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PADRÃO DE CONSUMO DE SUBSTÂNCIAS PSICOATIVAS EM MOTORISTAS DE TRANSPORTE ALTERNATIVO
PATTERN OF CONSUMPTION OF PSYCHOACTIVE SUBSTANCES IN ALTERNATIVE TRANSPORT DRIVERS
PATRÓN DE CONSUMO DE SUSTANCIAS PSICOACTIVAS EN CONDUCTORES DE TRANSPORTE ALTERNATIVOS

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#### **RESUMO**

**Introdução:** Os motoristas de transportes alternativos, mais conhecidos como *"pirateiros"* estão constantemente expostos a diversas situações nocivas à saúde, tal como o consumo de substancias psicoativas.

Objetivos: Identificar os padrões de consumo de substâncias psicoativas em motoristas de transporte alternativo.

**Métodos:** Estudo descritivo com abordagem quantitativa, realizada numa amostra de 40 motoristas "pirateiros" da cidade de Oiapoque, no Estado do Amapá, Brasil. Utilizou-se um questionário sociodemográfico, e o *Alcohol, Smoking and Substance Test* (*ASSIST*). Os dados foram analisados no Software Statistical Package for the Social Sciences (SPSS) versão 22.0.

**Resultados:** Apurou-se que os motoristas *"pirateiros"* consumiam substâncias psicoativas: 87,5% utilizavam derivados de tabaco, 100% bebidas alcoólicas, 37,5% maconha, 15% cocaína e crack, 65% anfetamina, 2,5% inalantes e negam uso de hipnóticos, sedativos, alucinógenos e opioides. Através do questionário ASSIST sobre os Padrões de Consumo, detectou-se que 62,5% apresentaram uso ocasional para maconha e que 86,4% e 67,6% recorriam ao uso abusivo de anfetamina e derivados de tabaco, respectivamente. No referente ao consumo de bebidas alcóolicas 28,2% mostraram indicativo de dependência.

**Conclusões:** Os resultados mostram a necessidade de investagação mais específica, e a reflexão acerca da situação de vulnerabilidade dos *"pirateiros"* fortemente suscitada neste estudo. Da investigação emerge ser necessário instigar os profissionais a desenvolver acções concretas de educação para a saúde para esta categoria profissional.

Palavras-chave: condução de veículo; consumos; substâncias psicoativas;

### **ABSTRACT**

**Introduction:** The alternative transport drivers, more commonly known as "*pirateiros*" are constantly exposed to various health-threatening situations, such as the consumption of psychoactive substances.

**Objectives:** To identify patterns of consumption of psychoactive substances in alternative transport drivers.

**Methods:** A descriptive study with a quantitative approach, performed with a sample of 40 "pirateiros" drivers in the city of Oiapoque, in the state of Amapá, Brazil. There was use of a sociodemographic questionnaire, and the Alcohol, Smoking and Substance Test (ASSIST). The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 22.0.

**Results:** The "pirateiros" drivers consumed psychoactive substances: 87.5% used tobacco derivatives, alcohol 100%, 37.5% marijuana, 15% cocaine and crack, 65% amphetamine and 2.5% inhalants and deny the use of hypnotics, sedatives, hallucinogens and opiates. Through the questionnaire ASSIST on consumption patterns, 62.5% occasionally used marijuana and 86.4% and 67.6% resorted to the abusive use of amphetamines and tobacco derivatives, respectively. In relation to the consumption of alcoholic beverages, 28.2% showed indicative of dependency.

**Conclusions:** The results show the need for more specific investigations, and the reflection on the situation of vulnerability of "pirateiros" strongly raised in this study. The research reveals the need to entice professionals to develop concrete actions for health education for this professional category.

**Keywords:** automobile driving; consumption; psychoactive substances;

### **RESUMEN**

**Introducción:** Los conductores de transporte alternativo, más comúnmente conocidos como "pirateiros" están constantemente expuestos a diversas situaciones que son perjudiciales para la salud, tales como el consumo de sustancias psicoactivas.

Objetivos: Identificar los patrones de consumo de sustancias psicoactivas en los conductores de transporte alternativo.

**Métodos:** Estudio descriptivo con abordaje cuantitativo, realizado en una muestra de 40 conductores "pirateiros" de la ciudad de Oiapoque, en el estado de Amapá, Brasil. Se utilizó un cuestionario sociodemográfico y el *Alcohol, Smoking and Substance Test* (ASSIST). Los datos fueron analizados mediante el *software Statistical Package for the Social Sciences* (SPSS) versión 22.0.

**Resultados:** Se comprobó que los conductores "pirateiros" consumían sustancias psicoactivas: 87,5% utilizan derivados del tabaco, 100% el alcohol 37,5% marihuana, y 15% cocaína y crack, 65% anfetaminas, 2,5% inhalantes y denegaron el uso de hipnóticos, sedantes, alucinógenos y opiáceos. A través del cuestionario ASSIST en los patrones de consumo, el 62,5% tenía un uso ocasional de marihuana y el 86,4% y el 67,6% ha recurrido a la utilización abusiva de las anfetaminas y derivados del tabaco, respectivamente. En relación con el consumo de bebidas alcohólicas, 28,2% mostraron un indicativo de la dependencia.

**Conclusiones:** Los resultados muestran la necesidad de investigación más específica, y la reflexión sobre la situación de vulnerabilidad de conductores "pirateiros" planteada en este estudio. La investigación reveló la necesidad de atraer a los profesionales a desarrollar acciones concretas de educación para la salud para esta categoría profesional.

Palabras clave: conducción de automóvil; consumo; sustancias psicoactivas;

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### **INTRODUCTION**

The use of psychoactive substances (PAS) is considered a public health problem worldwide, because it causes serious consequences, in both the individual as social spheres. The report of the World Health Organization (WHO) aims to strengthen the prevention and treatment of substance abuse, including the abuse of narcotic drugs and harmful use of alcohol (WHO, 2004).

At global level, the research conducted in 2012 showed that approximately 243 million people, equivalent to 5% of the population between 15 and 64 years, had already used illicit drugs, especially cannabis, opiates, cocaine and stimulant-type amphetamine (UNODC, 2017)

A more recent study (UNODC, 2017) shows clear social disorder associated with drug use in the years from 2006 to 2015, in addition to the worrying fact that approximately 29.5 million of these drug users suffer from disorders due to its use. This context demonstrates that the habitual consumption of drugs is harmful given that their consumers may become dependent and require treatment. The same study also confirms that 17 million people lose years of their lives due to the disruption caused by the use of psychoactive substances (UNODC, 2017)

In Brazil, the "II National Survey of Alcohol and other drugs" warns that the illegal drugs used different methods for data acquisition, not allowing for a comparison by years, only prevalence data were presented: marijuana stood out as the most consumed illicit drug (8.8%), followed by solvents (6.1%), orexin (4.1%), cocaine (2.9%), crack (0.7%) and merla (0.2%). The indiscriminate use of benzodiazepines corresponded to 0.5% of the respondents, and the heroin users reached 0.09% (LENAD, 2012).

Faced with this reality and reflecting about the population layer of people in active age to work, the drivers stand out in this segment, because they are workers who require maximum attention while driving, attention to all stimuli around and to their behavior while driving, thus requiring not using such substances during the workday.

The drivers who consume amphetamines acquire capacity to perform activities for a longer time, with a feeling of tiredness relief, because during the first few hours the feeling of well-being is great. However, after eh end of these effects, they become irritable, depressed and with uncontrollable sleep, and may sleep while driving (Moreira & Gadani, 2009).

Amphetamines have high power of action on the Central Nervous System, they increase the motor activity, improve mood, inhibit sleep and minimize the sensations of fatigue or hunger. Nevertheless, the continuous and abusive use of this product leads to the development of substance dependence and occurrence of side effects, such as cardiovascular, neurological and psychiatric disorders (Leyton, Carvalho, Jesus & Muñoz 2002)

Less experienced professional drivers ("young adults", "low schooling", "little time of service") would be more likely to using stimulants, probably due to not being able to endure the hardships of this occupation, thus resorting to the use of drugs as a probable way out (Williamson 2007).

Puente-Rodriguez and Pillon (2011) show the close relationship of consumption of PAS among professional drivers. Those who drive for longer periods usually have risk life style and behaviors by presenting high content of alcohol consumption. During the implementation of the labor activities, they consume illicit substances to complete their long workdays and achieve their goals; other common characteristics are: sedentary lifestyle, smoking, poor diet and few hours of sleep and rest, which often result in risk of traffic collisions. (Puente-Rodríguez & Pillon, 2011).

Regarding the use of medications, other researches by Masson and Monteiro (2010) and Puente-Rodrigues and Pillon (2011) showed that most interviewees (54.2%) made use of PAS to stay awake due to the need to travel long distances and suffer pressure to fulfill pre-determined deadlines; 54.4% of drivers consume up to five pills of amphetamines per trip and made use of drugs for more than ten years (43.8%); the interviewees slept on average 5.3 hours per day during the work week and 7.9 hours at the weekend. (Masson and Monteiro, 2010)

The investigation of Sinagawa (2015), in the state of São Paulo, from 2008 to 2012, in toxicological tests, concluded that the substance identified in positive cases was amphetamine with43.7%; followed by cocaine, 35.9%, and Cannabis, 13.6%; the remainder of the positive cases was 6.8% by ingestion of multiple drugs - the combination of amphetamine + cocaine, amphetamine + Cannabis or cocaine + Cannabis.

In Brazil, even after the adoption of the Federal Law 12.619/12, - known as the "Rest Law", which normalized the workday and workweek of drivers, as well as defined rules for overtime, night hours and waiting time for loading and unloading, specifying rights and duties of the driver and employer that would facilitate drivers' life, because it stipulated a workday that should be fulfilled, - which was little accepted by the population and, especially, by drivers (Brazil, 2012).

In this context, the municipality of Oiapoque stands out, located extreme northern Amapá, on the border with French Guiana. During the winter, the region is very jeopardized, becoming practically isolated from other municipalities due to the BR-156 interdiction, a period that requires the use of alternative transport, such as "pick-ups", whose wheels have purchase, also known as "pirateiros" - are the only means of transport that support the Oiapoque/Macapá path, or vice-versa, in winter. There is also the increased demand for this service during end-of-year festivities.

Taking into account the harmful effects of the abusive use of psychoactive drugs and the delicate and close relationship of consumption of these substances with automobile driving, in addition to the lack of data on the patterns of consumption of PAS

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among of alternative transport drivers in the city of Oiapoque, the accomplishment of this study is justified. On the other hand, when considering the work routine of these professionals, with exposure to exhaustive overload, stressful conditions and process of vulnerability over the border area, this audience deserves and requires research with special attention to ensure that the results are used as guiding strategies to improve the quality of life of these individuals and, perhaps, to adopt measures to prevent the abusive and problematic use of PAS by this population group.

In particular, the present study aimed to identify patterns of consumption of psychoactive substances in alternative transport drivers in Oiapoque.

### 1. METHODS

### 1.1 Study Type

Descriptive study with a quantitative approach. The research site was the municipality of Oiapoque, situated in northern Amapá, 600 km far from Macapá, capital of Amapá, with an area of slightly more than 22 thousand km² and 25,514 inhabitants, according to the IBGE9. This distance is traversed by BR-156, which cuts the state from south to north, and currently has 110 km without asphalt, which brings great inconvenience to the community, because, during the local winter, several big mires that isolate the city (Almeida & Rauber, 2017).

In the winter season, the passengers' demand for alternative transport - "pirateiros" - to travel to other municipalities increases. Throughout the year, since they are freelancers, these drivers pass through BR-156 numerous times, there is no control over the time of rest and many of these trips are conducted at night, causing exhaustion. The municipality was selected due to its great difficult access and because it is an area of great flow of passengers.

### 1.2 Participants

The study participants were a non-random sample of 40 drivers, selected by convenience. The inclusion criteria were individuals exercising the activity of "pirateiro" driver for at least a year, excluding the drivers who, at the interview, presented clinical signs or symptoms suggestive of drunkenness/intoxication due to the use of psychoactive substances or who refused to participate in the research.

In relation to the sociodemographic characteristics of the sample, most drivers (42.5%) were 29 years (M=33.2;  $\pm$  SD= 9.07). Regarding marital status, 60% reported being unmarried, 15% married and 10% divorced. In terms of schooling, 52.5% (most of the sample) had only primary education. In relation to the place of birth, 35% of the participants were from Pará and only 27.5% from Amapá, with place of residence in the municipality of Oiapoque (87.5%). Concerning the number of people who lived with the interviewees in their homes, 40% lived with three people (M=3.7;  $\pm$ SD=1.41).

# 1.3 Data collection instrument

The data collection was performed through the application of the sociodemographic questionnaire and the Alcohol, Smoking and Substance Test (ASSIST).

Each driver was previously instructed to respond, had the right to clarify any doubts, given the guidelines and references described in Resolution 466/2012 of the National Health Council of Brazil, which prescribes the guidelines and standards related to researches with human beings.

### 1.3 Formal and ethical procedures

The drivers were discreetly and carefully approached at the passengers' departure and arrival point, located on the edge of the municipality of Oiapoque, northern Amapá. This place is strategic due to the large flow immigrating tourists coming from the territories of France.

After the approach, they were invited to participate in the study by signing the Informed Consent Form (ICF). After acceptance, they were conducted to a more reserved place, where they could feel more at ease and safe to answer the questionnaire. The present study, a project back then, was submitted to *Plataforma Brasil* and forwarded to the Research Ethics Committee

(REC) of the Federal University of Amapá for approval under CAAE: 80771817.1.0000.0003.

## 1.4 Statistical Procedures

The data were entered on an electronic database in the editor Microsoft Excel® and analyzed by the software Statistical Package for the Social Sciences (SPSS), version 22.0. Descriptive analyses were performed to verify the consistency of the data and comparisons involving the sociodemographic, occupational variables and those related to the consumption of alcohol and other drugs.



#### 2. RESULTS

The results correspond to the analysis of 40 interviews conducted by convenience, however, there are variations in the numbers of some tables, because some questions were not answered.

The analysis of aspects related to the occupation of drivers in the municipality of Oiapoque revealed that 100% of the sample were "pirateiros" with time of profession from 4 to 7 years (35%) (M=9.2; ±SD=7.82). Concerning the reasons reported by the participants for performing this activity, the majority (65%) justified it by financial issues, i.e., this practice works as a supplement to the participants' wage income. In relation to the used vehicle, 90% of the sample universe used their own car. Regarding working hours, 42.5% worked from 14h to 16h per day (M=12.8 ±SD=3.66). The amount of weekly trips was three-the trip mentioned in this study is equivalent to the roundtrip from the municipality of Oiapoque to the capital, Macapá, with 40% of the responses (M=4.9±SD=5.15) during the night (75%). Another assessed factor was the amount of hours of sleep of "pirateiros", ranging from 8h to 9h of sleep (57.5%).

## 2.1 Characteristics of psychoactive substances consumption by "pirateiros"

Table 1 shows the use of PAS by drivers in the municipality of Oiapoque, revealing that 87.5% of the "pirateiros" drivers used tobacco derivatives, 100% alcoholic beverages, 37.5% marijuana, 15% cocaine and crack, 65% amphetamine, 2.5% inhalants and deny the use of hypnotics, sedatives, hallucinogens and opiates. (ch. Table 1).

Table 1. Distribution of characteristics of drug consumption by drivers, Oiapoque/AP, 2017, (N=40).

	Alternative transport drivers (n=40)		
	n	%	
Tobacco derivatives			
Yes	35	87.5	
No	1	2.5	
Unanswered	4	10.0	
Alcoholic beverages			
Yes	40	100.0	
No	-	0.0	
Marijuana			
Yes	15	37.5	
No	1	2.5	
Unanswered	24	40.0	
Cocaine or crack			
Yes	6	15.0	
No	2	5.0	
Unanswered	32	80.0	
Amphetamine			
Yes	26	65.0	
No	2	5.0	
Unanswered	12	30.0	
Inhalants			
Yes	1	2.5	
No	2	5.0	
Unanswered	37	92.5	
Hypnotics and sedatives			
Yes	-	0.0	
No	2	5.0	
Unanswered	38	95.0	
Hallucinogens			
Yes	-	0.0	
No	1	2.5	
Unanswered	39	97.5	
Opiates			
Yes	-	0.0	
No	1	2.5	
Unanswered	39	97.5	

# 2.2 Patterns of Consumption of psychoactive substances by "pirateiros" drivers

Through the ASSIST questionnaire, there was the classification of patterns of consumption of PAS by participants, revelaing that 62.5% had occasional use of marijuana and 86.4% and 67.6% resorted to the abusive use of amphetamines and tobacco derivatives, respectively. In relation to the consumption of alcoholic beverages, 28.2% showed indicative of dependency.



Table 2. Classification of the use of psychoactive substances by "pirateiros" drivers according to the ASSIST Questionnaire. Oiapoque/AP, 2017, (N=40).

	Alternative transport drivers (n=40)						
Variables	Occasional use		Abusive use		Indicative of dependency		
	n	%	n	%	n	%	
Tobacco derivatives	10	29.4	23	67.6	1	2.9	
Alcoholic beverages	7	17.9	21	53.8	11	28.2	
Marijuana	5	62.5	3	37.5	-	0.0	
Cocaine and crack	3	60.0	2	40	-	0.0	
Amphetamine	2	9.1	19	86.4	1	4.5	

The consumption of products tobacco derivatives and the consumption of alcoholic beverages are most relevant, with frequent abusive use and indicative of dependency in the case of alcoholic beverages and tobacco derivatives. (ch. Tables 1 and 2).

#### 3. DISCUSSION

When researching the scientific literature, there were results similar to this study, since the study conducted with 114 truckers working for Dairy Cooperative in the region of Alto Paranaíba, Minas Gerais state, identified that the predominant age range was 26 through 35 years in 42% of the sample (Junior, Mendes, Silva, Oliveira & Gaya, 2016).

The study of Leopoldo, Leyton e Oliveira (2015), with 684 truck drivers that circulated through three highways in the state of São Paulo, showed an average age of 37.8 years. In another study, Masson and Monteiro (2010) found an average age of 37.5 years, characterizing them as older than those in the present study.

In relation to the marital situation of respondents, the majority (60%) was "unmarried". These results are different from those of Leopoldo, Leyton, Oliveira (2015) and Oliveira, Barroso, Gouvêa, Almeida Muñoz and Leyton (2015), because the authors identified that most of their interviewees were married (7.7% and 82.1%, respectively).

Regarding schooling, the sample universe of this study had only primary education with 52.5%, i.e., low schooling, which was also detected in investigations carried out in 2010 and 2015, respectively by Masson & Monteiro (2010) and Oliveira, Barroso, Gouvêa, Almeida Muñoz & Leyton (2015).

In relation to the place of birth, the most subjects in the study were from the state of Pará and only 27.5% from Amapá, with place of residence in the municipality of Oiapoque (87.5%). Simultaneously, the flow of migration between states in the northern region, as well as to other regions of the country, are still maximized, a result justified by the increasing search for the improvement of living and housing conditions.

One of the factors that contributes to the increased interstate migration is unemployment. According to the IBGE, Brazil has an unemployment rate of 12.7%, with more than 13.2 million people in such situation (UOL, 2018). Thus, the ceaseless search for work often leads individuals to perform activities on their own account (own-account workers), initiating these activities while still young, as the situation of the "pirateiros" drivers, who articulate "freight" (name given to alternative transport of cargo and passengers in northern Brazil) between the cities, as is the case of the municipality of Oiapoque, which leads to a profitable terminal in terms of arrival and departure of people from the cities of French Guyana and the Oiapoque/Macapá flow.

Another factor examined was the number of people who lived with the drivers. More than half of the interviewees lived with three people, but the level of kinship between them was not identified. Another point that can be analyzed in relation to the number of inhabitants is the portion of "pirateiros" that showed marital status married, which, in addition to the partners, suggests the existence of children. In the study of Masson & Oliveira (2010), most (80%) respondents had children and was the sole provider of sustenance of the family.

The present study characterized a sample of "pirateiros" drivers (100% of the respondents), i.e., who act in the transportation of cargo and passengers by their own (with their own car), without employment with a company due to reasons related to the improvement of financial conditions. Oliveira, Barroso, Gouvêa, Almeida Muñoz and Leyton (2015) mention that 21.6% of their sample worked at night or irregularly, data that differ from those found in this study.

In relation to workhours of alternative drivers, the majority worked from 14h to 16h, with an average of three trips throughout the week by the passage that connects the municipality of Oiapoque to Macapá and other localities of this passage, emphasizing that there are periods in which these trips increase. The path travelled by these drivers is 600km, with 110km without asphalt.

When analyzing the time spent for embarkation and disembarkation of passengers, local delivery of cargo and the occurrence of rainy periods, this workload can duplicate. The risk of an accident doubles from twelve hours of work and increases when working during 5h30min, if compared to the daily recommendation of four hours (Narciso e Mello, 2017). Most drivers of the

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study by Oliveira, Barroso, Gouvêa, Almeida Muñoz and Leyton (2015) drove on average 12.2h daily, traveling an average of 1,159.7km, which shows different results from those found in the present study, whose average was 12.8h.

The study of Masson and Oliveira (2010) showed that most participants drove a truck on average 16 hours per day, doing 955km a day in the southeastern region of the country, which is consistent with the reality of the infrastructure of roads travelled by the surveyed drivers and makes the results of the present study corroborate those authors.

The drowsy driving is a major risk to the safety of drivers and for the general population and deserves extra attention. The present study identifies a daily average from 8h to 9h of sleep in 57.5% of the sample and 75% of the drivers working at night. The work is carried out in irregular shifts - fatigue, excessive work hours and little time to rest, resulting from excessive workload to meet deadlines and seeking to acquire passengers cause this loss of sleep. These results are consistent with the study of Paris, Grandi, Silvéro and Pereira (2013), who also found that 45% of the truckers sleep between 7h and 8h and 40% sleep between 5h and 6h.

Regarding the consumption of illegal substances, Santos, Rodrigues, Venancio, Silva Ferreira and Fernandes (2017), in their study, found that 47.7% of the participants used tobacco derivatives, with cigarette as the main representative. Another survey conducted by Junior, Melo, Mendes, Silva, Oliveira and Gaya (2016) identified the use of this substance in 51.6% of their respondents, inferring that this study presents results corroborating those of other researchers.

As already described, the totality of the participants consumed alcohol. Previous researches by Santos, Rodrigues; Venancio, Silva, Ferreira and Fernnades (2017), and Nascimento and Silva (2007) showed that most of their participants consumed alcoholic beverages (91% and 73.9%, respectively), so that the results of this research corroborate the findings of previous researches. The data, however, are conflicting from those of the study by Masson and Monteiro (2010), which identified alcohol consumption in only 49.5%.

In this context, Damaceno, Malta, Boccolini, Souza, Junior, Almeida, Ribeiro and Szwarcwaid (2013) report that the frequent and abusive consumption of alcohol can impair the person's ability to drive, favoring, in this way, the occurrence of traffic accidents. Hence emerges the need to monitor the alcohol content of drivers, as a strategic measure of intervention (Damaceno, Malta, Boccolini, Souza, Junior, Almeida Ribeiro & Szwarcwaid, 2013)

All damages caused by an automobile driver configure a crime in Brazil, according to Law n. 11,705/08, 20 July 2008, and characterizes very serious offense, which is penalized with a fine, in addition to the suspension and/or restriction of the license of professional qualification of driver (Brazil, 2008).

In relation to the use of marijuana, crack/cocaine, 37.5% and 15%, respectively, used them. These results are much more worrying than those found by Santos, Rodrigues; Venancio, Silva, Ferreira and Fernandes (2017), who, in their study interviewed 161 drivers and found the use of marijuana in 9.9% and crack and cocaine in 5% of the sample.

Nonetheless, Leopoldo, Lexton and Oliveira (2015) found that 23.8% of the participants had consumed cannabis at least once in a lifetime, 19% had consumed cocaine and 2.0% crack, approaching the data in this study.

Rizzotto (2014) stresses that the consumption of these substances by truckers happens by the high workload in a given space of time, considered relatively short for the transport of goods. Thus, in order to arrive at the final destination of the trip, the drivers end up using substances such as "marijuana", "crack" and "cocaine" to stay awake and relaxed at the wheel.

Besides personal addiction, truckers are the most vulnerable to the transportation of illicit drugs, because they are considered "easier" to the action of traffickers, who approach them at petrol stations and restaurants on the banks of the roads and ensure that those products have more lasting effects than amphetamines, i.e., for them, the use is considered "beneficial", because they increase the amount of hours without sleeping at the wheel (Rizzotto, 2014).

The scientific literature, through various studies, shows that most accidents considered serious on roads happened with individuals under the influence of alcohol and other drugs, therefore, the use of those products carries serious consequences for the body/health/well-being of the individual.

Simultaneously, this study sought to analyze the use of amphetamines in the sample, revealing that 65% of the respondents use them. The research of Moreira and Gadani (2009) identified that 65% of the drivers used this substance aiming not to sleep and travel longer time periods, so that the present research corroborates the findings of that study.

This research analyzed percentages that corroborate Oliveira Souza, Barroso, Gouvêa, Almeida, Munoz and Leyton (2015), in which most of the sample (58%) made use of those substances. In turn, Girotto, Mesas, Andrade and Birolim (2014) found that the consumption of that product occurred in 29% of cases.

Moreover, this study sought to identify the consumption of inhalants, hypnotics and sedatives by "pirateiros", but none of the participants reported having used or using those products. Concomitantly, when researching studies in this context, the investigation by Ramos, Almeida, Ribeiro and Silveira (2018) recorded the occasional consumption of alcoholic beverages by 14.6% of the subjects, so that our results differ from the literature.

In relation to the risk of using products derived from tobacco, marijuana and amphetamines by drivers, the literature had no information on such classification. Several studies have identified the use of those substances in their samples, but do not classify the risk of consumption.

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The risk consumption associated with the ingestion of alcoholic beverages, as well as other drugs, is a crucial factor for the maximization of the driver's vulnerability, mainly because they involve and/or cause accidents, affecting their own lives and the lives of other people, in addition to changes in the organism, such as the onset of cardiovascular diseases (Junior, Melo, Silva, Oliveira & Gaya 2016).

Other scholars have identified maximum percentages of consumption of 50.9% for the use of tobacco, average of 33.3% for alcoholic beverages and minimum with only 5.5%, for marijuana, assuming that this study's findings match those of other researchers such as Henrique, Micheli, Lacerda, Formigoni & Milos (2004).

The drinking and smoking among drivers occur during resting hours as a tool of socialization, and even between meals. The exaggerated use of alcohol, tobacco and other drugs leads to serious consequences to the human being, especially when this use occurs simultaneously with labor activities, as occurs with truckers, who are mostly more exposed to the occurrence of accidents, in their majority, with fatal consequences (Moreno & Rotenberg, 2009).

#### **CONCLUSIONS**

Although the present study holds a sample whose size is reduced, its audience is unpublished and allowed identifying the pattern of consumption of psychoactive substances among alternative transport drivers in Oiapoque. Despite the possibility of improving the understanding about the theme, it is important to warn that the data are not generalizable to the entire Brazilian population of alternative transport drivers.

Additionally, one may not affirm that the participants who reported the use of psychoactive substances did it while driving. The ASSIST identifies all substances that were used, compares the prevalence of their use in this class of drivers as found in other studies, but is limited, since the cited studies used specific methodologies and were predominantly performed with truck drivers.

The analysis of the results revealed that the studied sample is mostly composed of young adults, "unmarried", with low schooling, with 4 and/or 7 years in this labor activity, with "financial matters" (i.e., the so-called "gigs") as the basis for such function. Furthermore, there was high consumption of products derived from tobacco, alcohol, marijuana and amphetamines, in particular, due to the long workdays and the occurrence of stressful situations.

Importantly, the results evoke other questions, demonstrating the need for more specific studies and the reflection on the situation of vulnerability of "pirateiros", strongly raised in this study. In this way, there emerges as implication for professional practice the possibility of instigating, mainly through health education, to raise awareness about the importance of the non-use of psychoactive substances during the transport of cargo and passengers, aiming to reduce traffic accidents and the consequent mortality and morbidity rate often associated with them.

### **CONFLICT OF INTERESTS**

The authors declare that there is no conflict of interests.

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