See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/264039497

The social representation of traffic accidents

ARTICLE · JUNE 2010

CITATION READS

1

3 AUTHORS, INCLUDING:



Andrei C Holman Universitatea Alexandru Ioan Cuza

25 PUBLICATIONS **16** CITATIONS

SEE PROFILE



33

Grigore Havarneanu

International Union of Railways (UIC)

21 PUBLICATIONS 17 CITATIONS

SEE PROFILE

PSIHOLOGIA SOCIALĂ

Buletinul Laboratorului "Psihologia câmpului social" Universitatea "Al.I. Cuza", Iași

Nr. 25 (I)/2010

POLIROM 2010

The social representation of traffic accidents

Abstract: This paper presents the results of a pilot study aiming at exploring the social representation of traffic accident in a Romanian sample. The method used was the associative network, a variant of the free association technique: the respondent has both to write down the words activated by the inductive expression – "traffic accident" – and to place them in hierarchical order according to their importance. The first data analysis was conducted from a structural perspective, investigating the central core and the peripheral zones of the representation. The lexical correspondence analysis was conducted in a second step exploring the dimensions of the representational field. Results are discussed in terms of contents, structure and factors of social representation, also correlated with the demographic variables used in the study – gender and age.

Key-words: traffic accident, social representation, meaning

Traffic accidents - a contemporary issue which deserves attention

Road accidents represent a major social problem across the world. Road traffic has experienced a steady growth since the fifties. In Romania, this growth became tremendous after 1990 and road accidents have been growing accordingly. Countless reports based on statistical data (WHO, IRTAD, NHTSA, SARTRE, OECD etc.) show that traffic accidents have become one of the main causes of death in all modern societies.

Just as a brief example, in a 1990 report, the World Health Organization (WHO) predicted that deaths from traffic accidents would rise to about 2.3 million per year by 2020 (Freund and Martin, 1997). Another WHO report published in 2004 estimated that 1.2 million people had been killed in road crashes every year, 20 and 50 million had been injured and the estimated global cost of road crashes had been about \$518 billion per year. It was suggested that over the next 20 years the figures would increase by 65 percent making road traffic injuries the third leading contributor to the global injury and dead.

Besides, statistics in Romania are really shocking. According to a C.I.S.R. (Interministry Council for Road Safety) report from August 2006, the number of accidents, the number of dead victims, and the number of severely injured increased in 2005 compared to 2004. In 2007, Romania had 2712 road traffic fatalities and 29832 non-fatal road traffic injuries (WHO, 2009). According to the 2009 WHO report on road safety, based on Romanian Police data, the number of road traffic accidents is in an obvious growing trend.

Following the increased psychosocial impact of traffic-related incidents, traffic psychology – a young yet growing field within psychology – has emerged to specifically focus on the behavior of road users and the psychological processes determining road behavior. It

^{1.} University "Al.I. Cuza", Iași.

encourages accident prevention in its calls for legal, educational, enforcement, vehicle-, and other road-specific safety promotion measures (Rothengatter, 1997). Although traffic psychology has tremendously expanded through applied social and cognitive research, in Romania accident analysis and prevention are barely present. Even if accidents are everyday facts, they are not systematically investigated and most of the times are regarded simply as unfortunate events. On the other hand, specialists argue that road accidents are not hazards which occur by chance. They have well known causes, they are predictable and as a consequence they can be prevented. Therefore, the term *collision* is preferred instead of *accident*.

Within the "pragmatic" related mission of traffic psychology the audio-visual and print media are likely to feature as sources of information, opinion-making, and general knowledge about traffic accidents in society (MacDonald, 2003). Different forms of communication technologies including radio, television, print journalism, and the internet all fulfill vital functions in distributing information and knowledge in society. Because accidents occur very frequently in Romania, and since 1 in 3 accidents is fatal (CNADR - National Highways and Roads Company from Romania) there is no wonder why they are present in almost every news report. People are overwhelmed by information about traffic incidents, but this information is presented in a way which is typical for mass-media. That is to say the accent is always on the most shocking, dramatic, severe events. If two different collisions occur in the same day, the media emphasis will certainly be on the most serious one (i.e. the accident with more victims, more injuries, more destruction, and so on). It is important to be born in mind that information provided by mass-media may affect people's perceptions and meanings about this issue. Whereas traffic accidents constitute one of the main causes of human suffering, injury, death and economic losses, little efforts have been put into exploring the meanings people give to these dramatic events. The way accidents and outcomes are exposed to the wide public should reflect in the social representation of this object.

Theoretical framework

Human factors are seen as the most prevalent, according to data, experts, and studies, in contributing to road crashes (Dahlen *et al.*, 2005). While respecting the importance of environmental factors, psychological research has generally focused on driver characteristics such as demographic, personality, cognitive, and information processing variables. Social psychology within the realm of traffic psychology has largely focused on attitudes towards road user behavior (*e.g.* SARTRE reports on drivers' attitudes in Europe). However, attitude studies are to some extent unclear because different authors use their own definitions of attitude, confusing attitudes sometimes with intentions, sometimes with reported behavior, sometimes with beliefs. Moreover, there are very few theoretical models used in attitude studies, most of these referring to Ajzen's theory of planned behavior (*e.g.* Parker, 2004).

As a concept, *traffic accident* may be controversial due to its wide range of connotations and meanings. First of all, an accident can be provoked by different factors (*i.e.* causes) and can provoke a lot of consequences which can be very different in terms of intensity: from simple material damage or easy scars – which involve no medical care – to severe injury, fractures, burns, permanent disabilities, or even death. Secondly, accidents can be different in terms of number of people involved, type of vehicle, traffic conditions, environmental context etc. Besides, there is another particular aspect that we consider worthy to be mentioned with respect to road accidents. Frequently, death is as the

consequence of accidents. But, in the case of road users, quite often death is not a simple hazard as it may seem. It is an uncertain event; nevertheless most times it is a consequence of driver behavior. A driver can be both the victim and the cause of death, while other categories of road users (pedestrians, cyclists, bikers) are mostly victims. The SR should be able to indicate the road users' level of awareness concerning these issues.

Assuming people are aware of this diversity, it seems on *a priori* grounds that accidents can be regarded in different ways and can trigger different subjective meanings. However, one may wonder which is the globally shared social meaning? In this paper we try to answer this particular question. In order to reach this goal, we use the Social Representation Theory (SRT; Moscovici, 1988) and explore the content, structure and possible functions of social representation of accidents among Romanian subjects.

Exploring and understanding people's representation about road accidents may be a significant issue since the processes that originally give rise to this mental model may be very important in determining whether it will be open to change in response to different intervention strategies. Once identified, these originating processes may also indicate what types of interventions are likely to be maximally effective.

SRT, one of the major social psychological theories of social influence processes, can provide the basis for explaining how an individual may acquire a mental model of an accident and what meanings are associated with it. The theory of social representations was initially developed to explain what happens when people are faced with having to make sense of or give meaning to ideas or data which are novel to them under conditions of uncertainty and where claims are contested. It might be argued that encountering a new social phenomenon inevitably triggers social representation processes. Traffic accidents are not new phenomena but they can be very different in terms of causes, consequences, number of people involved, type of vehicle, traffic context and so on. Consequently, they can be associated with a wide range of meanings. Not to mention the fact that personal experience with accidents, or experience of close ones, may influence this mental model. Thus, it seems rational to suppose an influence of affect upon the representation.

According to Moscovici (1988), social representation operates with two prime processes: objectification and anchoring. Objectification entails translating something that is abstract into something which is almost concrete, gaining a density of meaning which ultimately makes it a common and 'natural' part of thinking about the object. Anchoring entails categorizing a new object into pre-existing cognitive frameworks in order to render them familiar (*i.e.* reducing the strange and unfamiliar object to the level of an ordinary object set in a familiar context). People cope with the non-familiar by drawing on familiar ideas shared by their reference group. As a group they have deeply embedded visions and judgments. The way they explain things depends on what is familiar to them and what social representations of the world they use (Moscovici, 1981).

On the whole, SRT focuses on the way people think or create their shared realities. Thus social groups develop shared meanings of phenomenon by aligning them with what is a familiar and comfortable interpretation for them. The processes of objectification and anchoring could account for the structure often evident in the SR of accidents held by lay members of the public. However, SRT would emphasize that the mental model of accidents is not purely individualized. SRT draws a clear distinction between social representations, individual representations and collective ones. One fundamental axiom is that objectification and anchoring are not individual processes. They are processes that normally involve social interaction and the establishment of shared meaning and consensus through communication among people. Therefore, if meaning is generated through processes of social representation, it will be substantially shared by members of discrete groups, cultures, subcultures, or identities.

However, this does not mean that all members of the subculture would hold absolutely identical mental models of an object but rather that their mental model would share certain common core elements. Individuals within a group might then have representations that incorporate some minor peripheral elements that are not shared (Abric, 1994, 1995). This might happen in particular because the main sources of representations are direct experience based on past observations, social interaction, and mass-media public discourses. The last factor can play a major role in reproduction of ideas as it has more control over various forms of information diffusion and propagation at local and national levels.

Aim of the research

Our main aim was to investigate the content, structure and dimensions of the social representation (SR) of traffic accident in a Romanian sample. As such, we employed the Structural theoretical framework of social representation, as well as the recent developments in the field of exploratory analysis applied in the textual data field.

Method

Instrument

In order to explore the social representation, we used a version of the free association task, which is a method that has become the "landmark" of the structural approach to this phenomenon. The version we employed is based on the "Associative Network" instrument (De Rosa, 2002), which brings two main advantages compared to its "classical" counterpart.

First, it has a graphical format of the data input: that the participant is required to write down the words or expressions that come to his mind when thinking about the inductor words, which are written in the middle of a blank page. The place in which these elements are to be written (and, consequently, their distance from the inductor words) is at participant's free choice, and, thus, it can be in itself submitted to further analysis and interpretations.

Second, this variation of the free association task brings a greater emphasis on the subjective importance which the participant himself assigns to each of the word that he/she has elicited. This is acquired by asking the participant, after the completion of the writing phase, to assign each word a number corresponding to the importance that he/she thinks it has in that specific context. This measure – as shown in the "Results" part – was used in the structural analysis of the Social Representation; the initial version of the free association procedure takes into account the order of elicitation instead, but we consider the self – assessed subjective importance as a more valid indicator of the position that the semantic elements take in the structure of the S.R.

Being only a first, pilot study on the topic, this is the only supplementary item (to the words elicitation task) that we employed. The original Associative Network method offers a wider array of measures which can contribute to the exploration of the Social Representation at hand – such as valence, stereotipicality etc. – which may be used in further investigation on the topic.

In short, the instrument we employed requires participants to write down the words that come to their mind when thinking about the inductor phrase "traffic accident", placing them around it in the blank space of the page. Secondly, they were asked to rank

the words or phrases written on the criterion of importance, by assigning each a number from 1 – which denotes the most important word – to the total number of elements that he/she wrote – corresponding to the least important element.

The last part of the instrument consisted of two items concerning participant's sex and age.

Sample

The instrument described above was distributed to a sample of 43 drivers, residents of Iasi. The gender distribution was: 22 women, 21 men; the mean age of the group was 31, the standard deviation – 4 years, the minimum age was 19, and the maximum – 47.

Statistical analysis

The first part of the analysis was based on the structural approach to Social Representations, and, as such, it dealt with the segmentation of the corpus of semantic data in various levels, mainly reflecting the central system and the periphery of Social Representation of traffic accident in our sample. As presented in the Results part, the statistical procedure – using the EVOC software (*Analyses des évocations*) – is based on two measures: the frequency of the element and their mean importance rank. The other, secondary, analysis here – involving between group comparisons and specific vocabularies – employed the chi-square statistic; a p-value < 0.05 was considered statistically significant.

The second group of analysis – through the use of SPAD 5.0 software (*Système portable pour l'analyse de données*) – represents a lexical correspondence analysis of the data corpus, taking as illustrative variables (in the factorial segmentation of the whole vocabulary) participants' gender and age group. This last variable was built by splitting the sample in two, using the value of 30 as cut point; participants under 30 were included in the "young" group, those over 30 – in the "adult" group. As it can be noticed from the characteristics of the age distribution – presented above – we included in the sample only participants under the age of 50, thus having only two major age groups.

The procedures (methods) applied in SPAD in order to obtain the lexical correspondence analysis on our corpus were:

- "Selection des donnees textuelles Creation du vocabulaire des mots" in order to create the word dictionary;
- "Tableau lexical de contingence" TALEX in order to create the lexical table of contingencies between the words (the active variables) and the illustrative variables;
- "Analyse des correspondances binaries" CORBIT in order to reveal the factorial structure of the representational field.

Results

1. Structural analysis of the Social Representation of traffic accident

The total number of lexical elements elicited by our participant was 301, out of which 137 were different.

The first step of the procedure aimed at identifying the various layers in the structure of The Social Representation was the analysis of the distribution of the number of the elicited lexical elements as a function of their frequency. The goals of this exploration is twofold: on one side, we are interested in finding a first frequency cut point, which would allow us to distinguish between the element "frequent enough" to enter the second step of

analysis, and those which will be eliminated from it. On the other, the structural analysis is based on a second frequency cut point, which, as explained below, further distinguishes two major groups of elements in the hierarchy put forth by this criterion.

Generally speaking, the distribution of the number of words as a function of their frequency has a logarithmic shape. The following table presents the results of this analysis for our data, in terms of words frequency, number, cumulative frequency and cumulative percentage.

Frequency	Number of words	Cumulative frequency	Cumulative percentage
1	85	85	28.2%
2	25	135	44.9%
3	6	153	50.8%
4	6	177	58.8%
5	1	182	60.5%
6	3	200	66.4%
7	6	242	80.4%
8	2	258	85.7%
14	2	286	95.0%
15	1	301	100.0%

Table 1. The distribution of the number of words as a function of their frequency

As depicted in the table above, there are 85 lexical elements that were each elicited by only 1 participant in our sample; there are other 25 elements that were each written by 2 participants, and so on. The distribution – and, subsequently, the corpus of data – can be split in three density areas – as defined by the relationship between frequency and number of words:

- a) the first area contains the lexical elements in a much higher number compared to their frequency of elicitation the first two rows of the table, referring to the words which appeared only once or twice in the sample. Following the recommendations in the field, we excluded these words from the further analysis of the structure of the Social Representation. Thus, the corpus submitted to these further statistics and interpretations consists of 55,1% of the total initially elicited vocabulary.
- b) the second area contains the elements in a number more or less equivalent to their frequency. In our case, this segment of the corpus comprises the words or phrases with a frequency between 3 and 8.
- c) the third and final area contains the elements with a much higher frequency of elicitation compared to their number the last two rows of the table, referring to the elements with a frequency of 14 and 15.

Taking into account the last two areas, in the next step of the analysis – requiring the distinction between relevant and less relevant elements on the criterion of frequency – we set the cut point between them at the value of 9 (the first value above the upper margin of the second area -8).

From this point, the structural analysis includes two main criteria: the frequency and the mean rank of the elements. This last indicator represents, specifically, the sum of the ranks assigned to that element by the participants who wrote it divided by their number. Given the significance of the importance rank, the elements with a low value of the mean rank

are to be considered more important that those with a higher value. As in the case of the frequency distribution, this criterion also requires a cut point - dividing the corpus in "more important" and "less important" lexical elements. In our case, the value calculated by the EVOC software as the median of the distribution of mean ranks – and, thus, as the cut point) was 2,5.

The following table presents the overall structure of the Social Representation of traffic accident in our sample. Specifically, the remaining vocabulary submitted to this step of the analysis can be divided in four groups of elements, using frequency and mean rank as criteria. In the table, the values in the brackets assigned to each word or phrase represent its frequency of elicitation in our sample and, respectively, its mean rank of importance.

Frequency > 9, Mean rank < 2,5	Frequency > 9, Mean rank > 2,5
death (15; 2,06)	inattention (14; 4.143)
	police (14; 6.286)
Frequency < 9 Mean rank < 2.5	Frequency < 9 Mean rank > 2.5

Table 2. The structure of the social representation of traffic accident

death (15; 2,06)	inattention (14; 4.143)
	police (14; 6.286)
Frequency < 9, Mean rank < 2,5	Frequency < 9, Mean rank > 2,5
victims (7; 1,857)	alcohol (7; 6.857)
	ambulance (6; 3.500)
	insurance (4; 4.250)
	damage (3; 4.333)
	money (6; 6.500)
	pain (4; 4.750)
	tears (4; 11.000)
	tiredness (5; 5.000)
	firefighters (3; 8.333)
	stupidity (4; 8.000)
	wounded (7; 3.857)
	ambulance (3; 3.000)
	blood (8; 5.500)
	hospital (7; 4.143)
	sufferance (7; 2.714)
	upset (3; 5.667)
	time (3; 3.000)
	speed (7; 5.286)

The first cell of the table (in the upper left) contain the element with a frequency higher than the threshold of 9 and the mean rank lower than the threshold of 2,5. According to the structural approach, the words or phrases in this cell represent the candidates for the central nucleus (or system). As it can be noticed, the only element in this central position in our results is "death".

The second area (in the upper right) represents a second concentric semantic area of the Social Representation. It could be called "the first periphery", as it's less important than the central system judging on the criterion of the mean rank of subjective importance, yet as important on the criterion of frequency (which is, as before, higher than the threshold). In our case, it includes two words: inattention and police.

The third area (in the lower left) represents a more "special" part of the Social Representation, given the fact that its elements appear with a low frequency (lower than the cut point), yet, when they are elicited they are also assigned a high importance (thus their

mean rank lower than the threshold). This suggests the existence of a sub-representation inside the Social Representation of traffic accident, centered on the word "victims" and characteristic to a sub-group in our general sample. In order to identify this sub-representation, we analyzed the associations between this element and our demographic variables – gender and age – which didn't reveal any significant results. Thus, we will return to this question in the following part, through the help of the semantic associations depicted by the correspondence analysis.

The fourth are (in the lower right cell of the table) contains the elements in the second periphery of the Social Representation of traffic accident in our sample, consisting of words or phrases with a low frequency of elicitation and high mean rank. As we can notice, the elements could be categorized in some major semantic fields, such as potential causes of the accident (alcohol, stupidity, tiredness, speed), immediate physical consequences (wounded, pain, blood, ambulance, hospital, firefighters, damage), long term consequences, either psychological (tears, sufferance, upset) or monetary (money, insurance).

2. Semantic spaces and oppositions

In the second phase of the data analysis, we used the procedures available in the SPAD 5.0 software for the analysis of lexical correspondences of the vocabulary elicited by the subjects. The goal of these procedures was to obtain a synthesis of this data via the extraction of a certain number of factors. Each factor can be defined as a dimension essential for the Social Representation of that specific object as shared by the members of the population that we focus on. Thus, the factor extraction allows us two kinds of segmentations:

- a) one of the representational field, focusing on the words or phrases elicited by the subjects, through the identification of different "semantic spaces", or "clouds" for each dimension, that constitute different ways of social thinking about the same social object. Each factor offers two such word groupings technically speaking: the positive and negative semi-axis that constitute two opposite poles in the Social Representation of the object, two distinct ways of relating to and conceptualizing it. The opposition revealed by the lexical correspondence analysis translates in the fact that the two semantic spaces represent two mutually exclusive, but psycho-social cohesive, lens through which people can relate to, understand and describe the same object in our case, the traffic accident.
- b) one of the population in itself, though the positioning of the participants, defined by their various characteristics, on the representational field revealed in the step above, on the factorial distribution of the elicited vocabulary. This positioning of the participants closer or further to the various semantic poles of the dimensions that structure the Social Representation is achieved by the use of "illustrative variables". As mentioned before, the potential illustrative variables that we took into account in our analysis were participants' gender and age group.

On the basis of the correspondences between elements, the procedures first extracts the factors of the Social Representation, then it calculates and represents in a graphic output the position of all the significant elements and of the sub – groups defined by the illustrative variables in the Euclidian space defined by these factors. These positions are established on the basis of the coordinates of the elements on each of the factors relative to the origin point. The coordinates on each factor can have a negative value – indicating their assigning to the first segment of the factor – or a positive one – reflecting their position on the opposite segment. The other statistics calculated in order to reveal the position and the significance of the element are the absolute contribution of the element to

the total factor inertia (variance of the textual data), and relative contribution (chi-square), which is the contribution of the factor to the total inertia of the element, the measure in which its correspondences are defined by that respective dimension.

The procedure identified, in our corpus of textual data, two factors which cover 100% of the total inertia; the first explains 56,13%, while the second covers the other 43,87%.

- The results of the lexical correspondence analysis are presented synthetically in Figure 1. The size of the points to which the labels (words or phrases) are assigned reflects the cumulated contribution of the element to the total inertia of the two factors. As it can be noticed in the graphical representation, the extreme oppositions on the two factors are:
- a. On the first factor (the horizontal one), the positive semi-axis (on the right) seems to depict a discourse centered on the causes of the accident, predominantly related to an exterior and human source: mistake, careless, beginner, inability, hurry, imprudent, woman, but also other types of outside possible causes (brake, technical failure, bad luck). Looking at the demographic correspondences, we would assign this type of vocabulary to the adult males.
 - The negative semi-axis of this factor contains, at its extreme, elements relating to the psychological consequences of the accident (trauma, fright), as well as with the material effects (wrecked car, trauma). This type of discourse is more specific to young females.
- b. On the second (vertical) factor, the positive semi-axis (on the upper side) contains, on one side, references to potential outside causes of the accident snow, birds, pedestrians, but also to some mild (compared to others) consequences: injection, broken feet, stress, fight). This semantic space is more closely related to the adult females.
 - The negative semi-axis of this second factor depicts a very intense negative image of the social and, consequently, psychological consequences of the accident, in terms of family, orphans, sufferance, nightmares, disaster. Its demographic associations are stronger with the young males.
 - As the distances in the graph reflect the psycho-social groupings and closeness of the elements, we could also comment on the specific vocabulary of the demographic categories included in our analysis. We will draw attention to a question that has remained unanswered the status of the element "victim" in the Social Representation. As we can notice from the figure, this element is surrounded by a quite cohesive semantic "cloud", including semantically related words "blood", "death", "sufferance", "damage" as well as elements from different semantic areas, such as "inattentive", "stupidity", and even "money".

Discussion

The general objective of the present pilot study was to explore the globally shared social meaning of traffic accident, within the theoretical framework of SRT (Moscovici, 1988). Using both the structural analysis and the lexical correspondence analysis, we investigated the content, structure and semantic dimensions of the social representation.

The first results show that the hard central core of the representation is *death*, meaning that it was the most frequent associated word ranked, at the same time, as highly important by the respondents. Based on what we have mentioned in the first theoretical part, this is not a very surprising association. Since the mass-media draws attention especially to the most severe and dramatic forms of traffic accidents, there is no wonder that in people's minds death is automatically associated to this issue. We have here a clear example of the powerful influence of mass communication on the way people perceive and think of certain social objects.

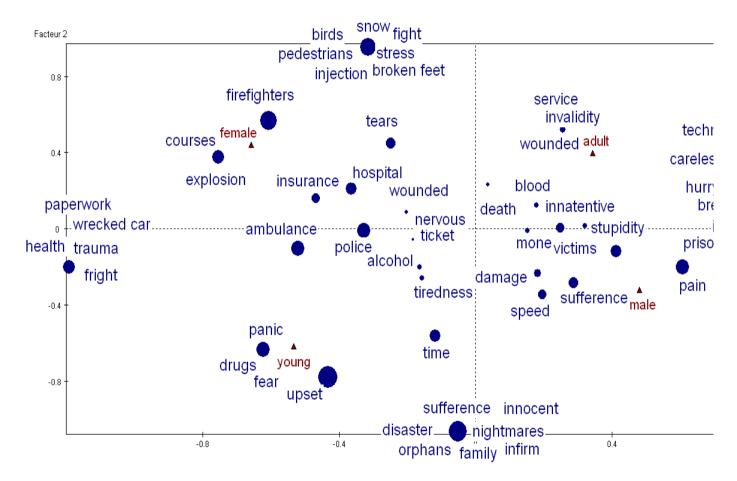


Figure 1. The lexical correspondence analysis of the Social Representation of traffic accident

A more interesting case is the word *victim*, placed in the "special" third area of the structure of this SR. It is an important element (without a very high frequency though) of the structural field because it suggests the existence of sub – representations characteristic to specific sub-groups in our general sample. As the further correspondence analysis showed, the peripheral elements grouped around the word *victim* in slightly different semantic patterns, associated with respondents' age and gender. It appears to be a semantic difference in the discourses of the two age groups: while the adults refer mainly to various causes of traffic accidents – either human (mistake, careless, beginner, inability, hurry, imprudent, woman) or external/contextual (brake, technical failure, bad luck, snow, birds) –, the young emphasize the consequences, especially the psychological ones (trauma, fright, orphans, sufferance, nightmares, and disaster).

This semantic difference is more visible for the male respondents. The fact that young males are more aware of the consequences is a bit surprising, if we think at the studies showing that young drivers (especially men) engage themselves significantly more frequently in risky driving behaviors and are responsible for a high number of accidents (e.g. Leung and Starmer, 2005; Bina et al., 2006). Still, their vocabulary comprises quite intense dramatic words like trauma, orphans, disaster etc. which are strongly linked to the central element, death, suggesting the possibility of them giving a sort of "second-hand" answers (i.e. not from their direct experience, but from what they hear and see in the media).

On the other hand, there are certain words in the adult male's vocabulary that could also account for this difference. These words are *beginner*, *inability* and *woman* and they refer to an external attribution of the accident, suggesting the image of the road user being a victim of inexperienced or bad drivers. This type of discourse might suggest the presence of the self-evaluation bias (Svenson, 1981; McKenna *et al.*, 1991) which is more likely to occur among the adult (and more experienced) drivers, who evaluate themselves as being more efficient than other drivers, hence less likely to be careless or to make mistakes.

Our preliminary results show a clear central core of representation anchored in the mass-media discourse focused on the extreme form of traffic accidents: the deadly or the most dramatic ones. Yet these results need further investigation on a larger sample, especially the analysis of the peripheral elements and the semantic differences of the associations made by different sub-groups. Equally, the image and meaning of *victim* need extra attention, since it was the "special" element within the structure of the SR of traffic accident. We also have to consider the various facets of this aspect (as the road user may be the cause of a traffic accident, the victim or both) and the fact that each facet involves different self- and hetero-attributions. Future larger-scale studies should focus on the representation of the victim in a traffic accident, taking also into account additional characteristics of the participants (like perceived self-efficacy, driving experience, attribution style etc.).

Rezumat: Articolul prezintă rezultatele unei cercetări-pilot cu obiectivul de a explora reprezentarea socială a accidentului auto într-un eşantion românesc. Metoda utilizată a fost o variație a asocierii libere – rețeaua asociativă, ce solicită subiectului atât scrierea cuvintelor activate în mintea sa de către expresia inductoare – "accidentul auto" –, cât și ierarhizarea lor în funcție de importanță. Prima perspectivă din care au fost analizate datele a fost cea structuralistă, prin investigarea nucleului central și a diverselor zone periferice ale reprezentării. Cea de-a doua etapă analitică a vizat dimensiunile câmpului reprezentațional, relevate prin intermediul analizei de corespondențe lexicale. Rezultatele sunt comentate prin prisma conținuturilor, structurii și factorilor reprezentării sociale, atât în sine, cât și în relație cu variabilele demografice ale studiului – gen și vârstă. Cuvinte-cheie: accident auto, reprezentare socială, semnificație

Résumé: Cette étude présente les résultats d'un étude pilot sur la représentation sociale des accidents du trafic des sujets Roumains. La méthode qu'on a utilisé a été celle du réseau associatif, une variante de la technique d'association libre: le sujet doit écrire les mots activés par l'expression inductrice "accident de trafic". Il doit également placer ces mots dans un ordre hiérarchique, en fonction de leur importance. La première analyse de données a été faite d'un point de vue structural, en explorant le noyau central et les éléments périphériques de la représentation. Dans une seconde étape, on a fait l'analyse de correspondance lexicale, en surprenant les dimensions du champ représentationnel. Les résultats sont discutes en termes de contenus, facteurs et structure de la représentation sociale. On a fait aussi les corrélations avec les variables démographiques utilisées dans l'étude: l'age et l'appartenance sexuelle.

Mots-clés: accident de trafic, représentation sociale, sens

References

- Abric, J.-Cl. (1994), *Pratique sociales et Representations*, Presses Universitaires de France, Paris. Abric, J.-Cl. (1995), "Reprezentările sociale. Aspecte teoretice", în A. Neculau (coord.), *Reprezentările sociale*, Societatea Ştiinţifică şi Tehnică S.A., Bucureşti.
- Bina, M.; Graziano, F.; Bonino, S. (2006), "Risky driving and lifestyles in adolescence", în *Accident Analysis and Prevention*, 38, pp. 472-481.
- Breakwell, G.M. (2001), "Mental models and social representations of hazards: the significance of identity processes", în *Journal of Risk Research* 4 (4), pp. 341-351.
- CNADR, Compania Nationala de Autostrazi și Drumuri Nationale din România, http://www.cnadnr.ro (retrieved in July 2009).
- Dahlen, E.R.; Martin, R.C.; Ragan, K.; Kuhlman, M.M. (2005), "Driving anger, sensation seeking, impulsiveness and boredom proneness in the prediction of unsafe driving", Accident Analysis and Prevention, 37, pp. 341-348.
- De Rosa, A.S. (2002), "The «associative network»: a technique for detecting structure, contents, polarity and stereotyping indexes of the semantic fields", în *European Review of Applied Psychology*, 52(3-4), pp. 181-200.
- Psychology, 52(3-4), pp. 181-200.
 Freund, P.E.S.; Martin, G.T. Jr. (1997), "Speaking about accidents: the ideology of auto safety", în *Health*, 1, p. 167.
- Leung, S.; Starmer, G. (2005), "Gap acceptance and risk-taking by young and mature drivers, both sober and alcohol-intoxicated, in a simulated driving task", în *Accident Analysis and Prevention*, 37, pp. 1056-1065.
- MacDonald, M. (2003), Exploring media discourses, Arnold, London.
- McKenna F.P.; Stainer, R.A.; Lewis, C. (1991), "Factors underlying illusory self-assessment of driving skill in males and females", în *Accident Analysis and Prevention*, 23, pp. 45-52
- Moliner, P.; Tafani, E. (1997), "Attitudes and social representations: a theoretical and experimental approach", *European Journal of Social Psychology*, **27**, pp. 687-702.
- Moscovici, S. (1981), "On social representations", în J. Forgas (ed.), *Social Cognition*, Academic, Londra, pp. 181-209.
- Moscovici, S. (1988), "Notes towards a description of social representations", în *European Journal of Social Psychology*, 18, pp. 211-250.
- Parker, D. (2004), "Road Safety: What Has Social Psychology to Offer?", în T. Rothengatter, R.D. Huguenin, *Traffic and Transport Psychology. Theory and Application*, Elsevier, pp. 125-134.
- Rothengatter, T. (1997), "Psychological aspects of road user behaviour", în *Applied Psychology*: *An International Review*, 46, pp. 223-234.
- Svenson, O. (1981), "Are we less risky and more skilful than our fellow drivers?", în *Acta Psychologica*, 47, pp. 143-148.
- World Health Organization (2004), World report on road traffic injury prevention, Geneva, WHO http://www.who.int.
- World Health Organization (2009), Global Status Report on Road Safety, http://www.who.int.