

PERSPECTIVE OF MOTORCYCLISTS ACCIDENTED ABOUT RISK AND TRANSIT ACCIDENTS
PERSPECTIVA DE MOTOCICLISTAS ACIDENTADOS SOBRE RISCOS E ACIDENTES DE TRÂNSITO
PERSPECTIVA DE MOTOCICLISTAS ACIDENTADOS SOBRE LOS RIESGOS Y ACCIDENTES DE TRÁNSITO

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ABSTRACT

In urban traffic, disputes over space are evident and situations of conflict and violence are highlighted, resulting in a high number of accidents, especially with motorcyclists. Among the determinants and constraints for such occurrences, there are lifestyle and explicit decisions in the representations of the people involved, as well as objective factors related to city life. The objective of this study was to understand the representations of motorcyclists who suffered a traffic accident in Belo Horizonte, Minas Gerais, about the risks and occurrence of accidents. The analysis of the data collected in individual interviews of hospitalized accident victims was based on the Giami proposals, in the psychosocial frame of social representations, that allowed the construction of two categories related to traffic violence: a) representations on injuries suffered with motorcycles; 2) representations on the transit. The results showed that the projection of responsibilities is strongly present in the representations on traffic violence. Psychosocial postures are strengthened in disputes, through representations of overvaluation of individual transportation, through the feeling of invulnerability by the belief that accidents will only occur with others, interspersed with the consequent weakening of equity relations in traffic. It was concluded that the psychosocial construction carried out through social interactions throughout life, in specific cultural and social contexts, defines postures of incurring more or less risks in traffic, impacting on the way of motorcycle driving in daily life.

Keywords: Accidents; Traffic; Motorcycles; Risk; Qualitative Analysis; Public Health.

RESUMO

No trânsito urbano evidenciam-se disputas por espaço e ressaltam-se situações de conflitos e violência, resultando em elevado número de acidentes, especialmente com motociclistas. Entre os determinantes e condicionantes para tais ocorrências, incluem-se os modos de pensar a vida e tomar decisões explicitadas nas representações das pessoas envolvidas, para além de fatores objetivos relacionados à vida na cidade. Objetivou-se compreender representações de motociclistas que sofreram acidente de trânsito, em Belo Horizonte, Minas Gerais, acerca dos riscos e ocorrência de acidentes. A análise dos dados colhidos em entrevistas individuais de acidentados hospitalizados foi fundamentada nas propostas de Giami, no referencial psicossocial das representações sociais, que permitiu a construção de duas categorias relativas à violência no trânsito: a) representações sobre lesões sofridas com motocicletas; 2) representações sobre o trânsito. Os resultados mostraram que a projeção de responsabilidades está fortemente presente nas representações sobre violência no trânsito. Posturas psicossociais são fortalecidas nas disputas, por meio de representações de supervalorização do transporte individual, pelo sentimento de invulnerabilidade pela crença de que os acidentes somente ocorrerão com os outros, entremeadas pelo consequente enfraquecimento das relações de equidade no trânsito. Concluiu-se que a construção psicossocial realizada por meio das interações sociais ao longo da vida, em contextos culturais e sociais específicos, define posturas de incorrer em mais ou menos riscos no trânsito, impactando no modo de condução da motocicleta no cotidiano.

Palavras-chave: Acidentes de Trânsito; Motocicletas; Risco; Análise Qualitativa; Saúde Pública.

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RESUMEN

En el tránsito urbano ocurren disputas por espacios y se producen situaciones de conflicto y violencia que resultan en un alto número de accidentes, principalmente con motociclistas. Entre los factores que determinan y condicionan tales hechos se incluyen el modo de pensar y de tomar decisiones reveladas en las representaciones de las personas involucradas, además de otros factores relacionados con la vida urbana. En este estudio se busca entender las representaciones de motociclistas que tuvieron accidentes de tránsito en Belo Horizonte, estado de Minas Gerais, sobre los riesgos y accidentes. El análisis de datos, recogidos en las entrevistas individuales de accidentados internados en hospitales, se basó en las propuestas de Giami, en el referente sicosocial de las representaciones sociales que permitió construir dos categorías sobre la violencia: a) representaciones sobre las lesiones con motocicletas; 2) representaciones sobre el tránsito. Los resultados muestran que la proyección de responsabilidades está muy presente en las representaciones sobre la violencia en el tránsito. Las posturas sicosociales se fortalecen en las disputas, por medio de representaciones de sobrevaloración del transporte individual, por el sentimiento de invulnerabilidad al pensar que los accidentes solamente les ocurren a los demás, mezcladas con la consiguiente fragilización de las relaciones de equidad en el tránsito. Se llega a la conclusión que la construcción sicosocial generada por interacciones sociales de toda la vida, en contextos culturales y sociales específicos, define posturas de incurrir en más o menos riesgos, que se reflejan en el modo de conducir cotidianamente.

Palabras clave: Accidentes de Tránsito; Motocicletas; Riesgos; Análisis Cualitativo; Salud Pública.

INTRODUCTION

Statistics on traffic violence in Brazil and around the world reveal the high vulnerability of motorcyclists. The dynamics and multi-causality of traffic accidents show disputes over space and emphasize situations of conflict and violence in urban circulation, among other factors. Data from the World Health Organization (WHO) document that traffic events are the leading cause of death in the 15-29 age group, the second cause between five and 14 years old and the third cause between 30 and 44 years old.^{1,2} It is estimated that if no measures are instituted to reduce the impact of morbidity and mortality, traffic accidents will be the fifth leading cause of death in the world population by 2030.²

In Brazil, specific mortality rates due to terrestrial transportation accidents (TTAs) ranged from 18.3 to 23.7 per 100,000 inhabitants from 1992 to 2012.³ The number of deaths per TTA in 2013 was 45,099.⁴ Of this total, 27% occurred among motorcyclists. According to the Hospital Information System, more than 170 thousand hospitalizations were recorded for terrestrial transportation accidents in 2013. More than half were motorcyclists (51.9%).⁵ The motorcyclists were responsible for the longest hospital stay and (R\$ 114,810,444.93) with hospitalization.⁵ The motorcycle was the means of locomotion used by most of the victims (62.7%) of transportation accidents registered by the Violence and Accident Surveillance System - VIVA.⁶

Traffic violence is analyzed in most studies with a focus on objective factors such as speeding, traffic problems, and non-compliance with traffic rules.⁷⁻¹⁰ Among the determinants and constraints of health, however, aspects related to the ways of thinking about life, of dealing with risks and with the other, included in the subjectivity and emotions of the people are considered fundamental for the changes in the area of promotion, prevention, and health protection. These aspects are not commonly addressed in the impact statistics of morbidity and mortality in traffic, but they have shown the existence of a multifaceted social phenomenon.

Regarding motorcyclists, there are several factors related to the risk of accidents. However, it is necessary to under-

stand these subjective aspects involved in individual and collective relationships in traffic to deepen the understanding of how motorcyclists perceive and assimilate the risks incurred in traffic, having already experienced them. Their narratives can provide new approaches, based on the integral care paradigm, both in prevention and in the follow-up of the injured and recovered after the accident. Literature is scarce in the subjectivity of these individuals, their views of the world and their representations around the motorcycle object and the possible risks.

It is expected that the understanding of vulnerability aspects of the population, especially of motorcyclists in relation to traffic violence can contribute to improving comprehensive health care, increasing the possibilities of preventive interventions.

The objective of this study was to understand the representations of motorcyclists who suffered a traffic accident in Belo Horizonte, Minas Gerais, about the risks and occurrence of accidents.

METHOD

It is a qualitative research, with a focus on the individual as a social being and, therefore, "representative" of a certain social group, but not a sample, but a belonging to a given community with whom he shares language, ideas, values, and practices.¹¹

Data were collected through interviews conducted by a single researcher, from February to May/2014, with motorcyclists attending a referral hospital for trauma, including traffic injuries, in Belo Horizonte, Minas Gerais. The criteria for inclusion of the participants were to be the driver of the motorcycle at the time of the event; be at least 18 years old, since it is the minimum age foreseen by the Brazilian Transit Code (CTB) for the acquisition of the National Driver's License (CNH); reside in BH and the event occurred in the urban perimeter of the capital; to remain in care in the emergency room or hospitalized for at least 24 hours after admission via the hospital's medical record; and to have clinical conditions to participate in the interview.

The selection of the participants was after the medical records were retrieved to confirm the inclusion criteria and, in the sequence, personal contact was made during the hospitalization period with those eligible for verification of the other inclusion criteria.

The interviews were carried out in the hospital, in a place that guaranteed security and privacy, with an average duration of 35 minutes. The interview took place after clarifications and accepted to participate voluntarily, with signing the Term of Free and Informed Consent (TCLE). The interviews were recorded in audio and transcribed for analysis.

The data collection consisted primarily of identifying the sociodemographic profile of the participants, gathering information about the accident and about the use of the motorcycle collected in the records of care, patients' records and the participant's report. Then, an open and in-depth interview was conducted,¹² to provide an account that revealed the interviewees' ways of thinking and acting in relation to traffic accidents, in a process of reflection on the risks, focusing on their life experience and context. There was no a priori definition of the exact number of participants. The criterion for the conclusion of the data collection was the saturation of the data, verified from the existence of repetitions of points of view, judgments and feelings about facts and experiences related to the objects present in the narratives, which allowed to establish interpretation rigorous and contextual analysis of the object under study.¹³

Initially, two pilot interviews were conducted, after confirmation of the inclusion criteria and accepted by the interviewee, to test the feasibility, interpretation, and vocabulary of the guiding question of the research. Adequacy on questions of glance was necessary to facilitate the interviewee's understanding of the meaning of one of the questions. After adjustment, other motorcyclists were interviewed and invited to participate in the survey. However, there were seven people who refused to feel free to express their feelings about the accident. These refusals reinforced for the authors the importance of deepening the discussion of representations, based on the inference of the possibility of existence of denial processes of the subjects on the event.

The saturation of qualitative data was reached after 16 interviews. Each respondent received identification with letter E plus the number corresponding to the increasing order of collection.

The theoretical reference of social representations (SR) was used in the critical perspective of Giami and Veil.¹⁴ For these authors, all representation is social, insofar as it necessarily draws its thematic contents from the materials present in the contemporary and past sociocultural, and not only from scientific categories, as defended in the first theories of SR.

The analysis of the data collected was based on the proposal of structural analysis of narration (SAN), presented by Demazière and Dubar.¹⁵ The analysis was coded by two re-

searchers separately and then, the codes were discussed and recreated after consensus. The categories were analyzed using NVivo® software - version 10.

Once transcribed, each interview has been thoroughly read. Initially, a vertical reading, in which the global meaning was sought, answering the question: what was this text about? Later, there was the horizontal reading in which the text was sequenced by order of appearance of each object in speech and each sequence was numbered in ascending order (S1, S2,...). Within each sequence, the facts (F), the justifications presented (J) and the characters (C) were identified. Then, the sequences dealing with the same subject, addressed in their confirmations, differences, and contradictions were regrouped and received a title that gave rise to a provisional categorization of the totality of the individual interview. In a third step, it was sought to find the similarities and differences in the set of interviews, in a so-called transversal reading, in which the provisional categories found were compared and regrouped for the totality of the interviews, defining the empirical categories on the found objects in their conjunctions and disjunctions. At the end, the results were compared with the relevant literature, defining the theoretical categories.

The research was approved by the Ethics Committees of the Federal University of Minas Gerais (UFMG), opinion 471.184, and the Hospital Foundation of the State of Minas Gerais (FHEMIG), opinion 604.412-0.

RESULTS

Based on the interpretation of the 16 narratives of motorcyclists (Table 1), two categories were defined regarding traffic violence: a) representations on injuries suffered with motorcycles; b) representations on the transit.

REPRESENTATIONS ON MOTORCYCLE INJURIES

By sharing their stories of involvement in traffic accidents, motorcyclists explained their points of view and their ways of acting, indicating representations about traffic violence and injuries sustained as a result of events. Although the magnitude of injuries and their severity are recognized as an everyday occurrence in the lives of motorcyclists in general, the participant's incessant attempt to find explanations for the specific occurrence of his case was found. Accident representations are close to the definitions of an unexpected, multifactorial event that can take shape at any time. Anchored in the need to find causes, culprits or factors influencing the fact, motorcyclists interpreted and justified their involvement in "accidents" or their injuries due to their unexpected occurrence, the mistakes and failures of the other driver (or pedestrian) involved and very little by the assumption of their own responsibility.

Table 1 - Interviewee Profile

	Age (years old)	Profession	License time (*)	Driving time (*)	Motorcycle use (hours/day)	Accidents suffered (n)	Reason for locomotion – current accident
E1	21	Service agent	3y	3y	2	2	Tour
E2	27	Hodman	Without license	14y	3	1	Tour
E3	18	Key Attendant	10m	2y	5	2	Tour
E4	37	Pizza chef	12y	10y	4	10	Home/work
E5	22	Printer	2a 6m	2y 6m	1	2	Home/work
E6	47	Personnel supervisor	25y	25y	1	1	Tour
E7	38	Bricklayer	3y	3y	3	3	Tour
E8	35	Assistant storekeeper	13y	5y	6 (weekend)	1	Tour
E9	46	Carpenter	6y	6y	1	3	Home/work
E10	24	Suspension mechanic	Without license (**)	14y	3	2	Tour
E11	40	Truck driver	15y	15y	1	1	Home/work
E12	29	Motoboy	5y	15y	12	6	Work
E13	36	Motoboy	15y	15y	10	3	Work
E14	20	Self-employed	1y 3m	1y 3m	4	3	Tour
E15	24	Motoboy	2y 6m	10y	8	3	Tour
E16	45	Trade Representative	26y	3m	6	2	Home/work

(*) y: years; m: months; (**) Lost after first accident.

As they considered it to be the external factors that determined the accident, it is always thought of as out of their control, because it is the other characters (other drivers and pedestrians), especially those of other types of vehicles, who are invariably responsible for the episode. Such a representation renders ineffective any proper attitude of care or attention: “[...] there is no way of sometimes taking care of you because the person comes and knocks... So you do not want to be careful. You're there in good, even stopped, the guy comes and throws you away. So the care you're taking is no good” (E7).

Common carelessness in traffic, such as speeding, for example, and even inadequate urban road conditions are considered to be elements involved in the genesis of events. However, aspects related to the motorcyclist or to his practices were little mentioned as possible causes. Thus, accidents resulting from acts that represent a “making fun” or a way to have power in transit were exceptions to this representation. Only a few, and even so subtly, considered responsible, in saying that the occurrence was due to their own “stupidity” or some “slip” by them.

Occurrences in traffic were only considered as accidents when they resulted in physical injuries that demand hospital care. In that case, deductive logic is found to support the decision to seek medical care. For those interviewed, injuries considered of less importance would not require specialized care: “I hurt, I did not need emergency room, it was just a little hurt. My knee was swollen, but it was not a case of going to the E” (E16).

On the other hand, the use of recommended accessories for the prevention of more serious injuries was seen as insufficient, inaccessible (due to the additional cost) or distant from the habit of motorcyclists on a daily basis, except for the use of the helmet: “For the motorcyclists, it is not usual to use protection, except the helmet”(E6). Protective clothing, elbow pads, and knee pads have not always been perceived as equipment capable of providing protection in their daily lives, and there is representation that is only necessary for high speeds or long shifts. In short day-to-day trips, they were considered “a waste” and “a lost time” to put them or take them away, in addition to the climatic conditions of high heat that makes them undesirable: “I do not know. You go from here to there and you wear those clothes. You go there, you have to take everything out” (E3). However, there is the admission of the fact that the use of such equipment would mean a decrease in the severity of the injuries suffered: “It was very hot yesterday, I was wearing a T-shirt, clothes. If I had a leather shirt, I would not have suffered from it.” (E6).

For some interviewees, the severity of the physical and/ or psychic trauma resulting from the involvement in the event was enough to generate the reflection about the insecurity they are exposed: “now I want to find a way to get rid of it [motorcycle] in my life, because getting to the brink of death is very bad. I took a trauma, I was afraid of a motorcycle” (E8), an affirmation that revealed the desire to stop piloting present also in the speeches of other interviewees. However, some of them reject such a meaning, denying risk and insecurity, showing the

power of the desire to use the motorcycle, despite insecurity (or for that matter), as a challenge to be constantly renewed: *"we say that we will stop, but you cannot stop, no. Once it passes, we improve and everything, we start walking again. It's like an addiction"* (E10).

REPRESENTATIONS OF TRANSIT

The violent context of urban traffic is evident in the narratives of the interviewees, enabling to reveal present representations in the assumed conducts and in the risks incurred. All the interviewees said that traffic is violent and emerges in a context of "chaos due to excessive vehicles on the streets". Representing it as chaotic, they justified it by the accelerated growth of the number of vehicles, constant works in public roads, low qualification and stress of the drivers. This situation, according to the interviewees, means that there is more possibility of being involved in accidents, demanding defensive (sometimes "aggressive") direction, considering, also, that the relationships in traffic do not occur in an isolated or individual way: *"you have to drive for you and others, and they get in the way too much"* (E10). The need to "conquer" their space in a context of low adherence and disregard for traffic regulations, the lack of physical protection on motorcycles and the possibility of suffering injuries when involved in accidents caused motorcyclists to create group identity.

This social position is defined as a form of cohesion in the face of traffic violence. Among other group identity behaviors, there is mutual support, expressed in helping other motorcyclists involved in an accident or requiring any help - described as something common among motorcyclists themselves:

You're passing by on a track, you see one there or with the flat tire or the gas runs out, something like that, you always go to one to help the other. Because they are more united, right? They are at great risk. So, what happens to one, usually stops five, six, seven bikers, all at once, to know the case, what happened. I think that biker is seen as a fragile thing in traffic (E15).

Group behavior, which also generates belonging to a group considered to be fought or persecuted by other drivers in traffic, has been reported to justify also the search for "sensations", either in the use of the motorcycle or in overcoming one's limits, which translates the taste for speed and pleasure provided by this practice. Situations that provoke "adrenaline" and "tanning" were narrated as important in the interactions in traffic:

You lean on a sign there... One begins to look at another, there begins to accelerate, already wants to cram the bike. Then it goes crazy, one after another,

with the indicator... They speak the "famous handle", right? He wants to be one better than the other, to get there, to the destination up there. Or maybe even adrenaline, tanning, I do not know... In my adrenaline rush. It's fun. Enter a corridor, exit the other, enter a street, call the other with the indicator, horn to the other, down there the mess. This is all the time. I see all the time [in traffic] (E15).

Traffic violations, assumed as such, are relativized by motorcyclists either because they have mastery of the situation, the consent of the other driver or because they believe they are a "correct driver" because they do not cause damage to the dynamics of traffic. However, such infractions were identified as possible causes of accidents and capable of damaging the traffic circulation when performed by other less skilled and experienced drivers and even by pedestrians. The representation that transgressions in traffic should therefore only be considered when one does not have control of the situation can be relativized when executed by motorcyclists interviewed and convicted when executed by other drivers, not as qualified as he. Thus, the "other" continues to cause difficulties, problems or accidents.

Therefore, results show that daily traffic violence reinforces the projection in the other as responsible for the dangers, but in general, it is necessary to learn to control such dangers, with the development of skills and experience to cope with sudden situations. Such abilities would be unveiled for themselves and for others as strength and power, even when the motorcycle is explicitly considered to be a more risky vehicle for the driver: *"[...] my bike is dangerous, but I can take it"* (E3).

Skills and pilot experience were also considered sufficient bases to evaluate obedience and disobedience to traffic rules, when driving a motorcycle: *"When I see that it can go more, I take it and go, when it does not, I take it and walk quiet. Because I cannot walk at a speed that is not allowed"* (E10).

The acquisition of skills to move in traffic was strongly present in motorcycle riders who use the motorcycle as a source of sustenance, and they presented the pressure for speed and agility to complete the services as a central justification for committing infractions, since the greater the number of deliveries, the greater the gain:

[I receive] by delivery. Maybe it's a little thing, it's a one or two, you have all day, then you go with more tranquility. But if you have too much, as you earn by delivery, the more you do, the better. There, it is where you lose the sense, it accelerates more, you do not respect. Ah, at the moment there is no worry. I must get there. Be leaping curb, let it be passing in corner, passing crossing lines" (E15).

Situations that increase risks, such as recognizing the motorcycle's safety limitations, traffic laws violations, aggressive behavior and the risks incurred during driving are insufficient to introduce the risk as something close to them: *"the dangers exist, but I know how to control them."* In this way, the risks become invisible in the eyes of motorcyclists, because they are camouflaged by confidence in their own experiences or by the heady feeling of riding the motorcycle.

Risks become palpable only when, for example, the motorcyclist find a serious traffic situation:

Very serious accident that I have seen, people without even legs in the street ... At that moment there, you feel afraid, but then you already forget. Forget and continue the same thing. He says: "Oh no, that's it, it was soft, he does not know how to fly." [...] leaves with that in the head and after about 10 minutes is to forget it, to return to adrenaline, everything again. Accelerating, going away, honking, I do not know... (E15).

Therefore, there is a vicious cycle of the motorcyclist, even being a spectator of serious accidents in the every day of the traffic, which causes apprehension and fear that the same happens to him, soon after the occurrence is forgotten. Because at the center of representations is the attribution of accidents to the failure of another driver.

DISCUSSION

The study showed the representation of motorcyclists that the accidents that involved them may have their main causality attributed to the other involved. The accident, the result of violence in urban traffic, is therefore not recognized as coming from possible (often transgressive) their behavior. On the other hand, the situations involving motorcyclists in traffic are a reference to predict the behaviors to be adopted: the transgression of traffic laws or their compliance are judged from the notions of risk involved in the situation.

The genesis of the accident is represented by behaviors that involve speeding, absence of signaling, track conditions, among others, but always coming from acts of other drivers or even motorcyclists. Laplanche and Pontalis define the mechanism of projection as "an operation by which the subject expels from himself and locates in the other – person or thing – qualities, feelings, desires and even 'objects' that he does not know or refuse".

Transgressing traffic laws based only on judgment of their expertise and instant assessment of the situation does not appear to be understood by these motorcyclists as a traffic violation. Restrictions on the driver's speed impetus will depend more on the probability of being fined than on his assessment

of accident risks. In other words, when the expected benefit of a violation exceeds its potential cost, the individual will be prone to violate the rule, otherwise, he will obey the rule.¹⁷ Judgments about certain situations in traffic are background to the choice of whether or not to follow legislation.

Based on the classification of the highest severity of the injuries that defines an occurrence as an accident, the reports of the participants after the involvement in traffic accidents in Belo Horizonte affirm the social imaginary about the risks in traffic. There is surprise after involvement in accidents because they believed that skills and experience would free them from such situations and injuries and misfortunes always happen to others, less skilled, such as a study carried out with victims of traumatic and violent amputation in traffic.¹⁸

Veronese states that an accident can be defined according to the damages involved in the situation, but for those involved, there is always loss, which is not always counted or understood as such by motorcyclists.

The use or not of protective equipment is conditioned by a series of factors and only in some moments, the needs of protection are modulated by the notion of risk that the motorcyclists possess about their conducts and attitudes in the traffic. Participants in a study mentioned the importance of protective equipment, particularly to minimize or avoid injuries resulting from accidents, but in many cases, the use or not is conditional on the obligation of the CTB and the lack of resources to acquire them respectively.⁸ The helmet can reduce the risk of death by up to 40% and the risk of serious injuries by approximately 70% in motorcyclists.¹ In a study carried out in the 24 Brazilian capitals and in the Federal District, it was obtained that the highest proportion of use of the helmet was observed in patients attended at the emergency services of Belo Horizonte (97.2%).⁶

In the last decades, driven by credit facilities and increased purchasing power, the number of individual motorized transport has been disseminated in a significant part of the population.⁹ In particular, the percentage variation of more than 403% in the number of motorcycles between 2001 and 2014 in Brazil.¹⁹ The excess of vehicles is responsible, in the opinion of motorcyclists, for evidencing changes in traffic dynamics. This search for space, in the midst of the "chaotic" traffic due to "excess vehicles", emerges as the main description of the daily violent scenario in which motorcyclists are inserted. However, there is a need for paradigm changes regarding the direct casuistic relationship that the greater the number of vehicles in circulation, the greater the number of accidents. Compared to the mortality rates in other countries in the world,¹ Brazilian society stands out as a violent society, often justified by exaltation of its own benefit to the detriment of other actors in transit, of precarious adherence to traffic laws, of low efficiency of supervision and, above all, education in traffic and, not necessarily, due to excessive vehicles.

The feeling of belonging to a vulnerable group, fought and often pursued by other drivers brings as a connotation the union between motorcyclists and the desire for mutual help. Tunnicliff *et al.* observed that the feeling of belonging to a group seemed very strong and universal among motorcyclists.¹⁰ Vasconcellos points out that, combated by automobile users, motorcyclists – especially motoboys – have created a group identity, anthropological in nature.²⁰ These representations about the social place of the motorcyclists were also found in this study: fragility and support to the rest of the group of belonging against the other types of vehicles and their drivers. Care should be taken here to open the possibility of future debates about the origins of the prejudices experienced by these professionals, mainly because they are considered the “villains” in traffic and suffer from the aforementioned intentionality of other drivers. However, possible victimization that minimizes the share of responsibility of these professionals in urban circulation must be also eliminated.

The knowledge about traffic and the skill developed in the years of work are important elements to be considered in the daily routine of traffic among professionals who use the motorcycle as a source of income. In other studies, motorcyclists have also cited the need to have knowledge about the work.^{7,21} For them, the experience gained from the profession and the skills developed in traffic have important influence in reducing the chances of a traffic accident to occur. Pressure on the effectiveness of deliveries influences the risks incurred in transit. Veronese warns that the possibility of working with the pay-as-you-go system turns out to be a win-lose game. Still, according to the author, the customers of motorcyclists, members of a competitive and capitalist market, use money as a stimulus for them to run more.

“Aggressive” or “dangerous” traffic behaviors emerge in the reports of the interviewees, mostly young people. Behaviors such as zigzagging between cars, passing a red light, disregarding “stop” signs, and traveling at full speed through urban roads are more dependent on a personal affirmation of dexterity, a sense of common omnipotence in the young person who does not consider death or the accident is something that concerns him.²² Musselwhite *et al.* found that most interviewees admitted that there would be little sense if there was no risk during driving, in which the risk is part of walking motivation.²³ Engagement in “running” was also described as pleasurable in Veronese’s study, cited above.⁷ The reports allow us to infer that participation in “running” has a positive connotation and the dangers arising from this practice, both for themselves and for others, are not understood as possible by motorcyclists.

Reflections on the definition of “accident”, when inserted in the scope of traffic, raise caution of its meaning. For Jorge, although the word “accident” may have a connotation of “casual”, “fortuitous” and therefore “work of chance”, external causes, in

particular, traffic accidents are throughout its spectrum of manifestations and, to a greater or lesser extent, predictable and preventable.²⁴ As a result, the World Health Organization stresses that the term accident would not be adequate terminology.¹

CONCLUSION

Based on the results of the present study, it can be affirmed, that individualism, the feeling of invulnerability and the projection as a mechanism to not feel responsible for the existing risks are representations that structure psychosocial postures present in the violence in the traffic. The ‘inevitable’ character and responsibility of the ‘other’ are representations of motorcyclists to justify traffic accidents involving them, but they reveal a dichotomy and highlight their lack of control over the situation.

It can be affirmed that the psychosocial construction carried out through social interactions throughout life, in specific cultural and social contexts, defines postures of incurring more or less risks in traffic, impacting on the way of motorcycle driving in daily life.

Risk representations are strongly present in motorcyclists’ ways of dealing with traffic, but with the certainty that violent and risky attitudes come from others, which requires specific forms of education for these drivers. Surveillance actions aimed at health promotion, reduction, and prevention of traffic accidents should be planned and guided to consider the complexity involved in the occurrence of accidents, including aspects related to the psychosocial vulnerability of individuals.

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REFERENCES

1. World Health Organization. Global status report on road safety 2015: supporting a decade of action. Geneva: WHO; 2015. [cited 2017 Jan 26]. Available from: http://www.who.int/violence_injury_prevention/road_safety_status/2015/Summary_CSRRS2015_POR.pdf?ua=1
2. World Health Organization. World Health Statistics 2008. Geneva: WHO; 2008. [cited 2014 Oct 29]. Available from: http://www.who.int/gho/publications/world_health_statistics/EN_WH_S08_Full.pdf?ua=1
3. Waiselfisz JJ. Mapa da violência 2014: os jovens do Brasil. Brasília: FLASCO; 2014.
4. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Departamento de Vigilância de Doenças e Agravos Não Transmissíveis e Promoção da Saúde. Saúde Brasil 2014: uma análise da situação de saúde e das causas externas. Brasília: Ministério da Saúde; 2015.
5. Andrade SCA, Jorge MHPM. Internações hospitalares por lesões decorrentes de acidente de transporte terrestre no Brasil, 2013: permanência e gastos. *Epidemiol Serv Saúde*. 2017 [cited 2017 June 18];26(1):31-8. Available from: http://www.scielo.br/scielo.php?pid=S2237-96222017000100031&script=sci_abstract&tlng=pt

6. Mascarenhas MDM, Souto RMCV, Malta DC, Silva MMA, Lima CM, Montenegro MMS. *Ciênc Saúde Coletiva*. 2016[cited 2017 Feb 08];21(12):3661-71. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S141381232016001203661&lng=pt
7. Veronese AM. *Moto-boys de Porto Alegre: convivendo com os riscos do acidente de trânsito [dissertação]*. Porto Alegre: Universidade Federal do Rio Grande do Sul, Escola de Enfermagem; 2004.
8. Teixeira JRB, Santos NA, Sales ZN, Moreira RM, Boery RNSO, Boery EN, *et al*. Utilização dos equipamentos de proteção individual por mototaxistas: percepção dos fatores de risco e associados. *Cad Saúde Pública*. 2014[cited 2016 Jan 12];30(4):885-90. Available from: <http://www.scielo.br/pdf/csp/v30n4/0102-311X-csp-30-4-0885.pdf>
9. Cruz MJA. *Os impactos dos acidentes de trânsito por lesão corporal na vida dos vitimados em face ao controle social do estado [dissertação]*. Belém: Universidade da Amazônia, Núcleo de Estudos e Pesquisa em Qualidade de Vida e Meio Ambiente; 2013. 102 f.
10. Tunnicliff D, Watson B, White KM, Lewis I, Wishart D. The social context of motorcycle riding and the key determinants influencing rider behavior: a qualitative investigation. *Traffic Inj Prev*. 2011[cited 2015 July 03];12(4):363-76. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/21823945>
11. Knauth DR, Leal AF. A expansão das ciências sociais na saúde coletiva: usos e abusos da pesquisa qualitativa. *Interface (Botucatu)*. 2014[cited 2014 Oct 18];18(50):457-67. Available from: <http://www.scielo.br/pdf/icse/v18n50/1807-5762icse-1807-576220140274.pdf>
12. Blanchet A, Gotman A. *L'enquête et ses méthodes: l'entretien*. Paris: Nathan; 1992.
13. Fontanella BJB, Ricas J, Turato ER. Amostragem em pesquisas qualitativas: proposta de procedimentos para constatar saturação teórica. *Cad Saúde Pública*. 2011[cited 2016 June 17];27(2):388-94. Available from: <http://www.scielo.br/pdf/csp/v24n1/02>
14. Giami A, Veil C. *Enfermeiras frente à AIDS, representações e condutas, permanência e mudanças*. Canoas: ULBRA/Institut National de la Santé et de la Recherche Médicale; 1997.
15. Demaziere D, Dubar C. *Analyser les entretiens biographiques: l'exemple de récits d'insertion*. Paris: Nathan, Coll. Essais & Recherches; 1997.
16. Laplanche J, Pontalis JB. *Vocabulário de psicanálise*. São Paulo: Martins Fontes; 2001.
17. Jou R-C, Wang P-L. The intention and willingness to pay moving violation citations among Taiwan motorcyclists. *Accid Anal Prev*. 2012[cited 2013 Mar 26];9:177-85. Available from: <http://www.sciencedirect.com/science/article/pii/S0001457511001771>
18. Agea JLD, Schriewer K, Perez PE. Por qué a mí? Instantáneas del momento del accidente em lós amputados traumáticos. *Index Enferm*. Granada. 2014[cited 2016 Sept 02];23(1-2):41-5. Available from: <http://scielo.isciii.es/pdf/indexv23n1-2/original7.pdf>
19. Observatório das Metrôpoles. *Estado da monitorização individual no Brasil – relatório 2015*. Rio de Janeiro: Observatório das Metrôpoles; 2015. [cited 2016 Oct 24]. Available from: http://www.observatoriodasmetrosoles.net/download/automoveis_e_motos2015.pdf
20. Vasconcellos E. O custo social da motocicleta no Brasil. *Rev Transportes Públicos ANTP*. 2008[cited 2015 Feb 20];30/31(119/20):127-42. Available from: http://www.scielo.br/scielo.php?script=sci_nlinks&ref=000179&pid=S1413-8123201200090000200024&lng=pt
21. Silva DW, Andrade SM, Soares DA, Nunes EFP, Melchior R. Condições de trabalho e riscos no trânsito urbano na ótica de trabalhadores motociclistas. *Physis*. 2008[cited 2014 Nov 09];18(2):339-60. Available from: <http://www.scielo.br/pdf/physis/v18n2/v18n2a08.pdf>
22. Le Breton D. *Conduas de risco: dos jogos de morte ao jogo de viver*. Campinas/SP: Autores Associados; 2009.
23. Musselwhite C, Avineri E, Susilo YO, Bhattacharya A. Public attitudes towards motorcyclists' safety: a qualitative study from the United Kingdom. *Accid Anal Prev*. 2012[cited 2015 Jan 12];49:105-13. Available from: <http://eprints.uwe.ac.uk/15508/121/Musselwhite%20Avineri%20Susilo%20Attitudes%20to%20motorcycle%20safety%202012%20AAP%20Preprint%20version.pdf>
24. Jorge MHPM. À guisa de conclusão. *Rev Saúde Pública*. 1997[cited 2014 Nov 03];31supl. 4):51-4. Available from: <http://www.revistas.usp.br/rsp/article/viewFile/24293/26217>