

Research Article

Stimulant Drink of the Long Driver Lorry in Sulawesi Island, Indonesia

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Abstract

Energy drinks are drinks that are widely consumed today for hard workers, especially ten-wheel truck drivers. Work makes them have to consume stimulants for health. This study aims to determine the percentage of drivers consuming stimulant drinks, the dominant age for the driver, as well as the percentage of stimulant drinks are most widely used. The research method used is the mix method to determine the type of stimulant drinks they consume as well as the percentage of age and the amount consumed. The results showed that the age of 26 years-30 years most of the age of truck drivers, the age of 36 years-40 years most drivers consume stimulant drinks due to decreased physical function, as well as the most consumed drinks are the type of "K" because of the price and related components contained therein. To the driver please consume stimulant drinks but not more than 300 ml or 2 bottles per day for health reasons.

Keywords: Stimulant drinks; Sulawesi; Driver; Truck 10 wheels

Introduction

Energy drinks are types of drinks that contain large amounts of stimulant substances such as caffeine, the amino acid, taurine, added sugar or sweeteners, and additives. This drink is usually consumed to provide extra energy to the body. This drink can indeed increase productivity and concentration so as to facilitate work, as a cold drink while exercising, as well as the daily activities of people who drink it. However, if consumed in excess, energy drinks can actually have a harmful impact on the health of the body.

Most energy drinks sold on the market contain caffeine as a stimulant or a substance that can stimulate the performance activity of the brain and nervous system of the body. The substance can also make the body feel more powerful. However, the caffeine content in most energy drinks is generally quite high, which is around 160 milligrams-300 milligrams per package. This amount can even reach 3 times-5 times the amount of caffeine in a cup of coffee or tea. Ideally, the caffeine intake limit for healthy adults is 400 milligrams per day. Not only that, energy drinks also

generally contain very high sugar, which is about 40 grams. That is why energy drinks are recommended not to be consumed in excess.

Hard workers or manual workers often make energy drinks as their supplement when they have to work for 24 hours. This happens a lot to truck drivers who operate on the trans Indonesia road to carry their cargo to other areas throughout Indonesia. Based on Kompas in 2023, the number of truck drivers in Indonesia amounted to about 5,934,803 people spread across 8 islands in Indonesia, namely Java, Sumatra, Kalimantan, Sulawesi, Bali, Nusa Tenggara, Papua, Maluku and North Maluku [1]. If in detail, East Java is the region with the largest driver population on the island of Java, namely 775,162 units. Then Jakarta became the region with the second largest population on the island of Java, namely 763,159 people. The islands of Maluku and North Maluku became the region with the least number of drivers, namely only 29,853 people.

Based on the Ministry of Transportation's 2022 report, the Road Transport Accident Victims in Indonesia reached 204,447 people throughout 2022. The number rose to 33%, compared to victims in 2021 who reached 153,732 people. Where accidents are dominated by two-wheeled vehicles about 40% and trucks about 15%. Ahdi Ahdiat (2022), said that the most common factor causing accidents was careless looking ahead as many as 18,070 cases, followed by failing to keep a safe distance as many as 17,247 cases. While the result of sleep or fatigue as many as 1,069 cases [2].

Fatigue is physical, mental, and emotional fatigue that occurs due to stress suffered over a long period of time, in situations that demand high emotional involvement. Setyawati (2010) describes fatigue as a state that reflects an emotional reaction in individuals who work in the field

of humanity (human service), or when working closely with the community. Sufferers are often found in nurses in hospitals, social workers, teachers, drivers and members of the police. Setyawati (2007) states that fatigue is a form of tension or psychological pressure associated with chronic stress, which is experienced by a person from day to day characterized by physical, mental and emotional fatigue [3].

Based on the results of research from Widyarini and friends in 2014 said the consumption of energy drinks on informants (public transport driver) related to his belief in the benefits of energy drinks, small public transportation driver did trialdo behavior adoption pattern before adopting the behavior, and the practice of energy drink consumption is generally done by informants are consuming energy drinks in the form of water and ice cubes as well as milk as additional ingredients [4].

With heavy work by truck drivers in the Sulawesi region where they have to work 24 hours as a driver with a load of vehicles and heavy loads, we as researchers are interested in knowing the pattern of habitual use of energy drinks or stimulants consumed by drivers when they work.

Methods

The Design of this study is a type of mixed method with a qualitative and quantitative descriptive phenomena approach to identify the type of stimulant drinks used by the driver and the percentage in consuming stimulant drinks that help them perform their duties as a driver of a large truck. the sample in this study is the 10-wheel truck driver who temporarily stopped at the Makassar-parepare trans Sulawesi line. The number of samples in this study as many as 500 samples consisting of large truck drivers. The sampling technique is the accidental sampling method during the period January-March 2024.

The sample criteria are willing to be a respondent when data collection is done, ready to cooperate in interviews, consuming stimulant drinks, age 17 years-40 years, male gender, 10-wheel truck driver, and not in a drunken condition. Data processing techniques are statistical methods by finding the percentage of drivers who use stimulant drinks while driving a vehicle as well as the type of stimulant drinks that is consumed. The variables of this study are the driver of 10 wheels at least, consuming stimulant drinks, as well as the type of stimulant drinks consumed.

Before the interview, they were presented with a consent form to participate in the research. Next, a tensimeter examination is performed using a digital aneroid sphygmomanometer. After that, all data is tabulated based on the variables studied and then statistical tests are performed to see the percentage based on the variables studied.

Results

The research was conducted along the Maros, Pangkep, and Barru Regency roads which are the routes of freight trucks on the island of Sulawesi to West Sulawesi, Central

Sulawesi, Southeast Sulawesi, Gorontalo, and North Sulawesi and vice versa. In this study, the following results were obtained:

- a. The types of drinks they consume most often are
 1. "K"
 2. "M"
 3. "HA"
 4. "GS"
 5. "Gr"
 6. "BB"
 7. Types of Coffee
- b. Pictures of stimulant drinks (Figure 1).

Types of Stimulant Drinking





Number	Name	Picture
1	Kratindaeng	
2	M-150	
3	Hemaviton action	
4	Green Sands	
5	Groovy	
6	Beer Bintang	
7	Coffee	

Figure 1: Pictures of stimulant drinks

Based on the data in Table 1, it is depicted that the number of truck drivers at the age of 26 years-30 years is the highest, namely about 201 people with a percentage of 40.2%, then drivers aged 30 years-35 years with a total of about 162 people or 32.4%, followed by 17 years-25 years of age as many as 81 people with a percentage of 16.2% and then ages 17 years-25 years of age as much as 17 years-25 years of age 81 people with a percentage of 16.2%.

Table 1: Karakteristikage characteristics of truck drivers

No.	Age	Total	Percentage
1	17 years-25 years	old 81 people	16.20%
2	26 years-30 years	old 201 people	40.20%
3	30 years-35 years	old 162 people	32.40%
4	36 years-40 years	old 56 people	11.20%
Total		500 people	100%

Source: Primary data of research 2024

Based on the data in Table 2 on stimulant drink consumption, it can be described that about 472 people or 94.4% of drivers consume stimulant drinks while they are driving their trucks. Only 28%, or 5.6%, said they did not drink stimulants during their truck runs.

Table 2: Consumption of stimulant drinks

No.	Usage	Total	Percentage
1	consumption of stimulant drinks	472 people	94.40%

2	No consumption of stimulant drinks	28 people	5.60%
Total		500 people	100%
Source: Primary data of research 2024			

Based on the data in Table 3, the data obtained that the most age of consuming stimulant drinks is in the age group of 36 years-40 years as many as 220 people or 46.62%, followed by the age of 26 years-30 years as many as 142 people or 30.08%, age 30-35 people as many as 80 people or 16.94%, and age 17 years-25 years as many as 30 people or 6.36%.

Table 3: Percentage of stimulant drink consumption by age

No.	Age	Total	Percentage
1	17 years-25 years	old 30 people	6.36%
2	26 years-30 years	old 142 people	30.08%
3	30 years-35 years	old 80 people	16.9.94%
4	36 years-40 years	old 220 people	46.62.62%
Total		472 people	100%
Source: Primary data of research 2024			

Discussion

Based on the results of the research has been conducted on 500 samples consisting of 10-wheel truck drivers who operate on the Makassar-Parepare axis, namely Maros, Pangkep, and Barru regencies. From the study described:

Driver age characteristics

From the research conducted, it was found that the highest percentage of truck driver age is at the age of 26 years-30 years. Such an age is a young adult age with stamina and strength that is on the verge of progressive. According to Sekarlangit, 2021 the age of 30 years is the age that most people make major changes in their lives when they are three-headed [5]. The researchers argue that at this age they have begun to look for the meaning of maturity in life and understand a hard work in life. On the other hand, at this age is the peak of a more satisfying sexual life in men, besides that the personality will be socially more stable in controlling emotions (Table 4).

Table 4: Types of stimulant drinks

No.	Types of drink	Total	Percentage
1	Kratindaeng	189	40.04%
2	M-150	96	20.33%
3	Hemaviton action	74	15.67%
4	Green sands	41	8.68%
5	Groovy	37	7.83%
6	Beer bintang	21	4.44%
7	Jenis kopi	14	2.96%
Total		472 orang	100%
Source: Primary data of research 2024			

Based on research conducted by Clarissa Ayu Candra Kirana, et al. (2023), they said that most expedition truck drivers were in the age range of 25 years-34 years with 29 respondents, namely in the initial worker category [6]. Age is a predisposing factor that affects a person's physical condition, such as the ability to see, hear, and think in running a large vehicle such as a truck.

From a study conducted by S. Zetli in 2018, from 30 drivers sampled, 5 (16.7%) were <20 years old, 12 (40%) drivers were between 20 years-30 years old, 7 (23.3%) drivers were 30 years-40 years old and 6 (20%) were >40 years old [7]. From the level of relationship tested with the chi square statistic test, it was found that all drivers aged >40 years experienced fatigue while working. Obtained is 0.036 thus the value of p value <0.05, means there is an influence between age and work fatigue.

From some research that supports study has been done that age is indeed very good as a truck driver with a large tonnage there is a range of 26 years-30 years because in addition to physical factors, psychological factors also greatly affect, especially the maturity in decision making on the highway whose route is very male with the level of compliance of road users in South Sulawesi.

Percentage of drivers who consume stimulant drinks

In the study conducted apparently very many drivers who consume stimulant drinks with a percentage of 472 people or about 94.4% of the 500 participants of large truck drivers interviewed. Indeed, it is very understandable because the load of cargo with a 24-hour working time makes drivers make stimulant drinks as a friend to prevent drowsiness and restore their energy, especially when carrying vehicles at night.

Stimulant drinks are very commonly used not only by drivers but also by many students. They use it as a complement to learning activities, especially those containing caffeine such as coffee. It was used to prevent drowsiness when in the process of lectures. This is in line with research conducted by Agussalim, et al. (2023) that students who consume coffee containing caffeine at least a glass overnight have a sleep disturbance effect on students and tend to be awake for the next few hours [8].

The highest percentage of drinkers of stimulant drinks by age

Based on research conducted it turns out that at the age of 36 years-40 years more dominant consume more stimulant drinks as many as 220 drivers. Based on a short interview, they dominantly said that because of the age, they had started to get tired easily, so they needed to be helped by stimulants. Based on Halo Sehat, in 2024 says that the age of 40 must be ready to be ready to face many health problems for both men and women [9]. Plus at this age there is a rush so that sometimes Health is not paid much attention.

Age 40 in love life or relationship life is also not looking for friends anymore, tend to enjoy relationships that have been formed. He emphasizes relationships that have been owned for a long time, rather than looking for new relationships again," said Astrid, 2021. In addition, at this age stage, a person also tends to feel enough and fulfilled more easily. Not as ambitious as it was in young adulthood.

This is also in line with research from Arum Meiranny, et al. (2022) published in the Journal of Health Promotion

publication Media about caffeine [10]. The results of this study concluded that there is a significant association of caffeine consumption with sleep patterns and quality. Consumption of caffeine in low doses has been shown to provide benefits. However, if caffeine is consumed in excess, it will experience side effects including headaches, tremors, anxiety, sleep disorders, insomnia, excessive anxiety, fatigue/lethargy, not excited, and nausea, and vomiting.

Percentage of the most consumed stimulant drinks

Based on research conducted on 10-wheel truck driver in South Sulawesi in get the results that the type of drink "K". This drink is consumed by more drivers, namely about 189 out of 500 drivers or about 40.04%. Based on interviews with the driver said the reason more consuming it because in addition to cheaper prices also give the effect of literacy longer when while active.

Based on data from the website "K" said that they have a production and sales strategy. This stimulant drink in addition to winning in terms of promotion, price, product quality, and also related to sponsorships held at various events. Fadhil (2023) added that "K" has a mix strategy in making the product sell well [11].

In other side data from TC Pharmaceutical Industries in 2016 inform than "K" contain 32 mg Caffein per 150 ml [12]. in addition, this product contains taurine, glucose, Inositol, choline, lysine and B vitamins. in addition, it is said that "K" is one of the energy drinks circulating in Indonesia. Many people become devotees because in addition to taste good, "K" believed to be able to increase stamina to work. It included in the list of drinks that are safe for consumption. Why it can be included in the list of drinks that are safe to consume? Because it does not use artificial sweeteners. It uses natural sugar for its sweetener. In addition, it has gone through a trial phase conducted by BPOM RI (Indonesian food and drug Supervisory Agency) and the results are safe for consumption it. This has certainly convinced us that it is safe for consumption.

Taurine is an amino acid found in fish and breast milk that greatly affects heart health, maximizes brain function, and helps in the secretion of enzymes. Caffeine serves to antioxidants found in coffee and chocolate that have a function to stimulate the nervous system, to increase metabolism in the body and help rejuvenate cells in the body and increase concentration and alertness.

Conclusion

Inositol nositol serves to help fat metabolism in the body, lysine is used to protect the liver and improve fat metabolism and Vitamin B as a coenzyme that converts carbohydrates and fats in the body into energy, an important coenzyme in the metabolism of carbohydrates, fats, and proteins, helps in the metabolism of amino acids and fats, and helps in the formation of red cells, as well as forming red blood

cells, stimulate the nervous system and form a network that protects nerve fibers. Things like this make the drink a lot of places in the hearts of heavy workers as well as 10-wheel truck drivers in the sulawesi region.

Ethical Clearance

Before conducting interviews and taking research data, the participants were given approval sheets as respondents. This is done as a step to avoid ethical problems.

Acknowledgement

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Conflict of Interest

There was no conflict of interest in this study.

References

1. Kompas, The number of trucks in Indonesia is up slightly, the most trucks are on the Island Jawa, 2023.
2. A. Ahdiat, Be careful on the road, these are 12 factors that cause traffic accidents, 2022.
3. B.S.A. Dwi Setiawan, The relationship between fatigue and dump truck driver performance, Psikoborneo, 5(2017):145-153.
4. S.R. Widyarini, R.M. Thaha, The consumption behavior of energy drinks on pete-pete driver routes Sudiang Makassar, 2017.
5. N. Sekarlangit, K. Glori, Age 30 is life span happy? 2021.
6. C.A.C. Kirana, M. Ririaty, I. Nafikadini, Factors related to COVID-19 prevention behavior of Expedition truck drivers in the adaptation period of new habits, 2023.
7. S. Zetli, Measurement of work fatigue in public transport drivers in an effort to determine the factors of public transport accidents in BATAM City, J Indust Sys Eng, 4(2018).
8. Agussalim, Rusli, R. Ashari, N. Muhammad, T Erawan, et al. Caffeine in student learning activities, J Drug Alc Res, 12(2023):1-5.
9. Hello Healthy, Things to do when you reach 40 years old, 2024.
10. A Meiranny, AM. Chabibah, The effect of caffeine drink consumption on patterns and sleeping quality of college students, MPPKI, 5(2022).
11. Fadhil, The secret to the success of the kratingdaeng mix marketing Strategy in building strong brand awareness, 2023.
12. T.C. Pharmaceutical industries CO., LTD. export product: Company profile, 2016.