

The perception of truck drivers on the use of psychoactive substances at work: an ethnographic study

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Objective: to understand the subjective experience of truck drivers regarding the use of psychoactive substances. **Method:** an ethnographic approach to qualitative research was employed. **Results:** the discovered elements, such as high levels of substance abuse, corroborate epidemiological research about the theme including, however, subjective feelings and testimonials. **Conclusions:** there is a divergence of opinions that weakens the category regarding negotiation for better working conditions, while the use of illicit substances is considered normal and is unquestioned by the participants.

Descriptors: Occupational Health; Mental Health; Quality of Life; Organizational Psychology.

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A percepção de caminhoneiros sobre o uso de substâncias psicoativas no trabalho: um estudo etnográfico

Objetivo: compreender a experiência subjetiva de caminhoneiros em relação ao uso de substâncias psicoativas. Método: utilizou-se método qualitativo de caráter etnográfico. Resultados: os elementos encontrados, tais como elevado índice de consumo de substâncias, corroboram estudos epidemiológicos acerca da temática, acrescentando, todavia, sentidos subjetivos e depoimentos. Conclusão: há uma divergência de opiniões que enfraquece a categoria em relação à negociação por melhores condições de trabalho, ao mesmo tempo que o uso de substâncias ilícitas é considerado normal e não é questionado por parte dos participantes.

Descritores: Saúde Ocupacional; Saúde Mental; Qualidade de Vida; Psicologia Organizacional.

La percepción de camioneros sobre el uso de sustancias psicoactivas en el trabajo: un estudio etnográfico

Objetivo: comprender la experiencia subjetiva de camioneros con respecto al uso de sustancias psicoactivas. Método: se utilizó el método cualitativo de carácter etnográfico. Resultados: los elementos encontrados, como el alto índice de uso de sustancias, corroboran los estudios epidemiológicos sobre el tema, agregando, sin embargo, sentimientos subjetivos y testimonios. Conclusiones: existe una divergencia de opiniones que debilita la categoría en relación con la negociación para mejorar las condiciones de trabajo, mientras que el uso de sustancias ilícitas se considera normal y no se cuestiona por los participantes.

Descriptores: Salud Ocupacional; Salud mental; Calidad de Vida; Psicología Organizacional.

Introduction

Currently almost two million truck drivers are responsible for the main modality of cargo transportation of the Brazilian economy, the road transport⁽¹⁻²⁾, and they are subjected to exhaustive working journeys. The use of psychoactive substances can be stimulated by inadequate working conditions, few hours of sleep, poor quality of life in general, and ultimately, as a way of managing the unpleasant effects caused by possible mental disorders. Truck drivers report that time away from home and family, financial concerns, delay in loading and unloading goods are some of the aspects that lead to mental exhaustion⁽³⁾.

Regarding the physical aspects, many report sleeping problems and tiredness caused by long journeys, besides being subject to cardiovascular diseases, systemic arterial hypertension and diabetes mellitus⁽⁴⁾. In this sense, in order to reduce fatigue and sleep deprivation on long journeys, a significant number of drivers rely on amphetamines often associated with the consumption of alcohol and other drugs⁽⁵⁾.

A systematic review study evaluating the prevalence of substance use by truck drivers from several countries shows that Brazil was the country with the highest consumption, with 91% of drivers saying that they had consumed some amount of alcohol while working⁽⁶⁾. In this study, the lowest consumption was detected in truck drivers from Pakistan. In another study⁽⁷⁾, the prevalence of substance use was evaluated in a sample of 684 drivers from the state of São Paulo, 70% of whom reported having ingested alcohol in the last month, and of these, 34% said it was in high quantity, so that 9% presented a pattern of use suggestive of addiction. In this study, more than half of the participants also reported using mainly tobacco and energy drinks, and the most expressive pattern of alcohol use was identified mainly among those using multiple substances.

The prevalence of the use of various substances in 993 truck drivers from all Brazilian states was also evaluated, and it was observed that approximately 6% and 0.7% had in their blood traces of amphetamine and cocaine, respectively⁽⁵⁾. Moreover, among those who regularly drove distances greater than 270 km, 11% regularly used amphetamines and had a nine-fold increased risk of using amphetamines (OR = 9.41, 95% CI: 3.97-22.26) as compared to those who traveled shorter distances.

Several international studies, since the 1990s, have emphasized the relation between alcohol and drug use and abuse and the death of truck drivers in the practice of their profession, regardless of the rigor of the laws of each country⁽⁸⁾. In addition, it was found⁽⁹⁾ that, even restricting the marketing of products containing amfepramone, femproporex, mazindol and sibutramine through the Resolution of the Collegiate

Board of Directors - *Resolução da Diretoria Colegiada RDC 50/2014* (National Health Surveillance Agency - *Agência Nacional de Vigilância Sanitária (ANVISA)*) and increasing the control through Ordinance 116/2016 of the Ministry of Labor, which demands for toxicological tests for professional drivers, the reduction of the use of these substances from 2013 to 2016 was not significant.

Fatalities involve both truckers as well as pedestrians and other vehicles that travel on the French capital's highways, as a large recent study has shown⁽¹⁰⁾. Regarding the characteristics of truck drivers, in a Colombian study, the men presented greater risk behavior behind the wheel. However, in the case of major infractions of the traffic laws that caused accidents, no difference was observed between genders⁽¹¹⁾.

The practice of shift work, even if regulated in many countries, has been associated with physical fatigue that directly interferes with the increase in average speed of vehicles, with the intention of arriving destiny as fast as possible⁽¹²⁾, besides strenuous journeys and inadequate infrastructure conditions for truck drivers, even in developed countries⁽¹³⁾. The understanding of the causes of substance use by this population, therefore, is relevant in the current scenario and allows a deeper understanding on the motivations of use and for the elaboration of prevention policies. In this sense, the objective of the present study was to understand the experience of these professionals in relation to the use of psychoactive substances from the subjective personal experience of the truck drivers themselves, seeking to analyze the context and the meaning attributed to this phenomenon. This topic is extensively addressed in quantitative and epidemiological studies, but those addressing the qualitative aspects involved are not frequent.

Method

The elements relevant to the methodological design will be presented below according to the three areas proposed in the Consolidated Criteria for Reporting Qualitative Research (COREQ) protocol⁽¹⁴⁾. The present work corresponds to one of the products derived from a master's degree project in Psychology.

Domain 1 - Characteristics of the Research Team. The person in charge of the interviews and who accompanied the participants in their journeys is a male research fellow enrolled in a *stricto sensu* Graduate Program who had personal experience in the contact with truck drivers, since he has close relatives and friends who currently practice or have practiced this profession. The other researchers, responsible for analysis and discussion, are one female and three male professors at graduate university programs, all with post-doctoral degrees in their areas of specialization, namely Psychology of Occupational Health, Psychiatry and Psychobiology.

The researcher responsible for the interviews did not know the participants beforehand and was presented to others by indication of the previous ones.

Domain 2 - Study Design. The present study is a qualitative research that employed the ethnographic method, which consists of immersing the researcher in the chosen community, in order to have direct contact with the reality of the individuals surveyed. Thus, understanding is based on observations, interviews, contact with institutions, situations and experiences that reflect the richness of the phenomenon studied⁽¹⁵⁾. Four trips were carried out over two years in different

trucks in the Southeastern, Midwest and Northeast regions of Brazil, covering a total of 9,600 km. On these occasions, seven truckers were interviewed, chosen by convenience from the "tell me about your job" question. There was no specific criteria for defining the geographical area, considering the very nature of the occupation in question. All the interviews were audio-taped and then transcribed, composing the research corpus. The profile of the participants is described in Table 1. Of the seven interviewees, five reported using amphetamines to be able to work. All, however, issued their views on the phenomenon.

Table 1 - Profile of participants of Southeastern, Midwest and Northeast regions, states of SP, MT, MS, and BA, Brazil, 2015

Pseudonym	Age (years old)	Marital status	Number of children	Education	Time in this profession (years)
Vando	29	Married	1	High school	10
Januário	53	Separated	0	High school	2
João	40	Single	0	High school	14
Joca	28	Married	2	High school	8
Valmir	39	Married	2	High school	12
Josué	32	Married	2	Elementary school	14
Rafael	40	Married	2	Elementary school	6

In addition to the recordings, the data were collected from observations and notes of the researcher's Field Journal. The very fact that the research had an ethnographic nature implies an important attitude of openness and collaboration on the part of the participants, who agreed to take the researcher with them on journeys of more than 20 h. Still, some of them might have asked for some element of their testimonials not to be released, however that did not happen. The intensive interaction provided the establishment of bonds that allowed the interviewees to feel more comfortable to deal openly with a subject, a priori, controversial and delicate.

Domain 3 - Data analysis. The analyzes were carried out based on the conceptual framework of Occupational Health Psychology⁽¹⁶⁾. Considering the complexity of the truck drivers' daily life, the great number of aspects observed and reported and the active selection by the researcher, typical of ethnography, the most important and significant aspects of daily life and mental health from the contents produced was prioritized, without previously determined categories. The interpretation of the facts and reports that were most significant for the workers and also for the purposes of this research, then, took place. Each most important element of the analysis is illustrated by representative statements attributed to the respective pseudonyms, as well as data from the researcher's Field Journal.

The present study was approved by the Research Ethics Committee of PUC-Campinas (CEP nº35508214.3.0000.548). All participants signed the Free and Informed Consent Forms and, throughout the text, pseudonyms are used for ethical reasons.

Results

The qualitative results found are consistent with epidemiological and quantitative data relevant to the scientific literature of the area⁽⁵⁻⁷⁾ and indicate several important aspects of the drivers' work routine, which have a direct repercussion on their living and health conditions, especially the use of drugs, mainly amphetamines. This theme is seen by some of them as something natural and, in some ways, inherent to the profession while, by others, it is viewed in the opposite way. Frequent use of amphetamines is contradictorily justified by truck drivers as a way to preserve life and to tolerate working several hours sleepless. However, the use of substances in order to remain in a state of alert generates a series of controversies among the truck drivers themselves, in which those who do not use them criticize those who use and vice versa.

One line of argument is centered on the idea that colleagues die from not using stimulants. This is because it is impossible to drive for several hours without using the substance and can be much more dangerous not to use, because the driver will feel the effect of tiredness at a certain moment and may sleep at the wheel. Edson said the following about this: *It's ... my colleague, his first trip last week, said he did not take a "rivet*"; turned there in Itatim, slept, fell ... The truck was gone, but he*

* Translators' note: "rivet" is the English word for "rebite", the slang used by truck drivers to refer to stimulant drugs in general they take to keep them awake in order to driving long hours sleepless. It will be used in quotes throughout the article.

had nothing, wasn't hurt. If you don't take it, then it's no use getting the job (Edson).

On the other hand, there are those who do not use amphetamines and other substances and refer to colleagues who use them as "crazy" (sic). They say they are aware that the use could cause many damages and further assert that several drivers were seriously injured, had limbs amputated or died because they used some stimulant substance and their effect suddenly ceased, causing them to doze off. They also state that in some cases, accidents are due to delusions or hallucinations while driving, resulting from the constant use of drug.

This controversy can also generate heated discussions such as the one that the researcher witnessed at the door of a company in the industrial center of Camaçari/BA, when two drivers nearly did not physically attack themselves, as recorded in his Field Journal: Now a little while ago, I witnessed a heated discussion, one of those involved in the discussion being Rafael, with whom I travel now. He strongly argued for the possibility of safely driving and being productive without the use of a "rivet". The other driver, however, strongly denied, stating that it was impossible to work so many hours without using the drug and that it was much more dangerous to drive without using it. They appeared to be quite altered, requiring the intervention of other drivers - who were also waiting to unload their trucks - to avoid further discussion. The other truck driver seemed to disbelieve that Rafael did not take a "rivet", and asserted that even if it were true, it is certain that sooner or later he would pay the price for what he considered a "recklessness" and feeling the effects of exhaustion, he would be involved in an accident (Field Journal).

The ethnographic design of the research also allowed the observation of what it is not spoken, but it appears in the look. The following situation was also recorded in the researcher's Field Journal who accompanied Joca on a 27 h journey with only five quick stops: The clock struck at 4:00 a.m., and Joca drove calmly, he did not seem to get tired, we had started the journey 14 h ago and he showed no sign of fatigue, nor did he intend to stop. He had already said that he did not use amphetamines, but I was so surprised by such a disposition, I even suspected that one of the quick stops he had made was for the purpose of ingesting the substance (Field Journal). Faced with admiration for being able to travel so long without sleep, he admits to using the drug: When I go without traveling for more than four days (something that happens very seldom), I use it at home to "relax" because I am already "addicted" (Joca).

Interviewees also reported that it is common to find colleagues in delirium or hallucination due to substance abuse, and that these colleagues see women, animals and ghosts at the roadside after

using stimulants for a prolonged period. Words such as "frightened", "accelerated", "crazy", "flustered", "nervous", and "talking nonstop" were also used to describe the state of some truckers after ingesting central nervous system stimulants.

However, this use is not restricted to amphetamines: Today it is not just "rivet" that I see, today I see a lot of things, cocaine ... a lot ... I never had an accident, in 42 years, I never had an accident. That's it and the cachaça too. There is a lot of drivers who drink alcoholic beverages. Today is less, but there are still people who drink (Chico). Another interviewee, who is 39 years old and 15 years in this profession, adds: In fact, they don't even know what they are doing, nor see, because they are more drugged. And not just younger drivers! There are old drivers who also use cocaine, "rivet", stone [crack] (Armando).

The driver Josué addresses a certain aspect of functionality in relation to substances. When asked whether or not he was aware of the harmfulness of amphetamines and the short-, medium- and long-term consequences, he was emphatic in responding: If we know, yes, people know, but it's a matter of choice, it's better to die slowly than die at once. (Josué). After being asked to explain better, he continues: That's it, if you don't use it, you sleep, hit, overturn the truck upside down and die. And if you take a "rivet", you stay "connected", you're more or less free from that risk and the side effects may take time to appear (Josué).

Discussion

The objective of this work, as previously mentioned, was to understand the subjective aspects involved in the consumption of psychoactive substances by truck drivers in their professional activities, considering the magnitude of this phenomenon in the Brazilian cargo transport.

The elements found confirm what previous studies have pointed out⁽⁵⁻⁷⁾, that the use of psychoactive substances is still common among these professionals. It is noteworthy the divergence of opinions between them and the heated discussions, which could provoke discord and even the threat of fights and violent confrontations, such as the one witnessed, a fact of great gravity. Instead of a sense of union among workers subjected to rather unfavorable working conditions, what has been witnessed was an internal breakdown that is likely to make it harder to fight for achievements for their category. Likewise, it is striking that they do not question workdays that come more than 20 h, very commonly. Paradoxically, what was clearly presented between them was the legitimacy or not of the use of substances, not the demands and contractual relations that 'oblige' them to do so.

Apart from tiredness, other important elements are boredom and loneliness. In a study conducted in

Sweden⁽¹⁷⁾, a number of secondary behaviors were identified during driving, such as using cell phones to maintain social contact, searching for papers and documents in the booth, drinking coffee, or snacking often to break the monotony. These behaviors are associated with increased risk of accidents by diverting the driver's attention. In the case of ingestion of psychoactive substances, such feelings become even more exacerbated and, therefore, such dispersion and risk, proportionally enhanced.

In the present study, it was found that drug use can be considered as an economic survival behavior for truck drivers, a fact that confirms the elements pointed out in other studies^(5-7,9). This is unhealthy because these drivers put their lives and others' at risk because of economic necessity. In a Brazilian study with 260 truck drivers, 43.2% drove more than 16 h/day and 2.9% worked in shifts. The mean daily hours of sleep was 5.97 h/day. Of the total sample of this study, 23.8% slept less than 5 h/day, and 50.9% used alcohol. In the last five years, 27 drivers (13.1%) were involved in accidents, five of them with injuries and three with deaths⁽¹⁸⁾.

The "Truckers' Law", which came into force in 2012, includes obligations such as defensive driving, observance of driving time and rest periods, as well as compulsory testing for drugs and alcohol⁽¹⁵⁾. However, many forms of labor contract, outsourcing, low freight rates, risk transfer and maintenance lead to extreme situations in which these professionals are increasingly exploited⁽¹⁹⁾. Thus, the possible solutions are not restricted to the imposition of laws and rules, but also better working conditions and citizenship to truckers⁽¹⁻³⁾ who are forced to use illicit resources to survive, such as the use of cocaine⁽²⁰⁾. These elements evoke a broader and more systemic reflection that is linked to the maintenance of a network of supply of this type of substances. In this sense, it is a perverse arrangement of the economic system: the cargo logistics, somehow, depends on drug trafficking.

This problem, however, is not exclusively Brazilian. In Australia, two national surveys on the effects of fatigue on long-distance road transport drivers indicated that the use of stimulants was very common. The results showed that the use of stimulant drugs was twice as high in drivers who had difficulty controlling fatigue and two to three times higher by paid drivers or depending on the type of remuneration, as well as younger and less experienced drivers were more likely to present this behavior. This demonstrated the impact of external factors, especially the trucker's payment system⁽²²⁾.

In a large comparative study⁽²³⁾ between 200 Portuguese truck drivers and 206 Brazilian truck drivers, it was reported that the Portuguese drivers were older, with higher schooling, longer rest period

per work free days, and 72% consumed alcohol more than six times a week. Of these, 94% used stimulants such as caffeine and guarana powder, being 0.50% of amphetamines and doing more shift work. Among the Brazilians, 35% suffered from some sleep disorders and 43% drove more than 16 h/day, while those percentages among the Portuguese drivers were only 21% and 2%, respectively. Ninety five per cent of Brazilian drivers used psychostimulants, 11% of them being amphetamines. Accidents with victims or fatalities in the five years prior to the survey showed a frequency of 20% among the Portuguese and 13% among Brazilians. These data show very serious discrepancies, and the Brazilian reality is evidently worse, although the accident rate is lower.

A study with 279 truck drivers on Brazilian federal highways showed that 72.6% consumed alcoholic beverages in the last twelve months, with 78% with a minimum monthly frequency. Among the drivers, 9% had ingested alcohol on the very day of the ethylmetrics test. In the same study, partial results of saliva tests for the detection of benzodiazepines, cocaine, marijuana and amphetamines revealed 0.9% of cocaine positivity and 5.3% for amphetamines⁽²⁴⁾. These data lead to question the emotional status of these professionals, since the use of stimulants has a functional aspect, as already mentioned, but alcohol and marijuana suggest depressive aspects.

An interesting study conducted in the United States⁽²⁵⁾ identified four main categories of stressors present in truckers' activity: family loneliness/nostalgia, health issues, lack of respect, and legislation. These elements seem to match those experienced by Brazilian professionals, with the difference that, in the Americans' case, there is a high rate of turnover in the category, whereas in Brazil, this does not occur.

Given these data, we also highlight the elements related to the emotional and health aspects, derived from the way the work is organized and which cause the workers interviewed to refer to the "nature of the devil" when referring to their relationship with employers⁽²⁵⁾, showing a clear ambiguity regarding the profession, on the one hand, pleasure, and on the other, deep wear and suffering. In the American case, however, there seem to be more occupational alternatives than in the Brazilian, which makes the drug issue even more serious.

Conclusion

Many authors in several countries have confirmed the phenomenon of psychoactive substances use by truck drivers. Based on different methodological designs, this relevant question has been addressed through its multiple factors: epidemiological, biochemical, organizational and social.

The segmentation of opinions among drivers draws some attention, which weakens the category. This may

be related to the difficulty they face in making concrete advances in their claims, causing the results of protests and strikes to have lesser impacts than those they might actually have.

The lack of reflection of these professionals regarding the inhuman conditions to which they are exposed, understood in a natural way, as part of the work, is also highlighted. The use of substances or not, therefore, becomes only a response to an unquestioned situation, seen by the research subjects as a necessary resource for the work, without which the professional is seen as reckless. It is, though, a serious situation: a worker being criticized by his colleagues for not being willing to get involved in an illegal act.

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