**	**1**	**2**	**3**	**4**	**5**
D1.6	Somebody speeds up while you are trying to overtake him/her.	**0**	**1**	**2**	**3**	**4**	**5**
D1.7	Somebody is slow in parking and blocks the traffic.	**0**	**1**	**2**	**3**	**4**	**5**
D1.8	You are trapped in a traffic jam.	**0**	**1**	**2**	**3**	**4**	**5**
D1.9	Somebody makes an obscene gesture for your way of driving.	**0**	**1**	**2**	**3**	**4**	**5**
D1.10	Somebody sounds the horn for your way of driving.	**0**	**1**	**2**	**3**	**4**	**5**
D1.11	A cyclist is moving in the middle of the road and slows down traffic	**0**	**1**	**2**	**3**	**4**	**5**
D1.12	A policeman approaches you.	**0**	**1**	**2**	**3**	**4**	**5**
D1.13	Sand or gravel falls down from a lorry in front of you.	**0**	**1**	**2**	**3**	**4**	**5**
D1.14	You are driving behind a huge lorry blocking your view.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE E1

Read the following statements and indicate your level of agreement with each of them using the scale from 0 (Strongly disagree) to 5 (Strongly agree) near each statement.

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

E1.1	It is ok to break the rules until you are caught.	**0**	**1**	**2**	**3**	**4**	**5**
E1.2	It is ok to circumvent laws and regulations as long as you do not break them directly.	**0**	**1**	**2**	**3**	**4**	**5**
E1.3	If something allows you to achieve the result you want it is not important whether it is right or wrong.	**0**	**1**	**2**	**3**	**4**	**5**
E1.4	There are things that are not crimes which, however, must not be done.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE F1

Below you will find various statements. Assess your level of agreement or disagreement with each of them. To express your assessment use the 0 to 5 scale near each statement:

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

F1.1	I am not a person who worries.	**0**	**1**	**2**	**3**	**4**	**5**
F1.2	I often get angry about the way people treat me.	**0**	**1**	**2**	**3**	**4**	**5**
F1.3	Some people think I am egoist and egocentric.	**0**	**1**	**2**	**3**	**4**	**5**
F1.4	I often wish exciting things.	**0**	**1**	**2**	**3**	**4**	**5**
F1.5	I easily panic.	**0**	**1**	**2**	**3**	**4**	**5**
F1.6	I am tranquil and not irritable.	**0**	**1**	**2**	**3**	**4**	**5**
F1.7	I try to be kind with all the persons I meet.	**0**	**1**	**2**	**3**	**4**	**5**
F1.8	I would not like to spend my vacations in a place, such as Las Vegas or Montecarlo.	**0**	**1**	**2**	**3**	**4**	**5**
F1.9	I am seldom frightened and anxious.	**0**	**1**	**2**	**3**	**4**	**5**
F1.10	I am known as a passionate and hot-blooded person.	**0**	**1**	**2**	**3**	**4**	**5**
F1.11	Some persons consider me as cool-headed and self-seeking.	**0**	**1**	**2**	**3**	**4**	**5**
F1.12	Sometimes I did things only for excitement and thrill.	**0**	**1**	**2**	**3**	**4**	**5**
F1.13	I often feel tense and nervous.	**0**	**1**	**2**	**3**	**4**	**5**
F1.14	I am not considered susceptible or irritable.	**0**	**1**	**2**	**3**	**4**	**5**
F1.15	I often try to be attentive and thoughtful.	**0**	**1**	**2**	**3**	**4**	**5**
F1.16	I tend to avoid scary and shocking movies.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE F1 (continue…)

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

F1.17	I seldom worry about the future.	**0**	**1**	**2**	**3**	**4**	**5**
F1.18	I am often disgusted by the persons I deal with.	**0**	**1**	**2**	**3**	**4**	**5**
F1.19	The others think I am not very generous.	**0**	**1**	**2**	**3**	**4**	**5**
F1.20	I enjoy being in an active environment.	**0**	**1**	**2**	**3**	**4**	**5**
F1.21	I often worry about things that can go wrong.	**0**	**1**	**2**	**3**	**4**	**5**
F1.22	It takes a lot to make me angry.	**0**	**1**	**2**	**3**	**4**	**5**
F1.23	Most of the people I know like me.	**0**	**1**	**2**	**3**	**4**	**5**
F1.24	I love the thrill of roller-coaster.	**0**	**1**	**2**	**3**	**4**	**5**
F1.25	I have fewer fears than most people.	**0**	**1**	**2**	**3**	**4**	**5**
F1.26	Sometimes I felt disappointed and resentful.	**0**	**1**	**2**	**3**	**4**	**5**
F1.27	I think I am generous with who is in trouble.	**0**	**1**	**2**	**3**	**4**	**5**
F1.28	I am attracted by bright colours and showy styles	**0**	**1**	**2**	**3**	**4**	**5**
F1.29	Sometimes frightening thoughts cross my mind.	**0**	**1**	**2**	**3**	**4**	**5**
F1.30	Even the smallest inconvenience can be frustrating to me.	**0**	**1**	**2**	**3**	**4**	**5**
F1.31	If I can I do my utmost to help the others.	**0**	**1**	**2**	**3**	**4**	**5**
F1.32	During sports events I like to be part of the crowd.	**0**	**1**	**2**	**3**	**4**	**5**
F1.33	I am a reliable worker	**0**	**1**	**2**	**3**	**4**	**5**
F1.34	I tend to be lazy	**0**	**1**	**2**	**3**	**4**	**5**
F1.35	I tend to persevere until the task is finished	**0**	**1**	**2**	**3**	**4**	**5**
F1.36	I make plans and follow through with them	**0**	**1**	**2**	**3**	**4**	**5**
F1.37	I am easily distracted	**0**	**1**	**2**	**3**	**4**	**5**

SCALE G1

G1.1 In the last few months **have you driven a scooter/motorbike?** ☐Yes ☐No

G1.2 **If Yes**, which of them have you driven more often? ☐ Scooter ☐ Motorbike

G1.3 Do you have a scooter driving **licence**? ☐Yes ☐No

If Yes, for how long?

G1.4 years:_____

G1.5 months:_____

Thinking of the last three months……(Answer the following questions considering the vehicle you have driven more often)

G1.6 …**how many times** in the week **do you use a scooter/ motorbike**?

☐ Never ☐ 1-2 time/s ☐ 3-4 times ☐ 5-6 times ☐ Everyday ☐ Only in the weekend

G1.7 …**how many kilometers do you drive along** approximately during the week?

☐ From 1 to 10 Km ☐ From 11 to 30 Km ☐ From 31 to 50 Km ☐ From 51 to 100 Km ☐ More than 100 Km

G1.8 In the last three months, how many times have you **driven after 11:00 p.m.**?

☐ Never ☐ 1- 2 time/s in a month ☐ Between 2 and 4 times in a month ☐ More than 4 times in a month

G1.9 …How often in a week **do you go on a scooter/motorbike sitting behind a friend**?

☐ Never ☐ 1-2 time/s ☐ 3-4 times ☐ 5-6 times ☐ Everyday ☐ Only in the weekend

G1.10 In the last three months how often **have you accepted a lift** on a scooter/motorbike sitting behind a friend **after 11:00 p.m.**?

☐ Never ☐ 1- 2 time/s in a month ☐ Between 2 and 4 times in a month ☐ More than 4 times in a month

SCALE G1 (continue …)

Think <u>of your experience as a driver</u> (refer to the time passed since you have used the scooter/motorbike until now)

G1.11 Have you ever been **fined**? ☐ YES☐ NO

G1.12 **<u>If Yes</u>**, how many times?_____

<u>If Yes</u>, for what violation/s? (you can choose more than one)

G1.13. ☐ You did not respect a stop sign
G1.14. ☐ You drove through a red light
G1.15 ☐ No parking
G1.16 ☐ Transport of a second person
G1.17 ☐ Drunk driving
G1.18 ☐ You were not wearing the helmet
G1.19 ☐ Speeding
G1.20 ☐ Other (please, specify)_____

G1.21 Have you ever been involved in an **accident as a driver?**

☐ YES ☐ NO ☐ No, but I was close to it

G1.22 **<u>If Yes</u>**, how many accidents did you have?_____

G1.23 **<u>If Yes</u>**, what were their consequences?

☐ Material damages ☐ Personal injuries ☐ Both

G1.24 Have you ever been involved in an **accident as a passenger**?

☐ Yes ☐ NO ☐ NO, but we were close to it

G1.25 **<u>If Yes</u>**, How many times?_____

G1.26 **<u>If Yes</u>**, what consequences did you suffer?

☐ Material damages ☐ Personal injuries ☐ Both

G1.27. Have you ever driven after drinking alcoholic drinks? ☐ YES ☐ NO

G1.28 **<u>If YES</u>**, How many times?_____

<u>If YES</u>, What were the effects? (you can choose more than one option)

G1.29. ☐ You could hardly follow the trajectory of the road
G1.30. ☐ You could hardly keep your head on straight
G1.31 ☐ You had muscle cramps
G1.32 ☐ You could hardly keep your eyes open
G1.33 ☐ You got stomach cramps
G1.34 ☐ You could not focus on the road
G1.35 ☐ Someone who was on the scooter/motorbike with you made you notice it.
G1.36 ☐ Other (please, specify)_____

SCALE I1

Nobody is perfect! Even the best driver can make mistakes or commit violations, some of which may be irrelevant but some others are potentially dangerous. The questionnaire is very simple. It contains a list of mistakes and violations that people commit or notice while driving a scooter. You are kindly asked to specify how often you have exhibited the behaviours specified below. Please, use the following answering scale:

0	1	2	3	4	5
Never	**Almost never**	**Every now and then**	**Fairly often**	**Often**	**Almost always**

HOW OFTEN HAVE YOU DONE EACH OF THE FOLLOWING…

I1.1	To exceed the speed limit by over 10 Km/h.	**0**	**1**	**2**	**3**	**4**	**5**
I1.2	To overtake the car in front of you also when its speed is appropriate.	**0**	**1**	**2**	**3**	**4**	**5**
I1.3	To break road traffic rules in order to better circulate in the traffic.	**0**	**1**	**2**	**3**	**4**	**5**
I1.4	To break road traffic rules in order to drive faster.	**0**	**1**	**2**	**3**	**4**	**5**
I1.5	To speed up in order to arrive on time.	**0**	**1**	**2**	**3**	**4**	**5**
I1.6	To drive so close to the car in front of you that you cannot stop should it brake suddenly.	**0**	**1**	**2**	**3**	**4**	**5**
I1.7	To be distracted by what happens around you while driving.	**0**	**1**	**2**	**3**	**4**	**5**
I1.8	To cause dangerous situations because you are not careful enough.	**0**	**1**	**2**	**3**	**4**	**5**
I1.9	To drive without keeping the safe distance.	**0**	**1**	**2**	**3**	**4**	**5**
I1.10	To continue driving even if you are tired and would need a rest.	**0**	**1**	**2**	**3**	**4**	**5**
I1.11	To drive short distances without wearing the helmet	**0**	**1**	**2**	**3**	**4**	**5**
I1.12	To drive long distances without wearing the helmet	**0**	**1**	**2**	**3**	**4**	**5**
I1.13	To slow down in order to let the car behind to overtake you more easily.	**0**	**1**	**2**	**3**	**4**	**5**
I1.14	To slow down near a sign of danger	**0**	**1**	**2**	**3**	**4**	**5**
I1.15	To slow down if (road, weather, etc.) conditions are bad even if you are respecting speed limits.	**0**	**1**	**2**	**3**	**4**	**5**
I1.16	To slow down below the speed limits if the road is slippery.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE I1 (continue …)

0	1	2	3	4	5
Never	**Almost never**	**Every now and then**	**Fairly often**	**Often**	**Almost always**

HOW OFTEN HAVE YOU DONE EACH OF THE FOLLOWING…

I1.17	To drive after drinking more than a glass of beer/wine.	**0**	**1**	**2**	**3**	**4**	**5**
I1.18	To drive after drinking, even if you are not sure that you sobered up.	**0**	**1**	**2**	**3**	**4**	**5**
I1.19	To ride on a motorbike with a driver who drank too much.	**0**	**1**	**2**	**3**	**4**	**5**
I1.20	To slow down when road signs indicate that you are in a children's play area.	**0**	**1**	**2**	**3**	**4**	**5**
I1.21	To slow down in a children's play area even if no child is on sight.	**0**	**1**	**2**	**3**	**4**	**5**
I1.22	To drive within speed limits.	**0**	**1**	**2**	**3**	**4**	**5**
I1.23	To drive under the effects of narcotic drugs	**0**	**1**	**2**	**3**	**4**	**5**

SCALE J1

Imagine that you are in the following situation:
"*You have to go to visit some friends and you are a little bit late. You have to reach your friends' place by driving your scooter/motorbike".*
Assess each situations outlined below and consider to what extent, in your opinion, it is likely to behave as described below
Please answer by using the scale from 0 (most unlikely) to 5 (most likely) on the right side of the page.

0	1	2	3	4	5
Most unlikely					**Most likely**

J1.1	To exceed speed limits by over 10 Km/h.	**0**	**1**	**2**	**3**	**4**	**5**
J1.2	To overtake the car in front of you also when its speed is appropriate.	**0**	**1**	**2**	**3**	**4**	**5**
J1.3	To break road traffic rules in order to circulate better in the traffic.	**0**	**1**	**2**	**3**	**4**	**5**
J1.4	To break road traffic rules in order to drive faster.	**0**	**1**	**2**	**3**	**4**	**5**
J1.5	To speed up in order to arrive on time.	**0**	**1**	**2**	**3**	**4**	**5**
J1.6	To drive so close to the car in front of you that you cannot stop should it brake suddenly.	**0**	**1**	**2**	**3**	**4**	**5**
J1.7	To be distracted by what happens around you while driving.	**0**	**1**	**2**	**3**	**4**	**5**
J1.8	To cause dangerous situations because you are not careful enough.	**0**	**1**	**2**	**3**	**4**	**5**
J1.9	To drive without keeping a safe distance.	**0**	**1**	**2**	**3**	**4**	**5**
J1.10	To continue driving even if you are tired and would need a rest.	**0**	**1**	**2**	**3**	**4**	**5**
J1.11	To drive short distances without wearing the helmet.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE J1 (continue …)

0	1	2	3	4	5
Most unlikely					**Most likely**

J1.12	To drive long distances without wearing the helmet.	**0**	**1**	**2**	**3**	**4**	**5**
J1.13	To slow down in order to let the car behind to overtake you more easily.	**0**	**1**	**2**	**3**	**4**	**5**
J1.14	To slow down near a sign of danger.	**0**	**1**	**2**	**3**	**4**	**5**
J1.15	To slow down if (road, weather, etc.) conditions are bad even if you are respecting speed limits.	**0**	**1**	**2**	**3**	**4**	**5**
J1.16	To slow down below speed limits f the road is slippery.	**0**	**1**	**2**	**3**	**4**	**5**
J1.17	To drive after drinking more than a glass of beer/wine.	**0**	**1**	**2**	**3**	**4**	**5**
J1.18	To drive after drinking even if you are not sure that you sobered up.	**0**	**1**	**2**	**3**	**4**	**5**
J1.19	To slowing down when road signs indicate that you are in an a children's play area.	**0**	**1**	**2**	**3**	**4**	**5**
J1.20	To slow down in a children's play area even if no child is on sight.	**0**	**1**	**2**	**3**	**4**	**5**
J1.21	To drive within speed limits	**0**	**1**	**2**	**3**	**4**	**5**
J1.22	To drive under the effects of narcotic drugs.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE K1

The following is a list of behaviours linked to driving a scooter/motorbike under the effect of alcohol.
You are kindly asked to indicate how often you have exhibited the behaviours described below. Please answer by using the following scale:

0	1	2	3	4	5
Never	**Almost never**	**Every now and then**	**Fairly often**	**Often**	**Almost always**

HOW OFTEN HAVE YOU DONE THE FOLLOWING…

K1.1	You drove less then two hours after having drunk alcohol	**0**	**1**	**2**	**3**	**4**	**5**
K1.2	You drove although your blood alcohol level might have been above the legal limit.	**0**	**1**	**2**	**3**	**4**	**5**
K1.3	You prevented someone you knew from driving under the effect of alcohol	**0**	**1**	**2**	**3**	**4**	**5**
K1.4	You saw someone you knew driving under the effect of alcohol.	**0**	**1**	**2**	**3**	**4**	**5**
K1.5	You were travelling on a scooter/motorbike with someone who was driving under the effect of alcohol	**0**	**1**	**2**	**3**	**4**	**5**
K1.6	You were the designated driver	**0**	**1**	**2**	**3**	**4**	**5**
K1.7	You travelled on a scooter/motorbike with a designated driver	**0**	**1**	**2**	**3**	**4**	**5**
K1.8	You were driving a scooter/motorbike and you were stopped by the police for an alcohol test.	**0**	**1**	**2**	**3**	**4**	**5**
K1.9	You were the passenger on a scooter/motorbike and you were stopped by the police for an alcohol test to the driver.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE L1

Below you will find several statements regarding the effects of alcohol while driving. Assess whether you agree or disagree with each of them.
Please answer by using the scale from 1 to 5 on the right site of the page:

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

L1.1	Alcohol increases concentration capacity	**0**	**1**	**2**	**3**	**4**	**5**
L1.2	Alcohol decreases the level of attention	**0**	**1**	**2**	**3**	**4**	**5**
L1.3	Alcohol reduces sensory capacity.	**0**	**1**	**2**	**3**	**4**	**5**
L1.4	Alcohol makes you more active and alert	**0**	**1**	**2**	**3**	**4**	**5**
L1.5	Alcohol makes your driving more sportive and brilliant	**0**	**1**	**2**	**3**	**4**	**5**
L1.6	Alcohol reduces the effects of tiredness.	**0**	**1**	**2**	**3**	**4**	**5**
L1.7	Alcohol makes you feel sleepy	**0**	**1**	**2**	**3**	**4**	**5**
L1.8	Alcohol makes you feel more secure	**0**	**1**	**2**	**3**	**4**	**5**
L1.9	Alcohol makes you feel euphoric	**0**	**1**	**2**	**3**	**4**	**5**
L1.10	Alcohol helps you be more prudent	**0**	**1**	**2**	**3**	**4**	**5**
L1.11	Alcohol slows down reaction time	**0**	**1**	**2**	**3**	**4**	**5**
L1.12	Alcohol improves reaction time	**0**	**1**	**2**	**3**	**4**	**5**
L1.13	Alcohol makes you overestimate your own capacities	**0**	**1**	**2**	**3**	**4**	**5**
L1.14	Alcohol makes you less capable of assessing the risks	**0**	**1**	**2**	**3**	**4**	**5**
L1.15	Alcohol blurs your vision	**0**	**1**	**2**	**3**	**4**	**5**
L1.16	Alcohol effects depend solely on how much you usually drink	**0**	**1**	**2**	**3**	**4**	**5**
L1.17	Alcohol has little effect on you	**0**	**1**	**2**	**3**	**4**	**5**
L1.18	Even after having had alcohol you can drive better than many other persons.	**0**	**1**	**2**	**3**	**4**	**5**
L1.19	After drinking it is sufficient to drive more prudently in order to avoid unpleasant accidents.	**0**	**1**	**2**	**3**	**4**	**5**
L1.20	Drunk driving dangers are overestimated	**0**	**1**	**2**	**3**	**4**	**5**

END OF QUESTIONNAIRE

THANK YOU FOR YOUR COOPERATION!

YOU CAN GIVE BACK THE QUESTIONNAIRE

SECTION 3

IF YOU DRIVE NEITHER A CAR NOR A SCOOTER

SCALE M

Read carefully the following statements and indicate with a cross your level of agreement with each of them using the scale from 0 (strongly disagree) to 5 (strongly agree) you can find near each statement.

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

M.1	To keep traffic smooth-flowing you should ignore many of the road traffic rules.	**0**	**1**	**2**	**3**	**4**	**5**
M.2	It is reasonable to exceed speed limits to overtake slow or inexperienced drivers.	**0**	**1**	**2**	**3**	**4**	**5**
M.3	The road traffic code has to be observed regardless of road and weather conditions.	**0**	**1**	**2**	**3**	**4**	**5**
M.4	Speed limit cannot be observed because it is too restrictive.	**0**	**1**	**2**	**3**	**4**	**5**
M.5	It is reasonable to pass when traffic light is going from yellow to red.	**0**	**1**	**2**	**3**	**4**	**5**
M.6	Running risks and breaking a few rules does not necessarily mean that you are a bad driver.	**0**	**1**	**2**	**3**	**4**	**5**
M.7	It is acceptable to run risks when driving if other persons are not involved.	**0**	**1**	**2**	**3**	**4**	**5**
M.8	The road traffic code is often too complicated to be observed.	**0**	**1**	**2**	**3**	**4**	**5**
M.9	High-speed driving is reasonable if you are a good driver	**0**	**1**	**2**	**3**	**4**	**5**
M.10	High-speed driving is possible if road conditions are good and there is nobody around.	**0**	**1**	**2**	**3**	**4**	**5**
M.11	Sanctions for speeding should be harsher.	**0**	**1**	**2**	**3**	**4**	**5**
M.12	It is ok to go by car with a fast driver if it is the only way to go back home at night.	**0**	**1**	**2**	**3**	**4**	**5**
M.13	It is ok to go by car with a fast driver if also the others do the same.	**0**	**1**	**2**	**3**	**4**	**5**
M.14	I do not want to risk my life and health going by car with a reckless driver.	**0**	**1**	**2**	**3**	**4**	**5**
M.15	I would never drive after drinking alcoholic drinks.	**0**	**1**	**2**	**3**	**4**	**5**
M.16	I would never go by car with a driver who is under the influence of alcohol.	**0**	**1**	**2**	**3**	**4**	**5**
M.17	I would never drive under the influence of narcotic drugs.	**0**	**1**	**2**	**3**	**4**	**5**
M.18	I would never go by car with a driver who is under the influence of narcotic drugs.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE N

The following are statements made by drivers when discussing the causes of road accidents. Read carefully the following statements and indicate with a cross your level of agreement with each of them using the scale from 0 (strongly disagree) to 5 (strongly agree) you can find near each statement.

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

N.1	Driving without accidents is mainly a question of good luck.	**0**	**1**	**2**	**3**	**4**	**5**
N.2	Accidents occur mainly due to unpredictable causes.	**0**	**1**	**2**	**3**	**4**	**5**
N.3	To prevent an accident a driver can only observe road traffic rules.	**0**	**1**	**2**	**3**	**4**	**5**
N.4	Accidents occur due to so many reasons that nobody can understand the most important one.	**0**	**1**	**2**	**3**	**4**	**5**
N.5	Frequent drivers who have no accidents are only lucky persons and are not more careful than others.	**0**	**1**	**2**	**3**	**4**	**5**
N.6	A careful driver can prevent any accident.	**0**	**1**	**2**	**3**	**4**	**5**
N.7	When a driver is involved in an accident it is because he does not drive the way he should.	**0**	**1**	**2**	**3**	**4**	**5**
N.8	When a driver is involved in an accident it is because he/she is not so careful in driving.	**0**	**1**	**2**	**3**	**4**	**5**
N.9	Accidents are always caused by drivers' mistakes.	**0**	**1**	**2**	**3**	**4**	**5**
N.10	In case of accident it is almost always the driver's fault.	**0**	**1**	**2**	**3**	**4**	**5**
N.11	It is difficult to prevent accidents when you drive in bad conditions, such as darkness, rain, narrow roads, bends, etc.	**0**	**1**	**2**	**3**	**4**	**5**
N.12	Most accidents occur due to road bad conditions, lack of adequate signals, etc.	**0**	**1**	**2**	**3**	**4**	**5**
N.13	It is very difficult to prevent accidents when pedestrians emerge suddenly from between parked cars.	**0**	**1**	**2**	**3**	**4**	**5**
N.14	It is difficult to prevent accidents involving children since they are unpredictable when in the street.	**0**	**1**	**2**	**3**	**4**	**5**
N.15	It is really difficult to prevent accidents involving elderly people since they may not hear and see well.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE N (continue…)

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

N.16	Accidents occur because drivers have not learnt to be careful enough when driving.	**0**	**1**	**2**	**3**	**4**	**5**
N.17	It is always possible to foresee what occurs on the road. Therefore, almost all accidents could be prevented.	**0**	**1**	**2**	**3**	**4**	**5**
N.18	Accidents occur when a driver is not careful enough of what the other drivers are doing.	**0**	**1**	**2**	**3**	**4**	**5**
N.19	Accidents occur when a driver is not careful enough of all possible causes of danger.	**0**	**1**	**2**	**3**	**4**	**5**
N.20	If it is bound to happen, an accident occurs anyway and does not depend on a driver's behaviour.	**0**	**1**	**2**	**3**	**4**	**5**
N.21	Many accidents occur due to a lack of knowledge or the driver's laziness.	**0**	**1**	**2**	**3**	**4**	**5**
N.22	Accidents often occur also to drivers who observe the road traffic rules since it is the other drivers who do not observe them.	**0**	**1**	**2**	**3**	**4**	**5**
N.23	A driver never gets enough control over what occurs on the road.	**0**	**1**	**2**	**3**	**4**	**5**
N.24	Most accidents occur due to mechanical problems.	**0**	**1**	**2**	**3**	**4**	**5**
N.25	Accidents will always occur independently of drivers' efforts to prevent them.	**0**	**1**	**2**	**3**	**4**	**5**
N.26	Many accidents occur if drivers do not consider all possible behaviours of pedestrians.	**0**	**1**	**2**	**3**	**4**	**5**
N.27	Driving without accidents depends on drivers' abilities to pay attention to what happens on the road and pavements.	**0**	**1**	**2**	**3**	**4**	**5**
N.28	Drivers can always foresee what is going to occur. This is why on the road there is no room for surprises.	**0**	**1**	**2**	**3**	**4**	**5**
N.29	It is possible to prevent accidents also in adverse conditions, such as darkness, narrow roads, rain, etc.	**0**	**1**	**2**	**3**	**4**	**5**
N.30	Accident prevention depends only on the driver and his/her characteristics, not on external factors.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE O

O.1 **If you drive a car, how would you assess your risk of having a road accident as against the persons of your age?**

Very low									Very high
1	2	3	4	5	6	7	8	9	10

O.2 **How much are you worried about this possibility?**

A little worried									Very worried
1	2	3	4	5	6	7	8	9	10

O.3 Now think of the **friends you consider important:** how much would they approve if YOU undertook reckless behaviours when driving?

They would not approve at all									They would totally approve
1	2	3	4	5	6	7	8	9	10

O.4 Continue to think of the **friends you consider important**: how much would they encourage you to undertake reckless behaviours when driving?

They would not encourage me at all									They would totally encourage me
1	2	3	4	5	6	7	8	9	10

O.5 Think now of **your parents:** how angry would they get if they knew that YOU undertook reckless behaviours when driving?

They would get extremely angry									They would not get angry at all
1	2	3	4	5	6	7	8	9	10

O.6 Continue to think of **your parents**: do you think they would punish you if they knew you undertook reckless behaviours when driving?

They would punish me severely									They would not punish me at all
1	2	3	4	5	6	7	8	9	10

SCALE P

Imagine that each of the situations described below occurs to you when driving. Try to assess your rage level for each of them using the scale from 0 (I would not get angry at all) to 5 (I would get extremely angry)

I would get angry

0	1	2	3	4	5
Not at all					**Extremely**

P.1	Somebody in front of you zigzags through the traffic.	**0**	**1**	**2**	**3**	**4**	**5**
P.2	A vehicle going slowly on a mountain road does not pull in to let you pass over.	**0**	**1**	**2**	**3**	**4**	**5**
P.3	Somebody reverses just in front of you without looking back.	**0**	**1**	**2**	**3**	**4**	**5**
P.4	Somebody does not stop at a red traffic light or a stop sign.	**0**	**1**	**2**	**3**	**4**	**5**
P.5	You passed by a speed camera.	**0**	**1**	**2**	**3**	**4**	**5**
P.6	Somebody speeds up while you are trying to overtake him/her.	**0**	**1**	**2**	**3**	**4**	**5**
P.7	Somebody is slow in parking and blocks the traffic.	**0**	**1**	**2**	**3**	**4**	**5**
P.8	You are trapped in a traffic jam.	**0**	**1**	**2**	**3**	**4**	**5**
P.9	Somebody makes an obscene gesture for your way of driving.	**0**	**1**	**2**	**3**	**4**	**5**
P.10	Somebody sounds the horn for your way of driving.	**0**	**1**	**2**	**3**	**4**	**5**
P.11	A cyclist is moving in the middle of the road and slows down traffic	**0**	**1**	**2**	**3**	**4**	**5**
P.12	A policeman approaches you.	**0**	**1**	**2**	**3**	**4**	**5**
P.13	Sand or gravel falls down from a lorry in front of your car.	**0**	**1**	**2**	**3**	**4**	**5**
P.14	You are driving behind a huge lorry blocking your view.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE Q

Read the following statements and indicate your level of agreement with each of them using the scale from 0 (Strongly disagree) to 5 (Strongly agree) near each statement.

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

Q.1	It is ok to break the rules until you are caught.	**0**	**1**	**2**	**3**	**4**	**5**
Q.2	It is ok to circumvent laws and regulations as long as you do not break them directly.	**0**	**1**	**2**	**3**	**4**	**5**
Q.3	If something allows you to achieve the result you want it is not important whether it is right or wrong.	**0**	**1**	**2**	**3**	**4**	**5**
Q.4	There are things that are not crimes which, however, must not be done.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE R

Below you will find various statements. Assess your level of agreement or disagreement with each of them. To express your assessment use the 0 to 5 scale near each statement:

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

R.1	I am not a person who worries.	**0**	**1**	**2**	**3**	**4**	**5**
R.2	I often get angry about the way people treat me.	**0**	**1**	**2**	**3**	**4**	**5**
R.3	Some people think I am egoist and egocentric.	**0**	**1**	**2**	**3**	**4**	**5**
R.4	I often wish exciting things.	**0**	**1**	**2**	**3**	**4**	**5**
R.5	I easily panic.	**0**	**1**	**2**	**3**	**4**	**5**
R.6	I am tranquil and not irritable.	**0**	**1**	**2**	**3**	**4**	**5**
R.7	I try to be kind with all the persons I meet.	**0**	**1**	**2**	**3**	**4**	**5**
R.8	I would not like to spend my vacations in a place, such as Las Vegas or Montecarlo.	**0**	**1**	**2**	**3**	**4**	**5**
R.9	I am seldom frightened and anxious.	**0**	**1**	**2**	**3**	**4**	**5**
R.10	I am known as a passionate and hot-blooded person.	**0**	**1**	**2**	**3**	**4**	**5**
R.11	Some persons consider me as cool-headed and self-seeking.	**0**	**1**	**2**	**3**	**4**	**5**
R.12	Sometimes I did things only for excitement and thrill.	**0**	**1**	**2**	**3**	**4**	**5**
R.13	I often feel tense and nervous.	**0**	**1**	**2**	**3**	**4**	**5**
R.14	I am not considered susceptible or irritable.	**0**	**1**	**2**	**3**	**4**	**5**
R.15	I often try to be attentive and thoughtful.	**0**	**1**	**2**	**3**	**4**	**5**
R.16	I tend to avoid scary and shocking movies.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE R (continue…)

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

R.17	I seldom worry about the future.	**0**	**1**	**2**	**3**	**4**	**5**
R.18	I am often disgusted by the persons I deal with.	**0**	**1**	**2**	**3**	**4**	**5**
R.19	The others think I am not very generous.	**0**	**1**	**2**	**3**	**4**	**5**
R.20	I enjoy being in an active environment.	**0**	**1**	**2**	**3**	**4**	**5**
R.21	I often worry about things that can go wrong.	**0**	**1**	**2**	**3**	**4**	**5**
R.22	It takes a lot to make me angry.	**0**	**1**	**2**	**3**	**4**	**5**
R.23	Most of the people I know like me.	**0**	**1**	**2**	**3**	**4**	**5**
R.24	I love the thrill of roller-coaster.	**0**	**1**	**2**	**3**	**4**	**5**
R.25	I have fewer fears than most people.	**0**	**1**	**2**	**3**	**4**	**5**
R.26	Sometimes I felt disappointed and resentful.	**0**	**1**	**2**	**3**	**4**	**5**
R.27	I think I am generous with who is in trouble.	**0**	**1**	**2**	**3**	**4**	**5**
R.28	I am attracted by bright colours and showy styles	**0**	**1**	**2**	**3**	**4**	**5**
R.29	Sometimes frightening thoughts cross my mind.	**0**	**1**	**2**	**3**	**4**	**5**
R.30	Even the smallest inconvenience can be frustrating to me.	**0**	**1**	**2**	**3**	**4**	**5**
R.31	If I can I do my utmost to help the others.	**0**	**1**	**2**	**3**	**4**	**5**
R.32	During sports events I like to be part of the crowd.	**0**	**1**	**2**	**3**	**4**	**5**
R.33	I am a reliable worker	**0**	**1**	**2**	**3**	**4**	**5**
R.34	I tend to be lazy	**0**	**1**	**2**	**3**	**4**	**5**
R.35	I tend to persevere until the task is finished	**0**	**1**	**2**	**3**	**4**	**5**
R.36	I make plans and follow through with them	**0**	**1**	**2**	**3**	**4**	**5**
R.37	I am easily distracted	**0**	**1**	**2**	**3**	**4**	**5**

SCALE S

<u>Imagine</u> that you are in the following situation:

"You have to visit some friends and you are a bit late. You have to reach your friends' place by driving your own car"

Please, examine each of the situations listed below and indicate how likely you think it is that you will perform the behaviour described.
Please answer by using the scale from 0 (most unlikely) to 5 (most likely) on the right side of the page.

0	1	2	3	4	5
Most unlikely					**Most likely**

S.1	You exceed the speed limit by 10 Km/h	**0**	**1**	**2**	**3**	**4**	**5**
S.2	You overtake the car in front of you even though it is going at an adequate speed.	**0**	**1**	**2**	**3**	**4**	**5**
S.3	You violate traffic rules in order to move more smoothly	**0**	**1**	**2**	**3**	**4**	**5**
S.4	You violate traffic rules in order to go faster.	**0**	**1**	**2**	**3**	**4**	**5**
S.5	You drive fast in order to be on time at the appointment.	**0**	**1**	**2**	**3**	**4**	**5**
S.6	You drive so close to the car in front of you that you would not be able to stop if it were to brake sharply.	**0**	**1**	**2**	**3**	**4**	**5**
S.7	You are distracted by what is happening around you while driving.	**0**	**1**	**2**	**3**	**4**	**5**
S.8	You create dangerous situations because you are not attentive enough	**0**	**1**	**2**	**3**	**4**	**5**
S.9	You drive without keeping a safe distance	**0**	**1**	**2**	**3**	**4**	**5**
S.10	You keep on driving even if you are tired and need a rest.	**0**	**1**	**2**	**3**	**4**	**5**
S.11	You drive short distances without wearing the seatbelts.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE S (continue …)

0	1	2	3	4	5
Most unlikely					**Most likely**

S.12	You drive long distances without wearing the seatbelts.	**0**	**1**	**2**	**3**	**4**	**5**
S.13	You slow down to let the car behind you overtake you more easily	**0**	**1**	**2**	**3**	**4**	**5**
S.14	You slow down when approaching a danger sign	**0**	**1**	**2**	**3**	**4**	**5**
S.15	You slow down in case of bad conditions (road, weather, etc,) even if you are driving within the speed limit.	**0**	**1**	**2**	**3**	**4**	**5**
S.16	You slow down and drive below speed limit when the road is slippery.	**0**	**1**	**2**	**3**	**4**	**5**
S.17	You drive after having had a glass of beer/wine.	**0**	**1**	**2**	**3**	**4**	**5**
S.18	You drive after having drunk, even though you are not sure you have sobered up.	**0**	**1**	**2**	**3**	**4**	**5**
S.19	You slow down when street signs indicate that you are in a children's play area.	**0**	**1**	**2**	**3**	**4**	**5**
S.20	You slow down in a children's play area even if there is nobody in sight.	**0**	**1**	**2**	**3**	**4**	**5**
S.21	You drive within speed limits.	**0**	**1**	**2**	**3**	**4**	**5**
S.22	You drive under the effect of drugs.	**0**	**1**	**2**	**3**	**4**	**5**

SCALE T

Below you will find several statements regarding the effects of alcohol while driving. Assess whether you agree or disagree with each of them.
Please answer by using the scale from 1 to 5 on the right site of the page:

0	1	2	3	4	5
Strongly disagree	**Fairly disagree**	**Slightly disagree**	**Slightly agree**	**Fairly agree**	**Strongly agree**

T.1	Alcohol increases concentration capacity	**0**	**1**	**2**	**3**	**4**	**5**
T.2	Alcohol decreases the level of attention	**0**	**1**	**2**	**3**	**4**	**5**
T.3	Alcohol reduces sensory capacity.	**0**	**1**	**2**	**3**	**4**	**5**
T.4	Alcohol makes you more active and alert	**0**	**1**	**2**	**3**	**4**	**5**
T.5	Alcohol makes your driving more sportive and brilliant	**0**	**1**	**2**	**3**	**4**	**5**
T.6	Alcohol reduces the effects of tiredness.	**0**	**1**	**2**	**3**	**4**	**5**
T.7	Alcohol makes you feel sleepy	**0**	**1**	**2**	**3**	**4**	**5**
T.8	Alcohol makes you feel more secure	**0**	**1**	**2**	**3**	**4**	**5**
T.9	Alcohol makes you feel euphoric	**0**	**1**	**2**	**3**	**4**	**5**
T.10	Alcohol helps you be more prudent	**0**	**1**	**2**	**3**	**4**	**5**
T.11	Alcohol slows down reaction time	**0**	**1**	**2**	**3**	**4**	**5**
T.12	Alcohol improves reaction time	**0**	**1**	**2**	**3**	**4**	**5**
T.13	Alcohol makes you overestimate your own capacities	**0**	**1**	**2**	**3**	**4**	**5**
T.14	Alcohol makes you less capable of assessing the risks	**0**	**1**	**2**	**3**	**4**	**5**
T.15	Alcohol blurs your vision	**0**	**1**	**2**	**3**	**4**	**5**
T.16	Alcohol effects depend solely on how much you usually drink	**0**	**1**	**2**	**3**	**4**	**5**
T.17	Alcohol has little effect on you	**0**	**1**	**2**	**3**	**4**	**5**
T.18	Even after having had alcohol you could drive better than many other persons.	**0**	**1**	**2**	**3**	**4**	**5**
T.19	After drinking it is sufficient to drive more prudently in order to avoid unpleasant accidents.	**0**	**1**	**2**	**3**	**4**	**5**
T.20	Drunk driving dangers are overestimated	**0**	**1**	**2**	**3**	**4**	**5**

END OF QUESTIONNAIRE

THANK YOU FOR YOUR COOPERATION!

YOU CAN GIVE BACK THE QUESTIONNAIRE

Questionnaire

Road Safety Education Programs

Please answer the following basic questions on your country's policy regarding road safety education.

Country:……...

Police Force:……

1. In your country, which institutions or organisations are responsible for providing education in road safety? (you may select more than one answer)

- □ School
- □ University
- □ Driving schools
- □ Police Force
- □ Associations
- □ Local authorities
- □ Other …….

2. Which professional figures are responsible for providing education in road safety? (you may select more than one answer)

- □ Teachers
- □ Professionals in the sector
- □ Police Force
- □ Highways Police
- □ Psychologists
- □ Instructors
- □ Local Authority Representatives
- □ Other …….

3. Is road safety part of the school curriculum in your country?

□ Yes □ No □ I don't know

4. At what age does road safety education begin?

- □ 3-5 years
- □ 6-11 years
- □ 12-14 years
- □ 15-18 years
- □ 19–24 years
- □ I don't know

5. Which Institutions are responsible for road safety education in your country, and what are their programmes?

.....
……
……
.....
……

6. Which aspects of road safety are usually considered to be important in the education provided in your country? (you may select more than one answer)

□ Behavioural aspects
□ Regulatory aspects
□ Psychological aspects
□ Socio-cultural aspects
□ Medical/health aspects
□ Other …….

7. Which subjects are usually considered to be important in road safety education?

……
……
……
……
……
……

8. How is road safety taught? (you may select more than one answer)

□ Traditional classroom lessons
□ Exercises
□ Simulations
□ Discussions and focus groups
□ E-learning
□ Videos
□ Interactive games
□ Other …….

9. Is road safety education organised with the help of textbooks or guides?

□ Yes □ No □ I don't know

9.1 If yes, what type?

□ Illustrated
□ With interactive routes
□ With text and exercises
□ Other……

10. How efficient do you think the road safety training provided is?
(mark with an X the answer you think is most accurate)

Excellent	Very good	Good	OK	Insufficient	Bad	Very bad

11. Have the effects of road safety education ever been assessed?

□ Yes □ No □ I don't know

12.1 If yes, how?

……
……
……
……
……
……

12. What are the strong points of the road safety training provided in your country?

……
……
……
……
……

13. How could it be improved?

……
……
……
……
……

14. Is your country's Police Force involved in person in road safety training?

□ Yes □ No

14.1. If yes, how?

□ Independently
□ In collaboration with other Public Authorities
□ In collaboration with schools
□ Other …….

14.2. If yes, do the Police Officers involved in road safety education receive prior training for their activity?

□ Yes □ No

14.3. If yes, what training activities are provided?

……
……
……
……
……

15. What are the main causes of accidents among young people? (you may select more than one answer)

□ Driving under the influence of alcohol
□ Drug abuse
□ Disrespect for rules
□ Disrespect of the safety distance
□ Falling asleep at the wheel
□ Lack of attention
□ Speeding
□ Failure to secure seat belts
□ Using mobile phones while driving
□ Other …….

16. Which vehicle do young people in your country use the most?

□ Bicycle
□ Moped
□ Motorcycle
□ Mini car
□ Car (for those old enough to hold a driving licence)

If possible, please attach a standard road safety education programme from your country!
Thank you for your help and attention!

ICARUS *PROJECT*

INTER - CULTURAL APPROACHES FOR ROAD USERS SAFETY

ICARUS is an action-research program developed in three broad areas. The first area involved the setting up of a European network of national institutions focusing on road safety promotion.

The second area dealt with a study on a large sample of young drivers living in Austria, Bulgaria, Cyprus, Estonia, France, Germany, Ireland, Italy, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia and consented the identification of specific automobile and motorcycle driver profiles in each of the participating countries.

Based on these data, the third area envisions a training program, for European youth between the ages of 17 and 21 years, which is based on the common and specific national risk factors. This Research Report is divided into several parts that explain the methodology used to conduct the research and the main results obtained.

In particular, data gathered through questionnaires led to the construction of risk profiles of young drivers in the 14 European Countries that formed the ICARUS project network.

This significant activity, based on about 1000 questionnaires received from each Country, made possible to achieve the goal of a deeper understanding of the mechanisms underlying the risk conduct of young drivers.
The research report illustrates the details of the method and of the results, but also highlights the various aspects of risk profiles, which are the mile stones of the likelihood of designing a training model able to target the specific issues that support the risk driving.

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