



16th International Summer School 2010

European Ph.D. on
Social Representations and Communication
At the Multimedia LAB & Research Center, Rome-Italy



"Social Representations and Sciences"

16th - 27th July 2010

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Participants Presentations



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16th INTERNATIONAL LAB MEETING OF THE EURO Ph.D ON S.R. & C.

ROME, 16th – 27th JULY 2010

Grigore Havarneanu

Intermediate report

Intermediate research report

- Subject of thesis and training work:
“Drivers’ social representation of death as an outcome of road traffic accidents”
- Tutors:
 - Prof. A. Neculau (RO) → supervision & feedback
 - Prof. J.C. Abric / Farida Saad (FR)
 - Prof. J.A. Perez (ES) → Erasmus mobility
- Theoretical review and preliminary data

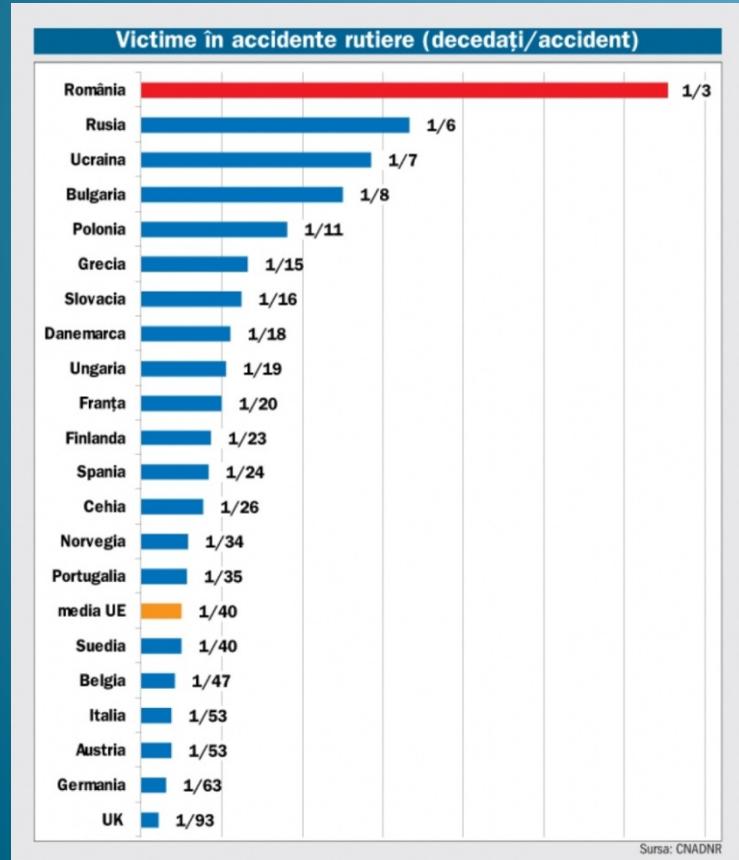
Arguments

- Road accidents are a serious problem (WHO, 2009)
- Statistics vs. road user's representation of this issue

Are they really important from the people's viewpoint?

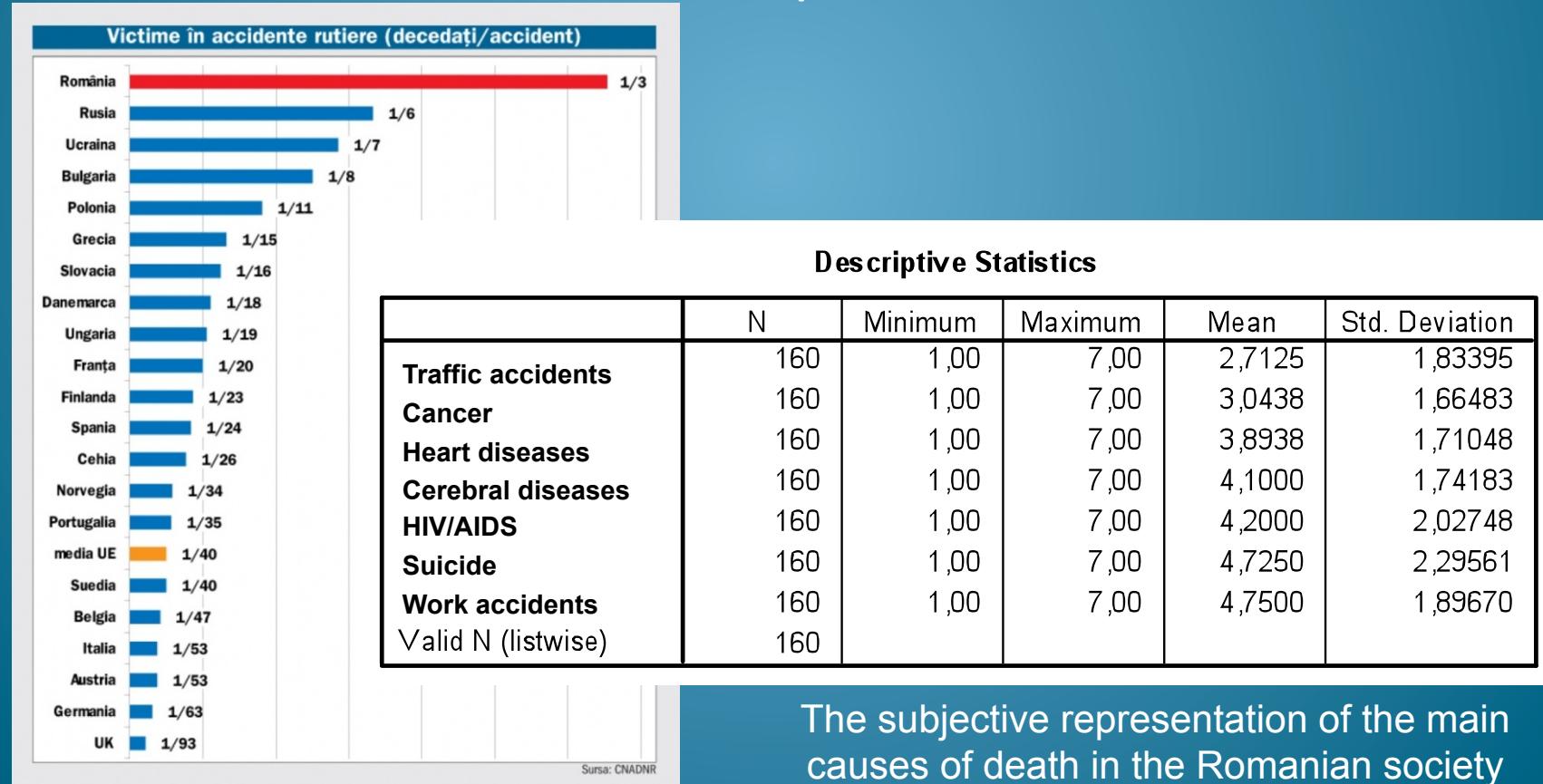
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- The Traffic Code – special category of norms.
- “massive” disobedience (Cialdini, 2007; Perez et al., 1998, 2002, 2009)

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Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Mobile phone use only with hands-free	160	0	99	69,09	24,837
Legal speed limits	160	0	99	58,73	22,533
Helmet use	160	0	100	57,84	31,806
Legal overtaking	160	0	99	54,91	24,843
Legal street crossing	160	0	99	46,48	24,164
Valid first aid kit and fire extinguisher	160	0	100	43,27	26,787
Stop when lights turn yellow	160	0	99	42,79	26,312
Seat belt use	160	0	97	41,99	25,137
Driving without drinking	160	0	99	40,12	24,376
All the car documents in order	160	0	98	30,43	21,387
Valid N (listwise)	160				

The subjective representation of norm violation.

48,56%

Theoretical review (2 chapters)

- **Chapter 1. The contribution of social psychology in traffic studies**
 - Attitude studies (e.g. SARTRE reports)
 - Social representation studies (e.g. INRETS reports)
 - A new psychosocial perspective (Perez et al. 1998, 2002; Lucas & Perez, 2003; Perez & Fernandez-Dols, 2009)

Social relations → social thinking → social behaviour

The heteronomous system (functionalist)

Police (out-group)



External pressure: authority's
sanction, fines, norm as
obligation, massive deviance

Drivers

The autonomous system (interactionist)

Drivers ← → Drivers

Internal pressure:
group's sanction,
respect, shame,
norm as necessity,
norm internalization,
collaboration,
communication,
feedback

Police
(out-group)

Theoretical review (2 chapters)

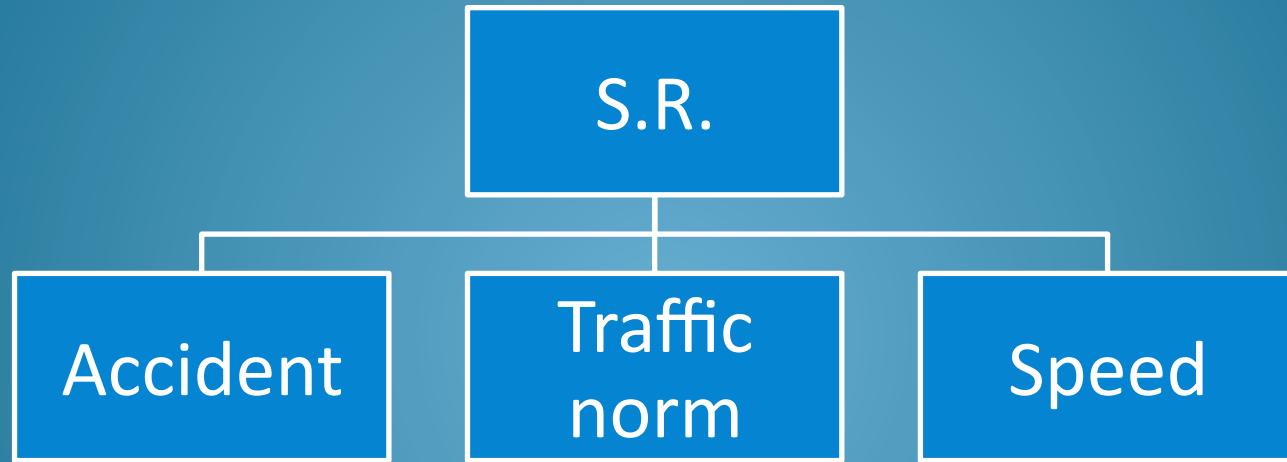
- **Chapter 2. The meanings of life and death in traffic**
 - Death – central element in the SR of the accident (Bachelor research group, 2009-2010)
 - Death threat vs. death defiance
 - Strategies of anxiety reduction (The Meaning Maintenance Model, Heine, Proulx & Vohs, 2006)

Representations of traffic: conexions with the normative systems

- Sample (N=160)
 - Gender (67 men and 93 women)
 - Age (M=32,17; SD=9,13)
- Social representations + “mental” representations
- Quantitative and qualitative data analysis (SPSS, EVOC 2003, T-LAB)

Objective

- 1.



- 2. To prove the prevalence of the heteronomous system.

Variables

- Independent:
 - Gender (M / F)
 - Age (<30 years old, >30 years old)
 - Driving experience
 - Road user type: pedestrian, B category driver, driver with more categories.
 - Experience with accidents as driver, passenger or pedestrian.
 - Mass-media influence

Variables

- Dependent:
 - the structure, content and polarity of the SR of the accident (1 inductor), the traffic norm (1 inductor) and of speed (4 inductors).
 - The preference for one of the normative systems: heteronomous or autonomous.

Variables

- Double role:
 - The perceived importance of traffic accidents among other main causes of death
 - The level of perceived deviance in traffic
 - Religious practices
 - Invulnerability illusion
 - Fear of death
 - Need of certainty regarding one's own death
 - Driving as relevant to self-esteem needs

Hypothesis – method – results

- The structure and content of the SRs from traffic reflect the dominance of the heteronomous system.
 - a) Words like “police”, “sanction”, norm as an “obligation”, freedom “restriction” etc. should be more prevalent compared to “real danger”, “other road users”, “safety”, norm as “necessity”.

Hypothesis – method – results

- A structuralist approach
- Free association task (Abric, 1995)
 - 5 words
- Ranking task (Verges, 1992)
- Polarity measure (de Rosa, 2002)
- 6 inductors: 2 linguistic and 4 figurative.

Hypothesis – method – results

Speed size

Speed
“nature”

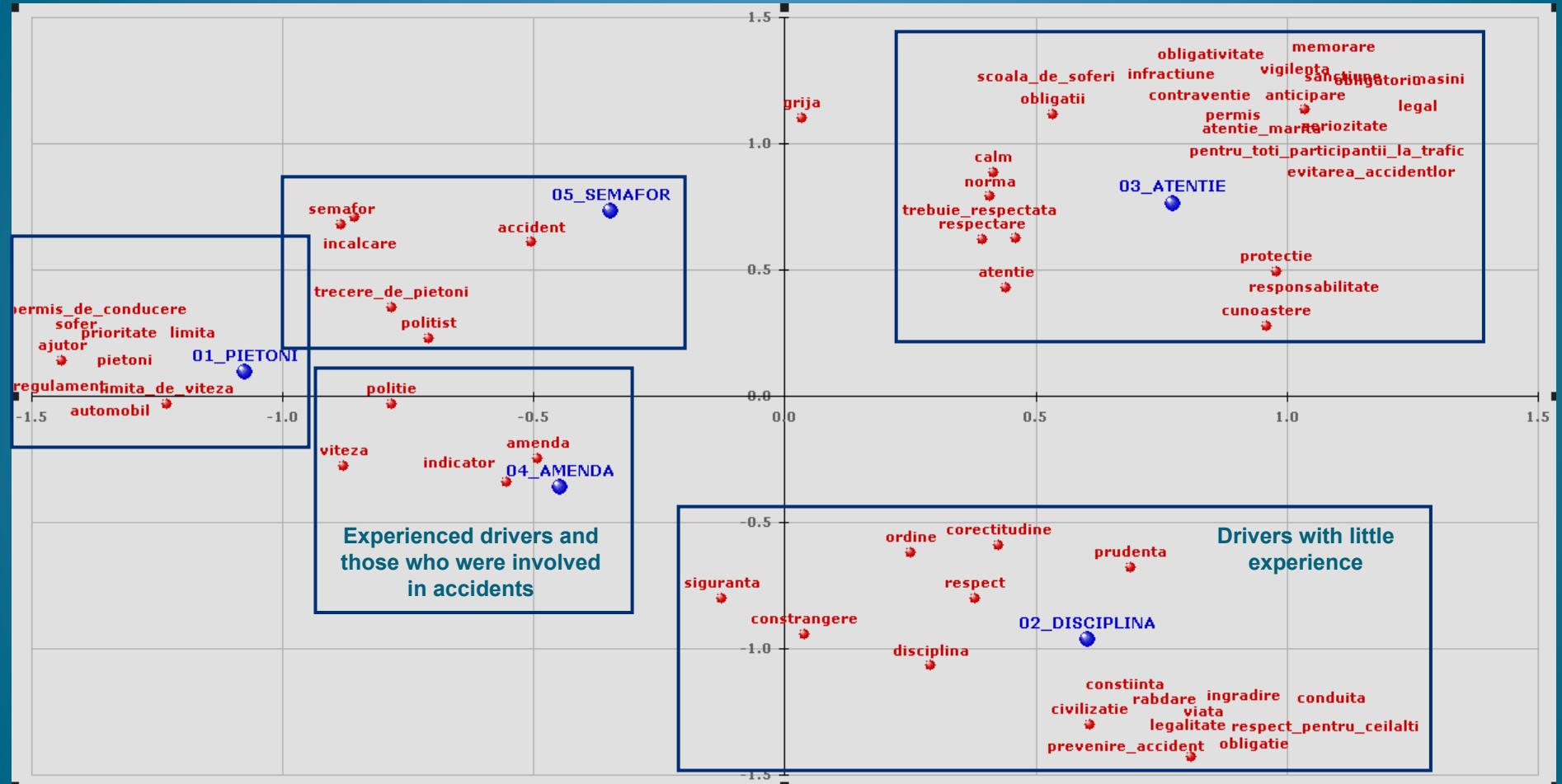


Hypothesis – method – results

Freq. ≥ 12	Rank < 3			Rank ≥ 3		
	Word	f	rank	Word	f	rank
attention	38	2,579	accident	14	3,000	
correctness	15	2,667	fine	26	3,769	
discipline	14	2,071	indicator	19	3,789	
law	17	1,941	pedestrians	14	3,214	
order	20	2,450	police	25	3,720	
policeman	19	2,789	caution	16	3,500	
respect	15	1,933	restriction	12	3,083	
safety	22	2,636				
Freq. < 12	Word	f	rank	Word	f	rank
	constraint	11	2,909	civilization	7	3,286
knowledge	6	2,333	violation	5	3,000	
legislation	5	1,600	car	6	4,000	
norm	5	1,800	traffic lights	7	3,000	
obligation	6	2,167	driver	8	3,125	
priority	11	2,545	traffic	9	3,889	
respect	10	2,700				
responsability	8	2,125				
must be obeyed	10	1,700				
pedestrian crossing	7	2,286				
speed	7	2,571				

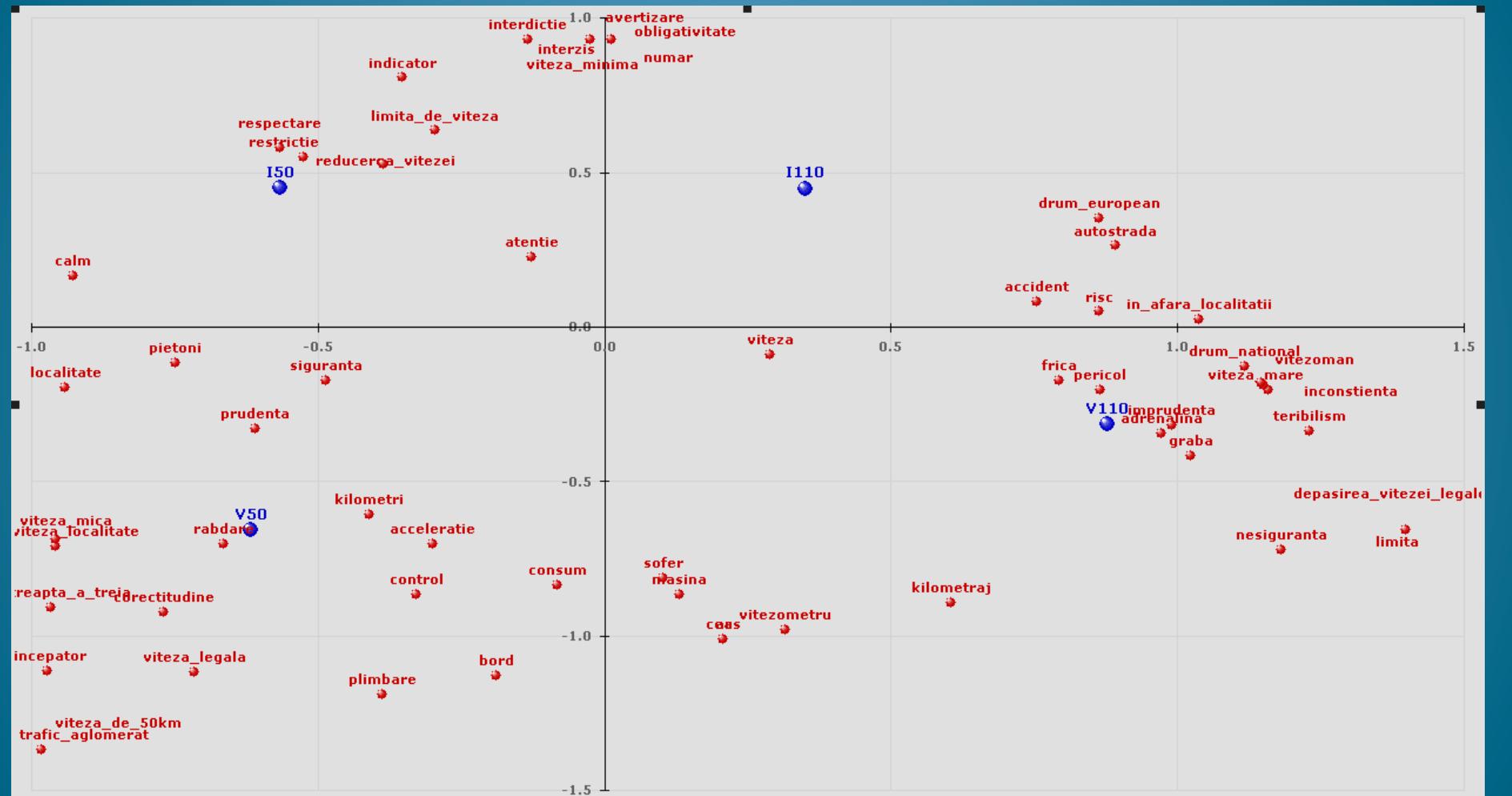
The structure of the SR of the traffic norm

Hypothesis – method – results



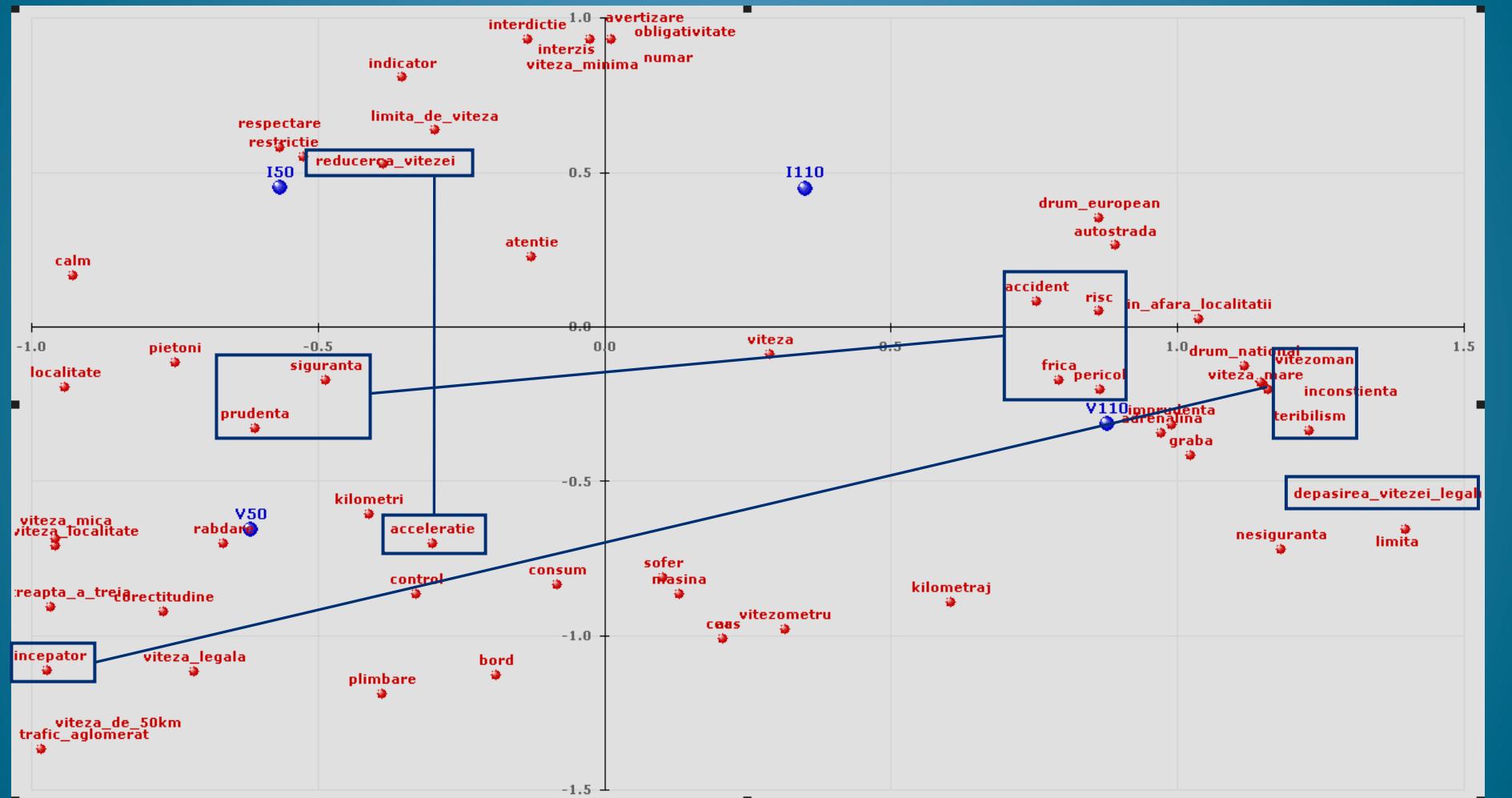
The 5 clusters graphically represented as a function of the first two factors
(42% of the variance explained)

Hypothesis – method – results



The correspondence analysis within the 4 inductors of speed and the factorial representation of the evoked words.

Hypothesis – method – results



The correspondence analysis within the 4 inductors of speed and the factorial representation of the evoked words.

Hypothesis – method – results

- Road users are anchored in the heteronomous normative system of moral reasoning.
 - a) The image of the Traffic Police is dominantly negative.
 - b) Own deviance is perceived as less prevalent compared to the deviance of other road users.
 - c) The Police is considered responsible for the norm violations.
 - d) The Police is considered responsible for the occurrence of severe accidents.

Hypothesis – method – results

Items	Factorial saturation					Communa-lities
	F1	F2	F3	F4	F5	
Polizia Rutieră din România își face bine datoria.	,803					,647
Polizia Rutieră este corectă în controalele de rutină pe care le face.	,778					,675
Polizia Rutieră este corectă în măsurile pe care le ia față de participanții la trafic.	,775					,757
Polizia Rutieră din România oferă modele de comportament participanților la trafic.	,674					,689
Polizia Rutieră din România este... corruptă	,673					,648
Comparativ cu ceea ce văd la ceilalți participanți la trafic, cred că încalc Codul Rutier...		,852				,699
Comparativ cu ceilalți participanți la trafic, cred că respect Codul Rutier...		,589				,561
Când respect normele rutiere, o fac în principal din cauza...			,817			,701
Când (trebuie să) încalc normele rutiere, cel mai mult mi-e frică de...			,745			,572
Cine este mai responsabil pentru producerea accidentelor mortale?				,763		,574
Dacă toată lumea ar respecta regulile de circulație, s-ar produce mai puține accidente mortale.				,633		,503
S-ar produce mai puține accidente grave dacă...				,629		,641
Dacă Polizia ar fi mai severă, s-ar produce mai puține accidente mortale					,804	,606
Polizia Rutieră trebuie păcălită ori de câte ori există această posibilitate.					-,559	,696
Eigenvalue	2,90	1,55	1,54	1,51	1,45	
% variance	20,74	11,13	11,04	10,78	10,37	Total 64,07

Hypothesis – method – results

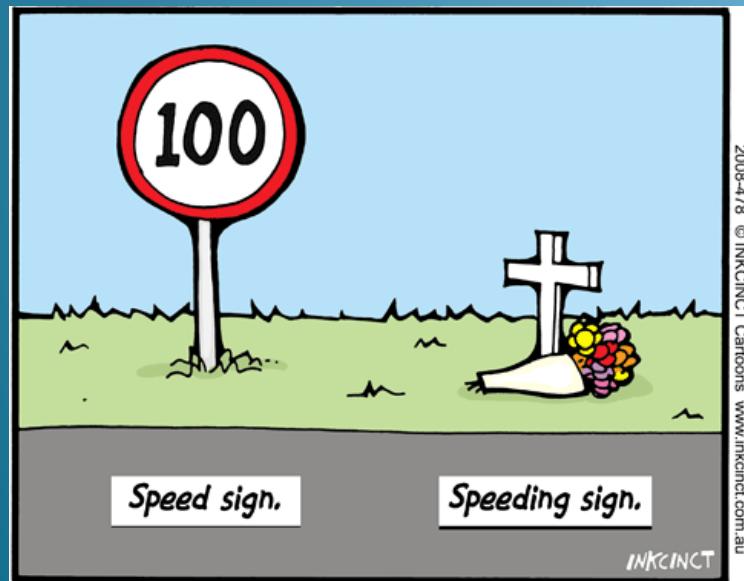
- The general image of the Police ($M=4,56$) and the conception of own deviance ($M=5,72$) reveal the **heteronomous framework**.
- The dominant pole associated with norm deviation ($M=2,42$) and with severe accident causation ($M=1,56$) is the **autonomy**.
- Conclusion: contradictory results
 - The road users consider themselves responsible !

Results summary (1)

- Regarding the normative systems:
 - The heteronomy dominates road users representations from traffic.
 - However, there are premises for a change in the system.
 - Being inexperienced
 - feeling responsible for the norm violation and for the severe accident causation but at the group level

Results summary (2)

- Regarding the normative systems:
 - Road users are aware of the speeding risks in both systems



Results summary (3)

- Regarding the death threat:
 - People are not afraid of death in traffic
 - No co-occurrences “death – fear” at the SR level
 - Very low scores at the “Fear of death scale”
 - Defense mechanisms:
 - Invulnerability illusion
 - ≈26% chances for a fatal accident & ≈32% for a severe one
 - Protective religious practices
 - 79% - cross sign, 76% - religious object, 48% - the “holy” car
 - Little certainty needs regarding own death
 - Driving as relevant to self esteem

Conclusions

- The practical contribution of the research
 - Ways of implementing the system shift
 - Interventions when drivers have little experience
 - Interventions focused on the possibility of losing a close person
 - The reduction of the invulnerability illusion
 - The reduction of drivers' self esteem

Thank you !