



MAKERERE UNIVERSITY

COLLEGE OF COMPUTING AND INFORMATION SCIENCE

SCHOOL OF COMPUTING AND INFORMATICS TECHNOLOGY

BSE 4100 SOFTWARE ENGINEERING PROJECT I

RESEARCH PAPER

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ABSTRACT

Alcohol and its ill effects have been a part of human civilization since time immemorial. The aim of the research was to obtain information about the attitudes of road users towards drunk-driving, legal implications and safety measures. It was found that the most common age group for drunk-driving was 18-34. Regions, gender, age groups were considered and a revelation of males from the central are more likely to get involved in drink driving. A large section of people also thought that as much as the police were doing enough to regulate the vice, the lenient laws were a pitfall towards ensuring offenders very punished.

INTRODUCTION

Driving under the influence of alcohol is one of the causes of accidents worldwide. So, it is just in order that in recent months Traffic police officers have zealously taken to subjecting motorists to the breathalyzer test to make sure they are not breaking this potentially life-saving law. One common feature in drink-driving legislation is the legal limit.

According to Section 112 of the 1998 Traffic Control and Road Safety Act, any person who drives a vehicle when the amount of alcohol in their blood “exceeds the prescribed limit at the time he or she provides the specimen commits an offence” [1].

When engaging in drunk – driving, there are good chances of getting caught with the person has an excessive blood greater than 80milligrammes of alcohol per 100 milliliters of blood which is 0.08%. [2]The law court has to choose between conditional and unconditional sentence in addition to fines. The target group is persons with a recognized alcohol problem and that get sentenced for driving with an excessive blood – alcohol level above 0.08 ‰, or repeated drunk – driving.

Literature Review

Traffic accidents cause the society large human damages and economical expenses. It is a superior goal to reduce the amount of traffic accidents and to improve the traffic safety. In this connection reduction of the number of drunk – drivers in the central region. The drunk –drivers represent a very high accident risk for instance, a total of 162 drivers were reported to be in police custody over drunk-driving during the Easter celebrations as stated by Kampala Metropolitan police spokesperson Emilian Kayima [3].

When it comes to the issue of drunk – driving, it is important to examine the drunk – drivers’ attitudes towards impaired driving and trying to change possible attitudes that are not ideal. Attitudes towards traffic safety can be defined as a person’s evaluation of the different aspects by traffic safety. This involves acceptance of violating the rules and speeding, acceptance of being a passenger with a risky driver, acceptance of drunk - driving and so on. In addition, cultural factors, subcultures, social norms and social pressure are also influenced by a person’s attitudes.

A key issue for Uganda is that the alcohol industry has targeted children and young people through the proliferation and packaging of alcohol tot packs/ sachets in lowest quantities of 30mls and cheap pricing of about UGX 200 [4]. This distribution strategy makes alcohol very cheap, easy to conceal, and accessible to minors. Consequently, young people (10-24 years) are increasingly getting hooked on alcohol which hinders their ability to attend school and to be employed.

Additionally, massive alcohol marketing campaigns are going on – including giant billboards next to roads, near schools and kindergartens. All this comes at a price for the people in my country and our society.

The drunk - drivers’ demographic characteristics are also of interest to look at when examining patterns. Demographic information contains e.g. gender, age, education, status, income and so on. One finding was that individuals under the age of 30 are more likely to continue driving under the influence of alcohol and are at greatest risk to receive a subsequent Driving While Impaired, DWI [5].

Alcohol has an impact on the central nervous system [6]. The central nervous system is vital for many functions and is important when you are driving a car. This is a substantial reason that driving while intoxicated increase the risk of accidents. When the driver is driving, he/she will get a lot of impressions through the senses (chiefly through the sight) from the situation he/she is in. The amount of impressions is generally large and bigger than the impressions the driver deal with. Early in the process it carries out “short – listing” of impressions so that only a small part is kept for further preparing. In this preparation the impressions are interpreted and cohered with the experience material so that the driver gets an understanding of what’s happening and what’s going to happen in the situation he/she is in. The results in a resolution about what he/she will do, and the resolution leads to action. The action that is carried out will change the situation. The driver senses the new situation, work on the impressions and carries out a new action. The process is going on as long as the driver is driving.

When it comes to the ability to take in and work on impressions (information), there is a clear difference between the persons. Some are capable to handle many impressions at the same time, interpret these impressions quickly and make a quick decision. Others on the other hand can only work on a small amount of impressions at the same time [7].

Alcohol, drugs and medication are hazardous to traffic and affect all the parts of the driving process, but not as much on all of them. Intoxicating substance impairs the sight and has an effect on the reactivity. Intoxicated substance primarily works on the ability to receive and work on impressions. A person who is influenced by alcohol, can handle less impressions at the same time than a sober person, he/she uses longer time to interpret impressions and often makes the wrong decision [7].

The drunk – driving legislation [2].

Section 108(1)(b) of the Act provides stiff penalties for causing bodily injury or death while driving under the influence of a drink or a drug to such an extent as to be incapable of having proper control of the vehicle. It carries a penalty of a fine of not less than five currency points and not exceeding sixty currency points or imprisonment of not less than six months and not exceeding two years or both. It can be concluded that traffic laws are well defined and adequate to avoid any incidents of drunk –driving thus avoiding the undesirable effects of alcohol consumption and abuse. The sentences prescribed are deterrent and would help prevent drunk-driving if the law was effectively enforced and population knew it. Enforcement is lacking however as the police only make surprise checks from time to time or carry out operations for a short period of time and later offenders will continue committing the crime.

METHODS

Search strategy

We first searched in both electronic databases and journal collections. We also manually searched the “Google” search engine by interchanging the above text words with each other. Finally, we used the reference citations in some articles for a further search.

Questionnaire

The questionnaire asked the respondents to answer questions with a direct evaluation of the penal accomplishment, alcohol use in the last month, charge on offence and demographical and other background information (see appendix). The reason for making it short was to increase response rate.

Gender, age group, region was some of the demographic characteristics considered. The other background information consisted of questions about loss of a loved one to drunk-driving, driving experience, the type of vehicle driven and frequency of being checked by an officer in the past one month.

One of the measure instruments used in this questionnaire was a dichotomous variable. Awareness of laws against drunk-driving, charge of drunk-driving and loss of a loved one required a „yes“, „no“, response. (see appendix)

Another measure instrument used was a self – report questionnaire. Variables to the measure instrument to measure policemen checking drunk – driving. A five-point evaluation scale was applied, and the response options were as follows: „strongly disagree“, „disagree“, „neutral“, „agree“, „strongly agree“ (see appendix). The third measure instrument used was a self – report questionnaire concerning how frequently traffic officers checked for alcohol (see appendix). The respondents were asked to assess how often they were checked. A five-point evaluation scale was used, with the following options: „once“, „twice“, „three times“, „more than three times“ and „never“.

RESULT AND ANALYSIS OF DATA COLLECTED.

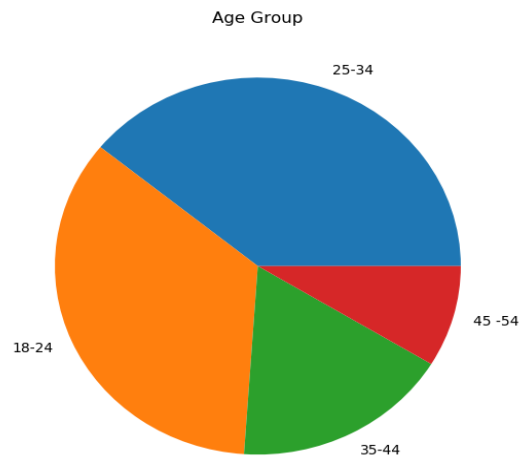


Figure 1 Age groups consulted during research

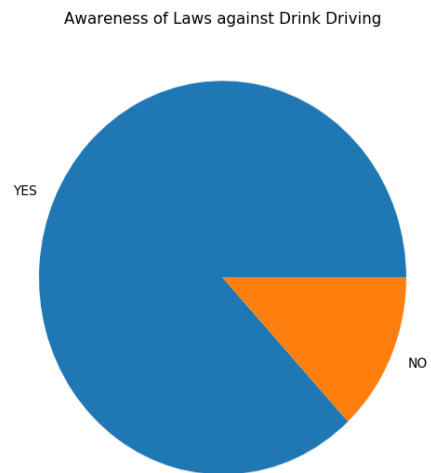


Figure 2 Awareness of Drink Driving Among People

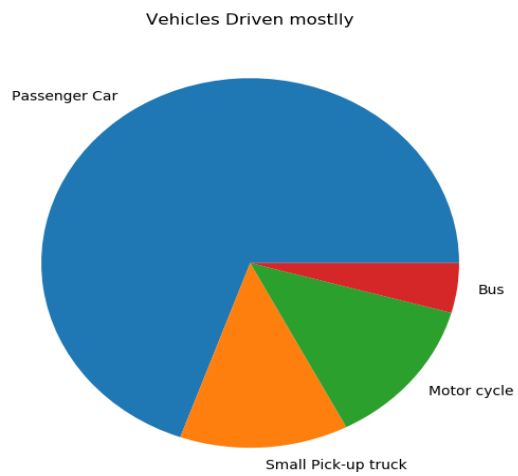


Figure 3 Vehicles Commonly used on roads

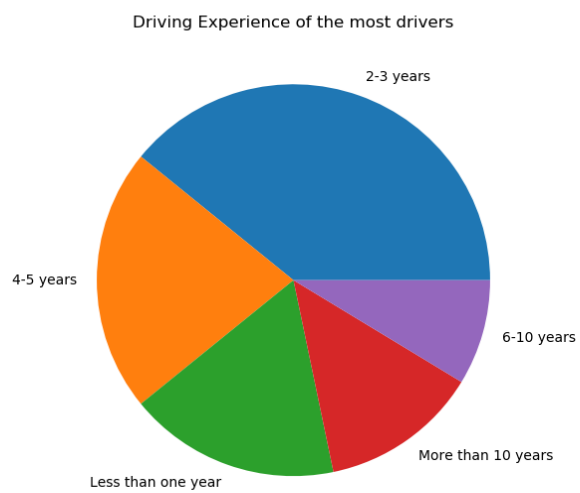


Figure 4 Driving Experience among most drivers

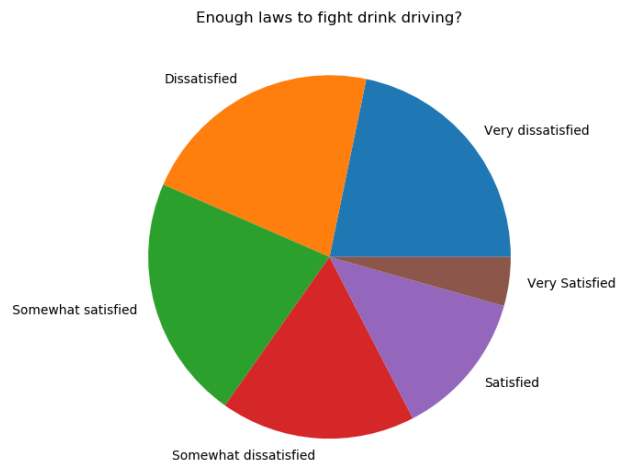


Figure 5 People's Satisfaction about laws against drunk driving

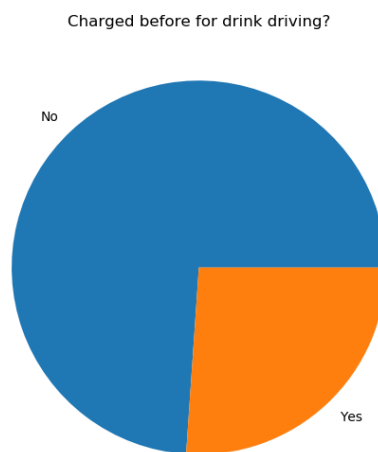


Figure 6 People charged with drunk driving.

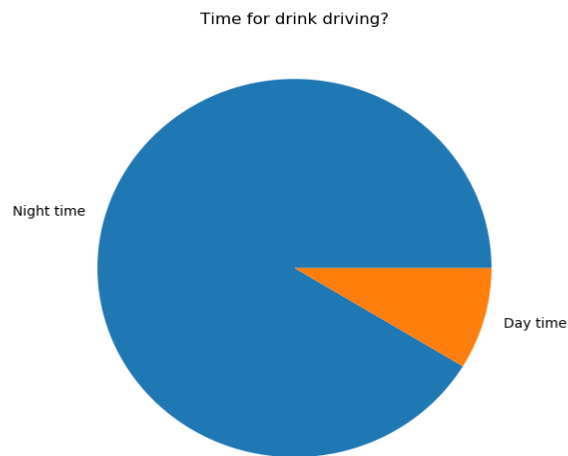


Figure 7 Drunk driving variation between day and night

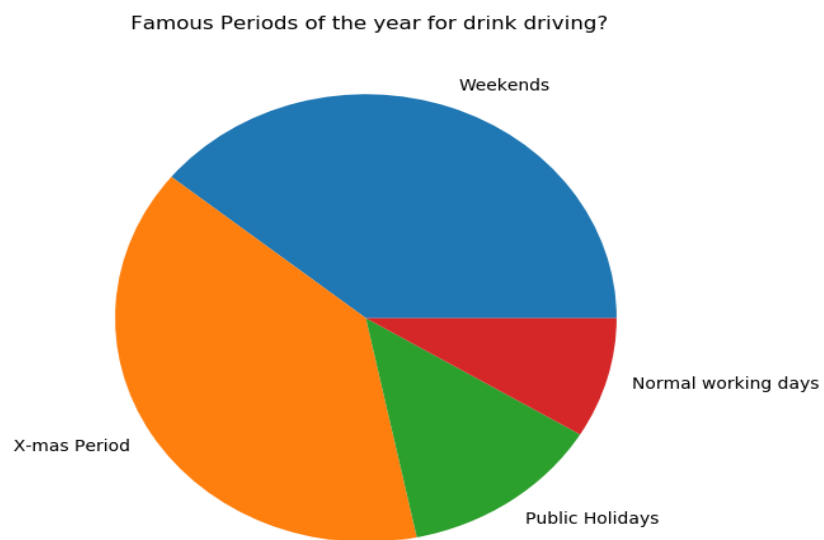


Figure 8 Periods of the year for Drink Driving

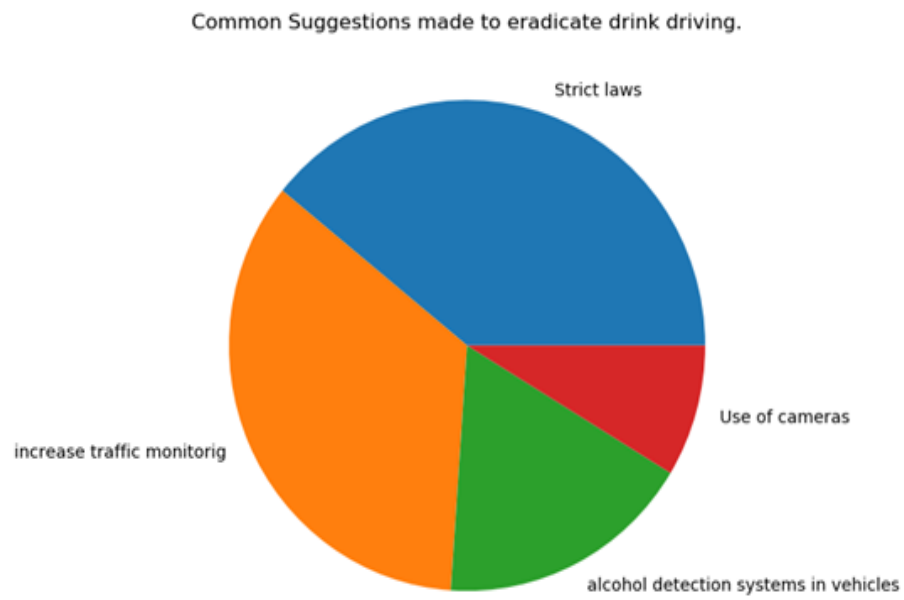


Figure 9 Suggestions made to fight drink driving

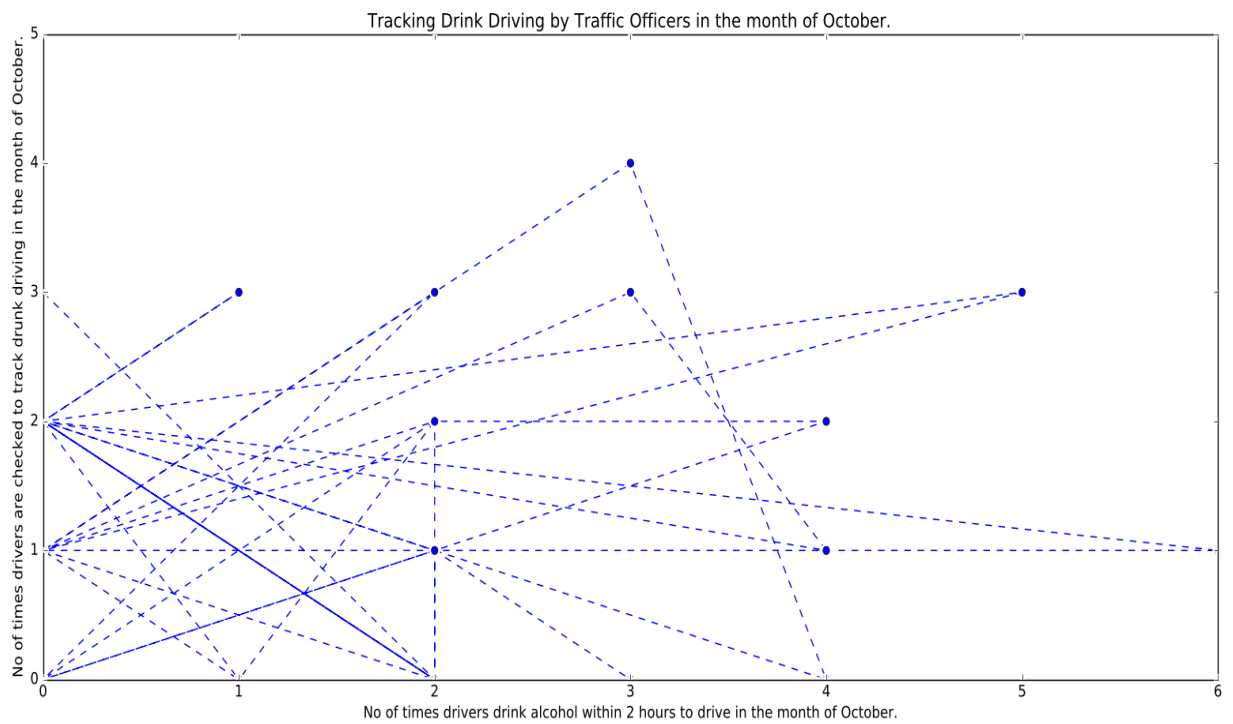


Figure 10 Fighting drunk driving by traffic officers in the month of October

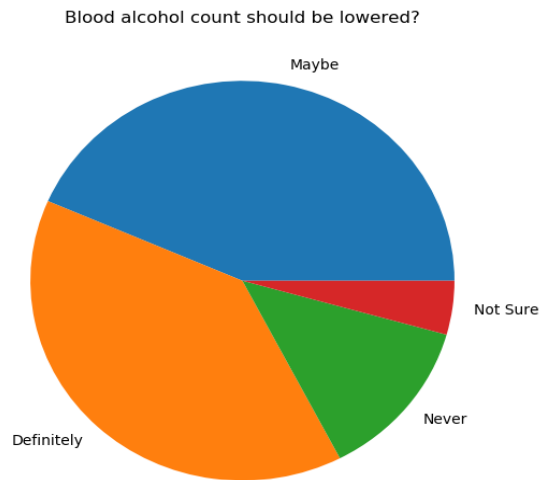


Figure 11 A pie chart showing support of lowering the limit for the Blood alcohol content limit of 0.8%.

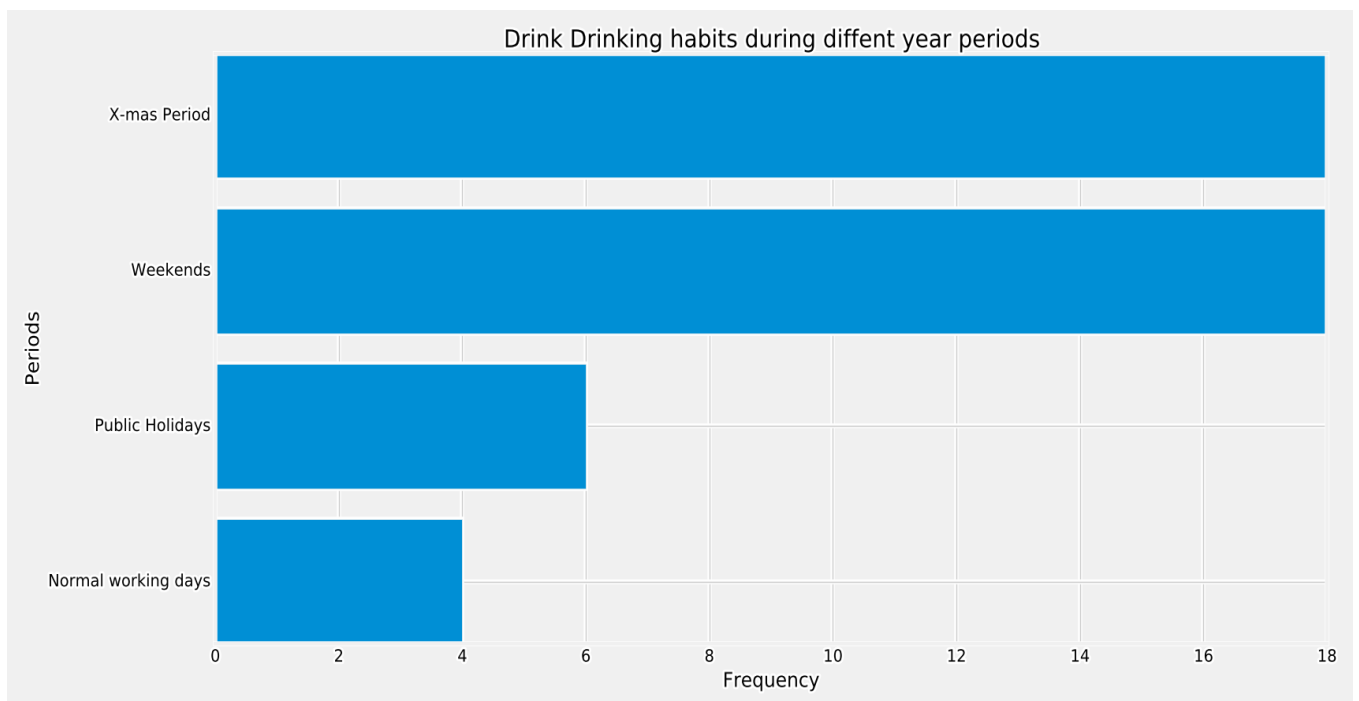


Figure 12 Bar Graph for the Drinking habits at different periods of the year

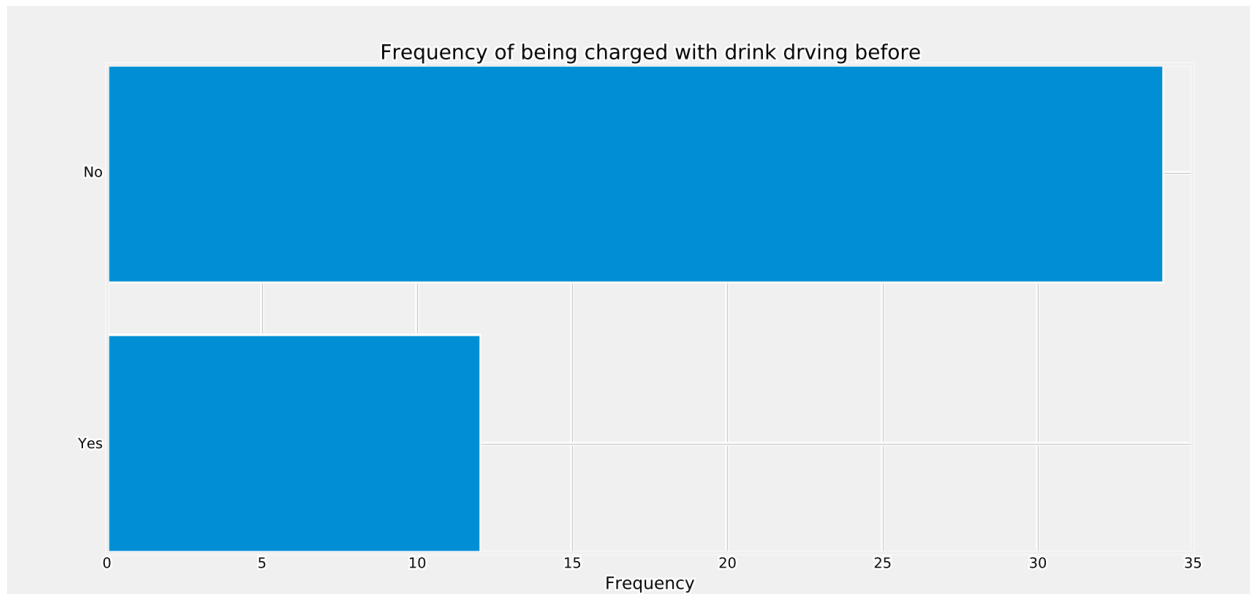


Figure 13 Frequency of being charged with drunk driving.

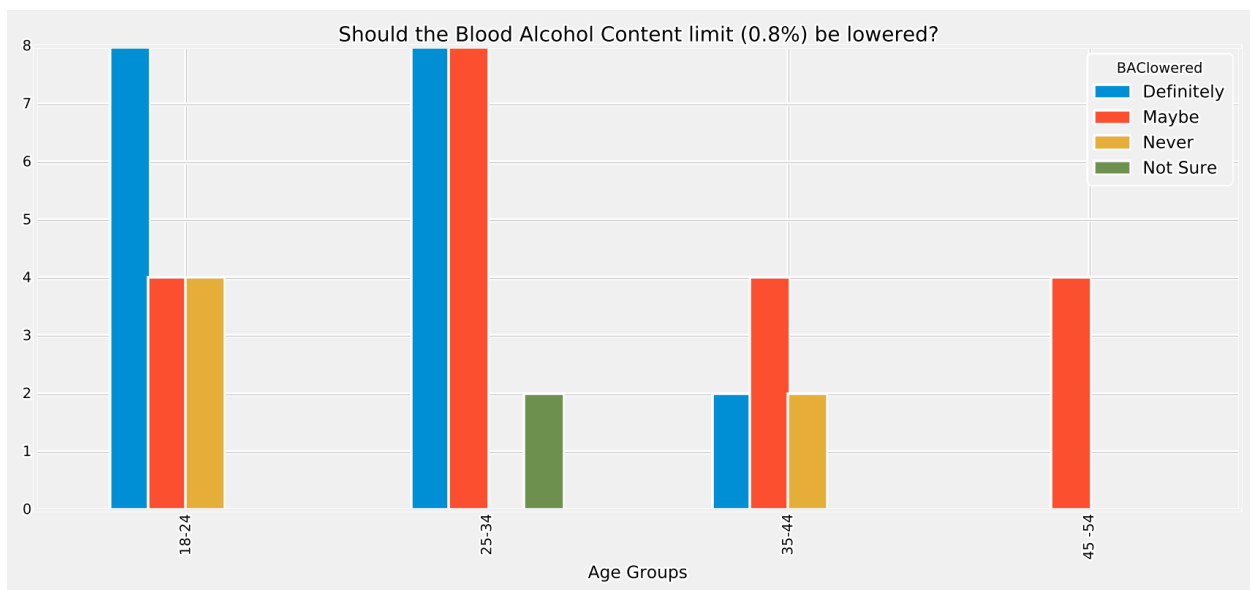


Figure 14 Different age groups and their support for lowering the BAC per the driver.

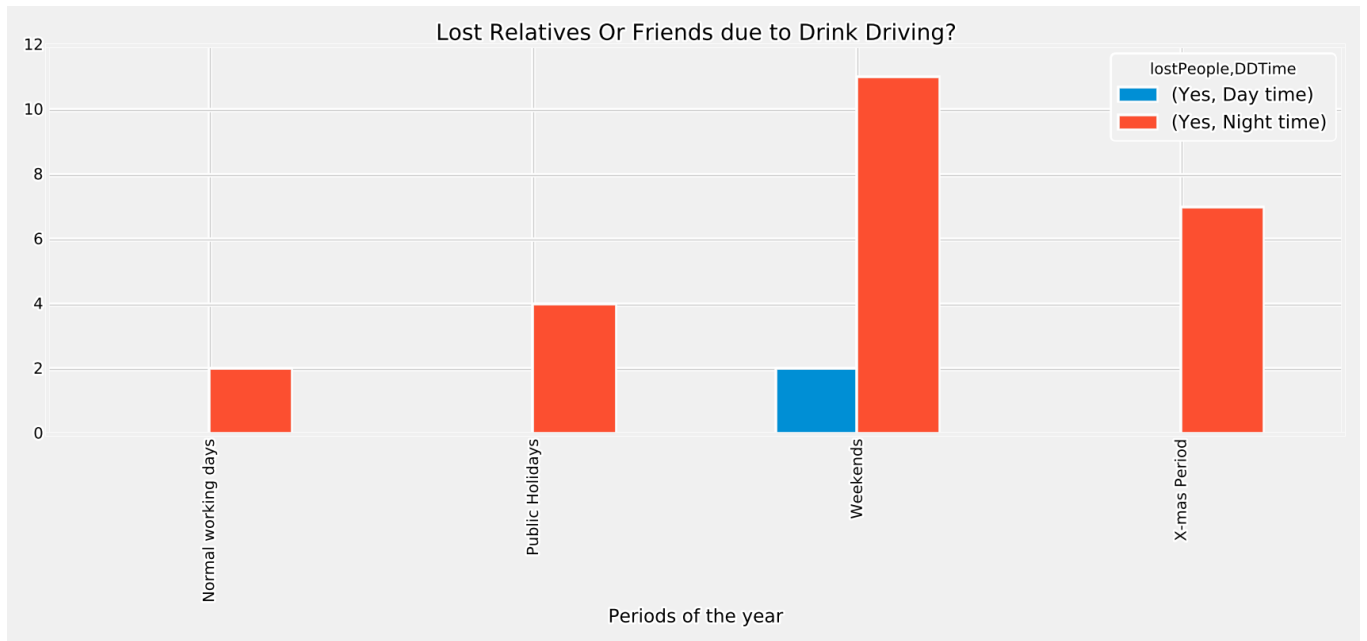


Figure 15 Deaths Occurrences due to drink driving times of the day and the year.

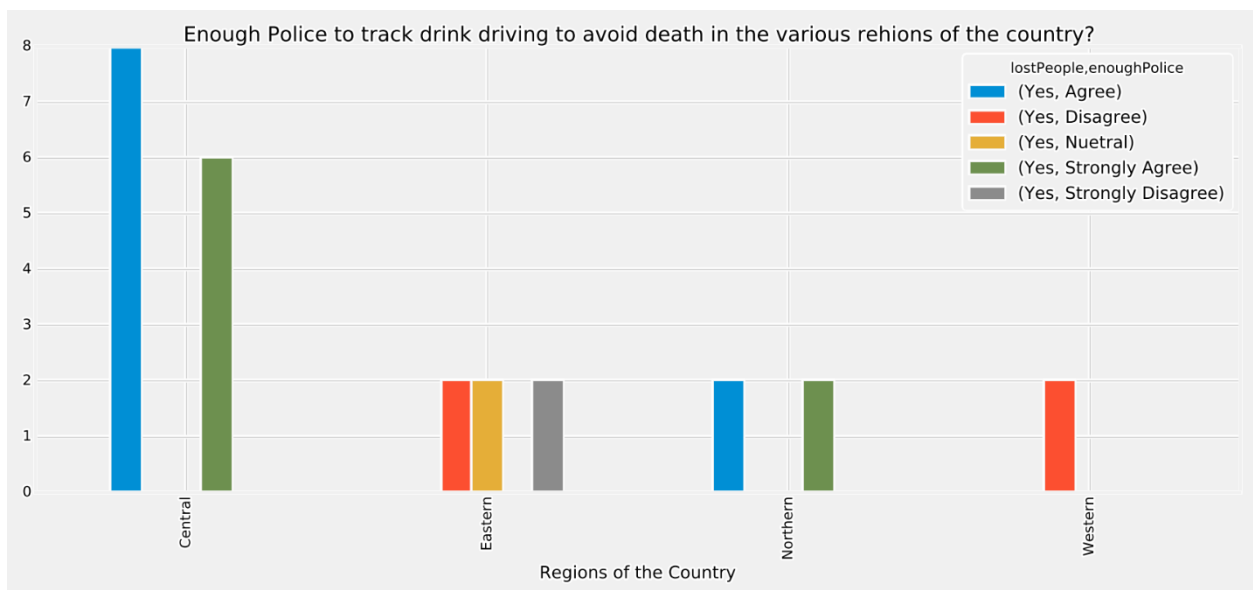


Figure 16 Death due to drink driving per regions of the country

DISCUSSION OF RESULTS

The overall purpose of the study was to examine the satisfaction of the drunk-driving laws compared to attitudes towards drunk – driving and risky driving behavior. Patterns among the drunk-driving – group and the regions was also examined.

The research also showcased that the deployment of traffic officers varies depending on the regions of the country in that there is more deployment is situated in the central region than other regions of the country.

The research also has shown that some of the traffic officers are not diligent enough while performing their duties since few of the culprits are apprehended for drunk driving, hence there are very few victims that are charged or face the corresponding laws.

The research on drunk – driving is large, but there is very little research found that are dealing with the attitudes of the people who actually experience getting caught for driving sentence. What the general population thinks about drunk – driving, traffic safety and risky driving behavior is not as important as to investigate the drunk – drivers’ attitudes. It was also found that the participants of drunk- driving were very satisfied with their sentence.

It was found that males were more aware of the laws about drunk-driving than females and that was regardless of the age group. Also drink driving is severe during the night time travels by the road users or drivers and also there is also a very big percentage of drunk drivers during the weekends, public holidays and festive seasons especially Christmas.

The drivers stressed that there should be an improvement in intensifying the laws against the vice that is leading to massive loss of lives and property as singled out by the research.

Majority of those who lost loved ones also vouched for stricter laws to curb the vice but interesting the highest percentage agreed that the police were actually doing enough to check sobriety. Our study revealed that only those between the ages of 18-34 are taking part in drunk-driving.

There is a possibility that some of the respondents filled out what they believed was the “right” answer, or what they believed other respondents would answer. This certainly happened since participants aim to present themselves favorably. This however is a known common problem when it comes to self-completion questionnaires.

CONCLUSION

To sum up, differences in attitudes towards drunk – driving and risky driving behavior were found. It was also found differences in patterns among men and women, where men were more prone to being checked for drunk-driving and knew more about the laws. Also age – differences were found, where the youngest age – groups had more prevalent cases of drunk-driving.

The study showed that the problem of drunk-driving is likely to grow in the coming times. The ill effects brought by the alcohol on the health of the person and possible financial implications on the family are a cause of concern. There is need to educate particularly the young age groups or have a measure that can essentially protect them instead.

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We would like to thank our supervisor Mr. Alex for all the support and guidance that he rendered to us during throughout the selection and preparation of this project.

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Lastly, we would like to thank the university for giving us this opportunity to develop our skills in terms of acquiring more knowledge through research and also providing us with the adequate time and resources such as internet connectivity to enable us to do productive work.

APPENDIX

DRUNK-DRIVING QUESTIONNAIRE

Greetings, getting behind the wheel of a vehicle – car, truck, motorcycle or any other motorized vehicle – after consuming alcohol are a serious crime. Drinking and driving is sometimes called driving under the influence (DUI) or driving while intoxicated (DWI), and involves operating a vehicle with a blood alcohol content (BAC) level of at least 0.08 percent. However, even a small amount of alcohol can lead to harmful situations. Some drivers may not even show warning signs of being under the influence, but that doesn't mean it's any less dangerous. It's important to remember that any form of drinking and driving is illegal and can come with strict punishment.

The questionnaire is therefore to gather opinions of drunk driving from people (drivers/ road users). You are kindly requested to answer the questions below. Your name is not required and the information you provide shall be used to help in the reduction of drunk driving by the use of the Driver Alcohol Detection System.

We would be very grateful for your contribution

1. Please select your age group

- ☐ Under 18
- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ Above 64

2. Are you aware of laws against drinking and driving?

- ☐ Yes
- ☐ No

3. Which region do you belong to? (State the region if its not included on the list).

- ☐ Central
- ☐ Eastern
- ☐ Western
- ☐ Southern
- ☐ Northern

Other(specify).....

4. Please select your gender

- ☐ Male
- ☐ Female
- ☐ Prefer not to say

5. Please select the type of vehicle you drive

- ☐ Saloon car
 - ☐ SUV
 - ☐ Passenger car
-

- ☐ Light truck
- ☐ Bus
- ☐ Heavy truck

6. Please select your driving experience

- ☐ Less than 1 year
- ☐ 2-3 years
- ☐ 4-5 years
- ☐ 6-10 years
- ☐ More than 10 years

7. Do you think there is enough law enforcement to curb drinking and driving?

- ☐ Yes
- ☐ No

8. Have you ever been charged of drinking and driving?

- ☐ Yes
- ☐ No

9. Do you agree there are enough policemen to check sobriety at various checkpoints?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly agree

10. Have you ever lost a loved one to drunk driving?

- ☐ Yes
- ☐ No

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