



Impact of an increase in excise tax levied on alcohol on reducing drunken driving in Durban (Kwazulu-Natal)



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ABSTRACT

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This study investigated the nexus between the increase in excise tax levied on alcohol and the reduction in drunken driving in Durban (KwaZulu Natal). The study approach was quantitative, and 203 respondents were selected using the convenience sampling method. The respondents were interviewed using a semi-structured questionnaire, which was conducted through surveys to solicit their views, opinions, and perceptions about the role of excise tax in reducing accidents. The study reveals that an increase in excise tax is an important factor influencing alcohol consumption among adults in South Africa. The study shows that people are reluctant to reduce or switch to low-priced alcohol when the tax is increased. Alcohol, to them, has been used as a toxicant to relax and have fun, and it was not important for them to understand the consequences of alcohol consumption despite an increase in excise tax or an increase in the price of alcohol. Increments in the total price of alcohol can lead to a reduction in drinking and driving and its aftermath effects within all age groups. Therefore, the study recommends that public transport must be improved to accommodate people who want to move around Durban without causing harm to other innocent road users.

Contribution/ Originality: There is currently a paucity of studies regarding the nexus between the increase in excise tax levied on alcohol and the reduction in drunken driving in Durban (KwaZulu Natal). Therefore, this study fills the existing gap in the literature by providing empirical information regarding how the increase in excise tax levied on alcohol has affected the reduction in drunken driving in Durban (KwaZulu Natal).

1. INTRODUCTION

In her report on the 10th of January 2017, Minister of Transport Dipuo Peters reported some shocking accident statistics of more than 1,714 lives lost on South African roads during the 2016/17 festive season, a 5% increase on 2015/16 statistics (Linegar & Van Walbeek, 2018). The minister attributed 70% of the deaths to human factors such as drunk driving, the use of cell phones while driving, and speeding. South Africans Against Drunk Driving (SADD) lay the blame on alcohol abuse. South Africans Against Drunk Driving based this on the fact that out of 9,175 incidents, 65% of the drivers (5,943) were charged with drunken driving (Bosire et al., 2020). Such a statistic is a cause for concern considering the number of people who perished in accidents.

The Minister also reported an increase in fatality statistics in the following provinces: Gauteng, KwaZulu-Natal (KZN), Limpopo, Free State, and Mpumalanga (Linegar & Van Walbeek, 2018). A microanalysis of the provinces revealed KZN, Mpumalanga, and Limpopo as having recorded the highest number of fatalities between 2018 and

2019 (Bosire et al., 2020), with KZN recording an 18% increase (National Treasury of South Africa, 2020). Again, alcohol abuse (drunken driving) was mentioned as the main cause of these fatalities. If most fatalities are attributed to alcohol abuse nationally, it can be generalized that this trend permeates down to the provinces. This generalization, together with KZN statistics, caught our attention and prompted us to investigate the kind of solutions we can offer to reduce alcohol-related harms within the province.

Despite driving under the influence of alcohol being a crime in South Africa, the majority of drivers opt to break the law by ignoring numerous calls against drunken driving. Alcohol consumption has been known to be a misnomer when one must operate a machine, including (driving) a motor vehicle. Alcohol impairs one's reflexes and judgment, both critical in motor vehicle operation. Bosire et al. (2020) state that despite the efforts by law enforcement agencies, monitoring and enforcing the implementation of the operations was identified as a weakness. Also, Bosire et al. (2020) suggested that most people who drink do so until late at night, which can be used to dissuade imbibers from abusing alcohol in the hope that it reduces alcohol-related harm. For example, a 1% increase in alcohol price leads to a 0.5% reduction in alcohol consumption, ultimately resulting in a 0.8% reduction in fatalities (Nelson & Moran, 2019). Anderson (2020) therefore concludes that such evidence is the reason why taxation is recommended as an option to control alcohol-related ills. The World Health Organization (2018) also weighed in by recommending that taxation of alcoholic products be one of the policy options to control alcohol abuse (Pidduck & Swanepoel, 2021).

In 2018, the finance minister declared a review of the budget, with the intention of examining the structure of excise duties on alcoholic beverages in South Africa. This document addressed excise duties on all alcoholic beverages and considered the period from 2018 to the present since its implementation. Recent data on excise policy formulation, both locally and internationally, and the scope of using the excise duty system to internalize the social and external costs arising from alcohol abuse are increasing (National Treasury of South Africa, 2020).

Although this section concentrates on studies of alcohol prices and taxes, economic research has made other crucial contributions to the field of alcohol research (Pidduck & Swanepoel, 2021). These involve literature regarding the impact of advertising on alcohol demand by households and the effects of macroeconomic conditions on alcohol intake, drinking, and driving in most countries of the world, as well as the impact of increasing legal drinking ages on traffic deaths (Rossow, Felix, Keating, & McCambridge, 2016). The regional nexus between outlet density, alcohol availability, and alcohol-related problem rates has been studied by Chaloupka and Powell (2018), and the relationship between alcohol consumption and earnings by consumers has been shown by Claudy, Doyle, Marriott, Campbell, and O'Malley (2021); they contribute negatively to society at large. It is important to state that there is currently a paucity of studies regarding the nexus between the increase in excise tax levied on alcohol and the reduction in drunken driving in Durban (KwaZulu Natal). Therefore, this study fills the existing gap in the literature by providing empirical information regarding how the increase in excise tax levied on alcohol has affected the reduction in drunken driving in Durban (KwaZulu Natal).

2. LITERATURE REVIEW

2.1. Current Alcohol Excise Tax Regime and Effects of Changes in Alcohol Prices and Taxes

According to Lombard and Koekemoer (2020), South Africa employs a comprehensive alcohol excise duty rate structure. This provides a benchmark that distinguishes between alcoholic beverages in 2018 and was adjusted in 2020. The total consumption tax burden (excise duties plus VAT) as a percentage of the weighted average retail selling price for wine, clear beer, and spirits was set at 11%, 23%, and 36% respectively in 2020. In view of the above, the budget for 2020 caused a rise in the target tax burden for beer and spirits by 7.4% and 9% simultaneously (Arndt, Gabriel, & Robinson, 2020). Despite a rise in alcohol excise duties above inflation since 2018/20, there have been several hurdles in trying to meet and sustain the targeted indirect tax burdens on alcoholic beverages (Arndt et al., 2020).

The law of demand states that if the price of an article goes up, the demand drops for that item. Accordingly, an increase in the pecuniary price of alcohol (i.e., via rises in tax) would be expected to bring about a reduction in the consumption of alcohol and its inverse outcomes (Ayomitunde, Olaniyi, Zannu, & Stephen, 2018; Sobhee, Kasseeah, Tandrayen-Ragoobur, & Gopaul, 2015). Studies that focus on such a relationship have proven that alcohol prices are a singular variable responsible for the consumption of alcohol among youths and adults in South Africa. Meanwhile, several studies have established that a rise in the total price of alcohol can initiate a decrease in the level of drinking and driving alongside its fatal consequences among all age groups. This could further decrease the emergence of diseases such as Acquired Immunodeficiency Syndrome (AIDS) from sexual behavior, injuries, and deaths related to alcohol usage, and reduce alcohol-related violence and other crimes in communities of South Africa and the rest of the world (Chaloupka & Powell, 2018).

In several countries, some policies have not been implemented or are rarely used, which influences the consumption of alcohol. However, an increase in the monetary price of alcohol, which is possible through the instrumentality of raising taxes on alcoholic drinks, could lead to a reduction in alcohol consumption (Bruwer, 2020). In the last 50 years, local taxes on alcohol have been raised only modestly and infrequently, with a view to increasing revenues rather than discouraging the use and abuse of alcohol (Chaloupka & Powell, 2018).

On the other hand, rates of excise tax on beer and wine have increased for the first time since November 1951, and the tax on distilled spirits has increased for only the second time during this period; however, their influence on the consumption of alcohol has been very insignificant (Bruwer, 2020). Excise taxes differ from sales taxes in that they are a flat tax amount based on the quantity purchased instead of a certain percentage of the purchase price. The payment of excise taxes is not made directly by consumers but is passed on to consumers via higher retail prices (Rossow et al., 2016). People incur a sales tax directly when they purchase a good or service.

While other factors remain unchanged, an increase in the prices of alcohol always leads to a decrease in alcohol consumption, and a decrease in the prices of alcohol generally orchestrates a rise in alcohol consumption (Rossow et al., 2016). The relationship between changes in the prices of alcoholic beverages, alcohol consumption, and related harm has been comprehensively studied more than any other potential alcohol policy measure (De Villiers, Cerbone, & Van Zijl, 2020). In an argument by Chaloupka, Powell, and Warner (2019), in some other countries, alcohol is more of a luxury item with a higher price elasticity. Several studies have posited that a rise in the price of alcohol brings about a reduction in problems related to drinking among youths and adults in every society. Evidence has shown that heavy drinkers of alcohol are no exception to the basic rule that alcohol consumers respond to changes in alcohol prices (Pidduck & Swanepoel, 2021).

2.2. Demand for Alcohol by Consumers

According to Bosire et al. (2020), lower standards of education are usually linked with higher levels of binge drinking among current drinkers. The most prevalent age for binge drinking in South Africa is between 18 and 35 years, and these individuals are mostly found in locations such as universities and private-public drinking spots (National Treasury of South Africa, 2020). Urban areas exhibit higher binge drinking levels among men compared to rural areas.

Ethnic groups binge drinking among men was highest among Coloureds (23%), followed by Whites (16%), Black Africans (13%), and Indians/Asians (7%) (Bosire et al., 2020). In European studies, the correlates are similar, except that heavy drinking in men is more prevalent in middle age (Rossow et al., 2016). As for South Africa, the correlates are between the ages of 14-26 years, and most of these are people who have graduated from their matriculation and are heading to colleges/universities. According to Bosire et al. (2020) some other provinces of South Africa show that the challenges faced by people who drink are similar to those in other countries such as Europe and the United States of America, except that heavy drinking in men is more prevalent in middle age. Most governments, such as South

Africa, have enacted a law that shops selling alcohol should not open on Sundays, and trading hours have been shortened.

The study aims to bring academic literature and new knowledge about the impact of excise tax on alcohol consumption. Excise taxes are levied on alcohol and many unhealthy products to reduce the consumption of these substances in South Africa. The study investigates the role of an increase in excise tax on alcohol consumption and road accidents in Durban. The study seeks to identify factors that contribute to road accidents and how these can be addressed using taxes to reduce the consumption of alcohol and related products with high toxicity to the body of an individual.

3. METHODOLOGY

This study employed a survey to collect original data to describe a population that is too large to observe directly (Pandey & Pandey, 2021). Information is obtained from a sample of people using self-report, that is, the participants respond to a series of questions posed by the investigator (Bell, Bryman, & Harley, 2018; Okoh, Mac-Ozigbo, John, & Aderemi, 2022). In this study, the information was collected once (cross-sectional data) through a semi-structured questionnaire administered by the researchers. In the same vein, a descriptive survey was chosen due to the fact that it provided an accurate portrayal or account of the characteristics, for example, behavioral opinions, abilities, beliefs, and knowledge of a particular individual, situation, or group (Kumar, 2018).

Non-probability sampling was used for this study as the respondents were identified at the beach area in Durban in eThekweni Municipality. This study used convenience sampling, which involves selecting readily available respondents. Convenience sampling is a non-probability sampling method of the items selected for the additions to the sample and is easily obtainable (Dawson, 2019). A quantitative research approach was used to describe the sample characteristics of the respondents, which included the impact of excise tax on road accidents in Durban. Consent was obtained from the subjects themselves, and the people interviewed were willing to participate, as well as other members who felt they could contribute to this academic study.

3.1. Study Area and Sample Selection

The study took place in Durban, KwaZulu-Natal Province. The area was chosen because of the limited resources available to conduct the study. A few sources were used to accomplish the study, and the research material used included academic journals, reference books, and the internet. The main reason why the investigator conducted the research in Durban is that it is a tourist resort for many South Africans and people from the rest of the world. There are over 1 million people who visit Durban for holidays. The results of this study cannot be generalized to the whole population because the sample size of the study was small due to limited resources during data collection.

Two hundred and three (203) respondents were identified from bars, taverns, restaurants, and parks such as South Beach, North Beach, Blue Lagoon, and the beaches around Durban. These areas are associated with many tourists who visit Durban for holidays and business activities. The data were collected using a semi-structured questionnaire that consisted of several questions requiring answers. The respondents were asked if they were willing to participate in the interviews and if they agreed to participate in the study. The research study used Google Forms, and the participants were given a link to complete the questionnaire, while others were interviewed by the research assistants. The response rate was surprisingly high for online questionnaires via Google Forms.

3.2. Data Analysis

The data was collected and analyzed using a statistical software called the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were used in this study, and frequency tables, graphs, and pie charts were employed to explain the various relationships between excise tax and other variables. The open-ended questions were

analyzed through quantitative analysis by the researcher to understand the different characteristics associated with alcohol and road accidents in Durban (Bell et al., 2018).

4. PRESENTATION OF RESULTS

The section begins with a description of the biographical and socio-economic characteristics of the sampled respondents in the study area. It includes respondents willing to be interviewed for the research on excise tax and a reduction in road accidents in Durban. The findings from this research aim to understand the impact of an increase in alcohol tax or excise tax on consumers and its effect on road accidents. The results are presented in the form of frequency tables, charts, percentages, and graphs.

4.1. Descriptive Analysis

The study aims to enlighten people on how excise tax impacts road accidents in Durban by understanding demographic aspects such as gender, age, and level of education, as well as responses from the respondents to questions asked during the surveys.

Generally, it is still a norm that men tend to spend more on alcohol than females in any part of the world. Gender influences the choices made by individuals. According to Table 1, more males than females were interviewed in this study. There were 70% males interviewed against 30% females. This shows that there is no gender balance in the demographic data that was collected during the data collection.

According to Table 1, there were no people interviewed below the age of 16, and the majority of those interviewed included people with ages ranging from 17 to 60 years who were in possession of driver's licenses as well. Eighty-five percent of the people that were interviewed were between the ages of 17 and 60, while those who were above 60 years old accounted for about 15%. Alcohol consumption is dependent on a person's life cycle and their age (Bruwer, 2020). Most young people consume alcohol for binge drinking, while adults drink alcohol on special occasions or for health reasons.

Table 1. Demographic characteristics.

Variables	N	%
Gender		
Male	119	58.6
Female	64	41.4
Age groups		
<20	3	1.5
21-30	107	52.7
31-40	57	28.1
41-50	26	12.8
51-60	10	4.9
Education level		
No education	9	4.4
Primary	23	11.3
Secondary	64	31.5
Tertiary	107	52.7
Occupation of respondents		
Formal employment	147	72.4
Informal employment	56	27.6
Income levels		
<10000	21	10.3
10001-20000	107	52.7
20001-40000	58	28.6
Above 40000	17	8.38
Total	203	100

Table 1 depicts that most of the respondents have higher qualifications, while a few have no education at all. The highest qualification attained by respondents was tertiary education, which encompasses postgraduate studies, at 52.7%. This is followed by secondary and primary education, with 31.5% and 11.3%, respectively. The lowest percentage is for those without education, which is 4.4%. These results are in line with Chaloupka and Powell (2018), who argued that education has a way of conditioning the behavior of an individual. Some decisions made by people can be correlated with their educational qualifications when they decide to consume or not consume alcohol before driving (Bruwer, 2020).

In addition, people's decisions to drink alcohol are also determined by their income. In economics, the higher the income, the more likely a person is to spend on goods and services. This is the same for alcohol consumption among the employed and unemployed. Table 1 shows that the income range is not that high among the respondents in this study. Most of the respondents' income is between R10,000–R20,000 (52.7%), followed by those in the R20,000 to R40,000 (28.6%) bracket. This tells us that people can afford to consume alcohol, and they can choose from various options on the market such as spirits, brandy, whiskey, ciders, beers, and wines. The affordability of alcohol is determined by the amount of income the respondents have, and this agrees with a study by Letsela, Mthembu, and Ntuli (2019). The above analysis of the demographic characteristics indicates that alcohol consumption in Durban could probably decrease because of a monetary price increase of alcohol (i.e., through tax increases), and it would be expected to bring about a reduction in the consumption of alcohol and its detrimental consequences.

4.2. The Frequency of Alcohol Intake When the Excise Tax is Increased

The respondents were asked to describe their alcohol consumption if the excise tax were increased over time. Figure 1 shows that most of the respondents did not change their drinking habits despite an increase in excise tax. The data show that about 40% of the respondents drank weekly, 31.5% consumed alcohol monthly, while those who drank fortnightly and daily were about 14% and 13%, respectively.

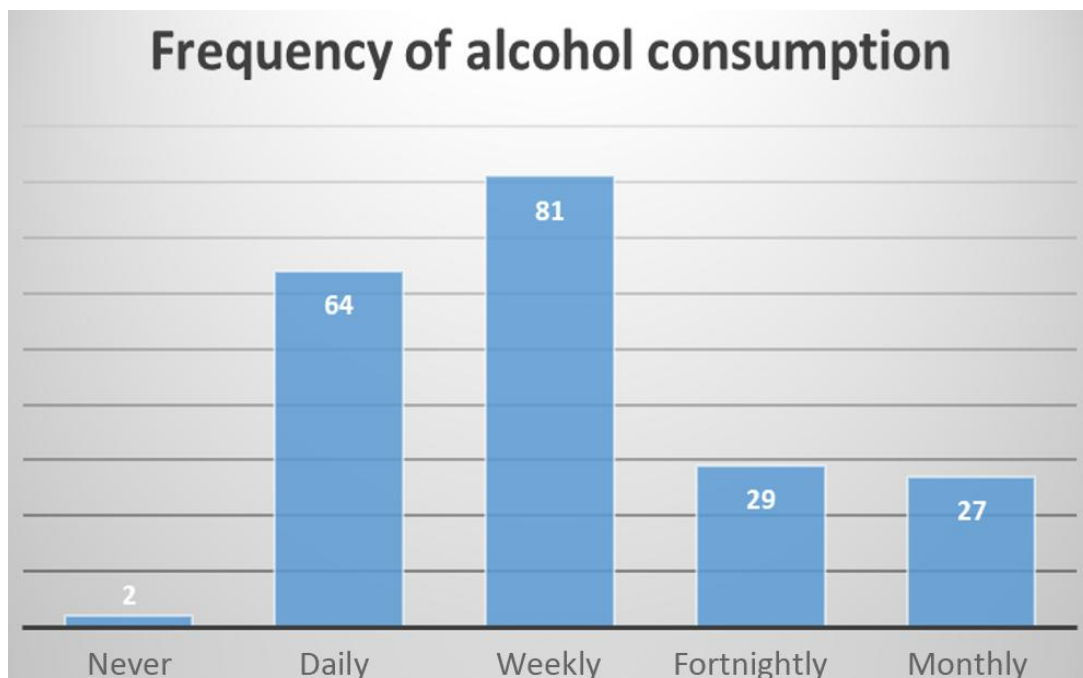


Figure 1. Frequency of alcohol consumption when excise tax is increased.

Durban city, which is home to the entertainment industry, hosts events such as the Durban July, international conferences, sports, music, and music awards, etc. People from all provinces of South Africa and around the world drive or fly into Durban for such events. During and after these events, people go out to relax and have fun consuming

alcohol. The number of alcohol-related incidents in the city is extremely high, according to reports from the [South Africans Against Drunk Driving \(2018\)](#). The unfortunate part of drinking is that people must drive back to their places of residence, and it is usually late at night when road accidents happen. The study revealed that most of these individuals drink and drive, causing fatal road accidents around the city and its outskirts. Unfortunately, innocent people also get hurt from drinking and driving on the roads.

4.3. Percentage Increase in Excise Tax on Alcohol

According to [Wall et al. \(2018\)](#), the demand for alcoholic beverages may differ from the demand for other consumer products because of the addictive nature of alcohol. Hence, follow-up questions were asked regarding the percentage increase in the price of alcohol that would likely cause respondents to decrease or give up their consumption of alcohol. [Figure 3](#) shows the different percentages at which respondents would give up alcohol if the percentage increase varied from 5% to above 20%. The results from the study show that 36% indicated that a 5% increase in alcohol price would either cause them to decrease or give up alcohol consumption. The next group of people who would give up or decrease alcohol consumption due to an increase in excise tax indicated that if it was above 20%, they would decrease or give up consumption.

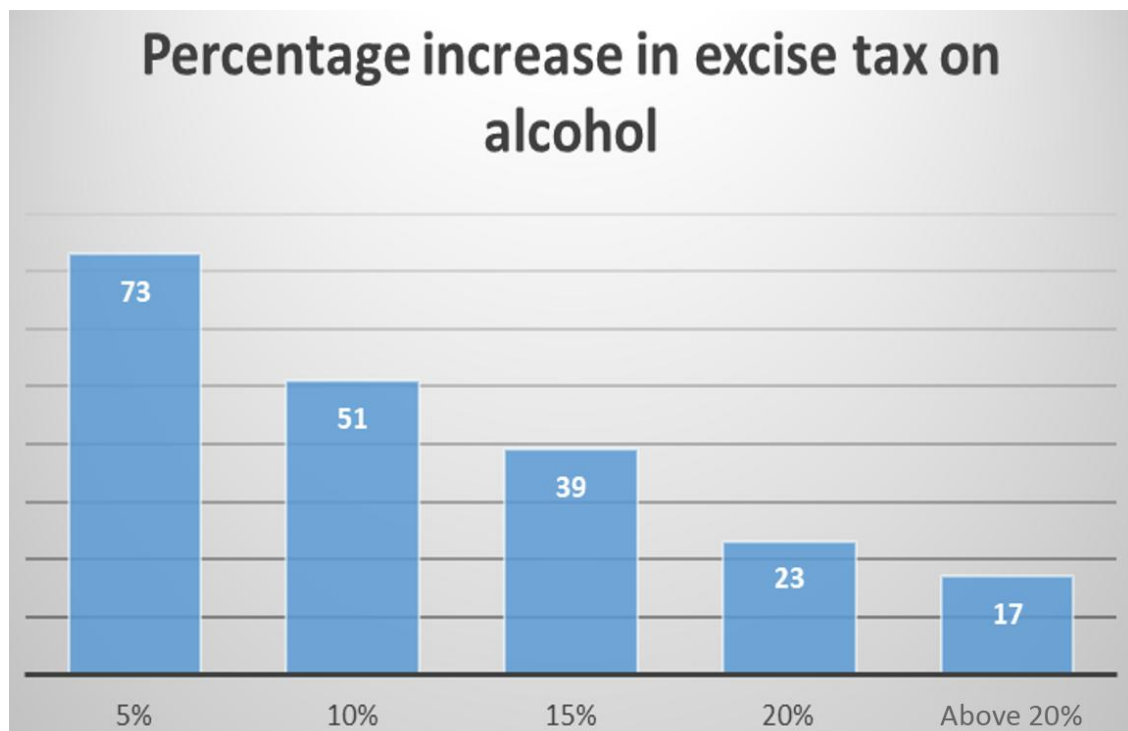


Figure 2. Percentage increase in excise tax.

[Figure 2](#) shows how respondents would react when the excise tax increases by 15% and 20%. There was a decline in the figures of people who consumed alcohol at 15% (25% of the respondents), and at 20%, 19% of the respondents felt it was too much for them to purchase alcohol at that tax rate. This could be directly linked to their incomes since a higher increase in tax would affect their disposable income for alcohol. Out of 203 respondents, only 17 respondents were willing to purchase at a tax above 20%. The reason behind this could be the fact that their incomes are slightly higher than the rest of the respondents, or it is people who spend when they visit Durban on their holidays.

4.4. Transport to Social Recreational Areas Around Durban

[Figure 2](#) depicts that those who drive their cars are about 35%, and those who hire are 22%. This shows the importance of cars and the convenience that comes with them. Some respondents highlighted that it was economical

for them to get Ubers and Taxify/Bolt to different locations in Durban, such as Florida Street, Kwamashu township, where “Uzalo” is being broadcast on SABC TV, Eyadini, and Maxi Style in Umlazi township. Those who used public transport were not many, and the chances are that these are locally based people who know how to maneuver around the social recreational areas. Hence, it can be argued that motorists find it convenient to drive after visiting these social recreational areas after drinking. Therefore, 35% of these respondents who drive in their cars were associated with convenience after getting drunk and reduced hassles looking for transport to their booked places.

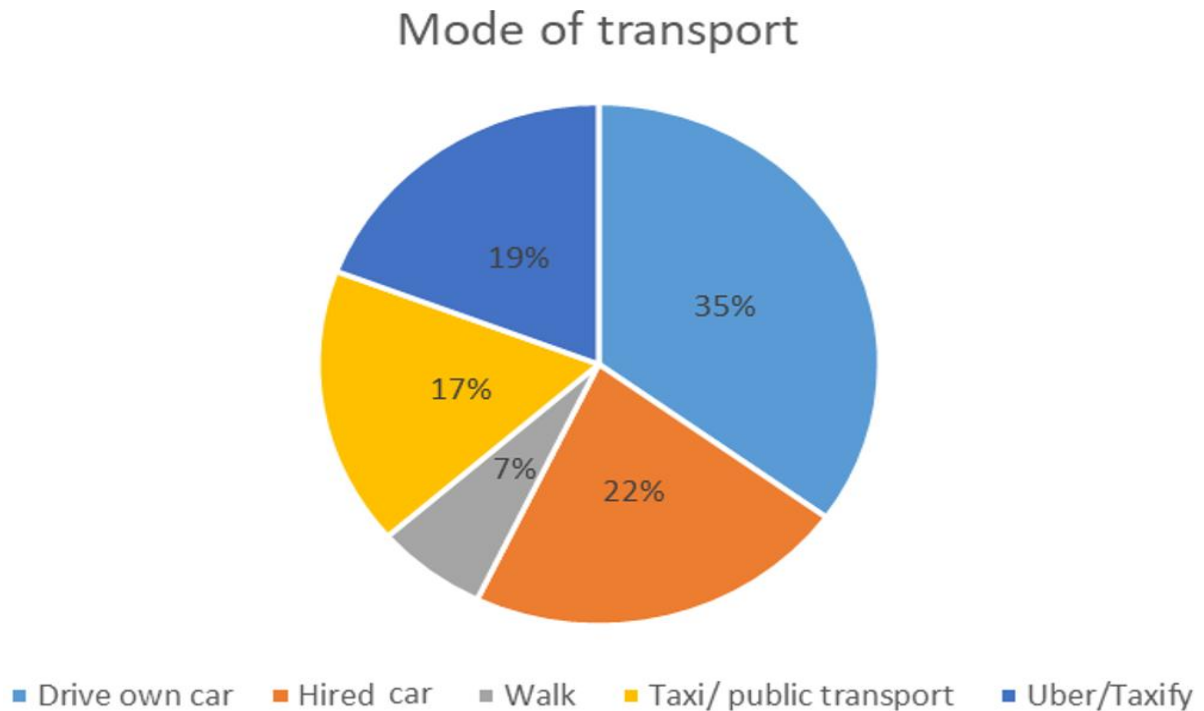


Figure 3. Mode of transport to drinking areas.

Figure 3 shows that most of these people are either locals staying around Durban or visitors from outside the province who drove or flew down to Durban. While that may be the case, it seems people find it convenient to drive their cars while in Durban for easy mobility from one place to another. These are people who stay in hotels close to the beaches in Durban and find themselves drinking in clubs and restaurants near where they are booked for a short duration. Some of the respondents highlighted that they take taxis or drive in a friend’s car to these social recreational areas. The reason is to cut costs since they can travel in a group. Some respondents emphasized that they rely on friends who do not drink to take them around Durban to avoid being stopped by the police for driving under the influence of alcohol.

4.5. The Impact of an Increase in Excise Tax on Alcohol Consumption

Respondents were asked if they drink and drive. About 80% of the respondents highlighted that they do not drink and drive. Perhaps the question was rather direct and could have been asked differently to more accurately assess whether these respondents do not drink and drive. They reasoned that alcohol does not cause people to be involved in accidents, but rather it is driving without a license or being irresponsible or careless on the roads.

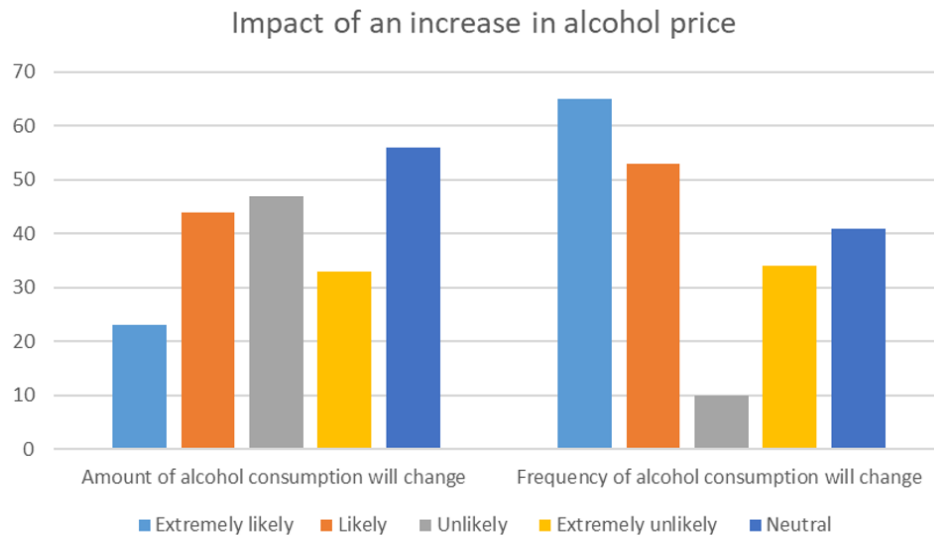


Figure 4. Importance of excise tax on alcohol consumption.

Figure 4 shows that most of the respondents highlighted that excise tax is important. They noted that if the tax were increased significantly, most people would reduce the amount of money they spend on alcohol. This is directly influenced by the income effect and price responsiveness of alcohol consumption among the respondents. Very few people indicated that there was a significant difference in alcohol consumption if the price of excise tax increased. The reasons that the respondents mentioned are that people will never stop drinking completely unless it is for health reasons, but crimes will increase as people find ways to obtain money to buy alcohol. Some respondents were neutral and pointed out that some people are addicted to alcohol and cannot survive without it. Therefore, there will always be a way to obtain money to buy alcohol.

4.6. Respondent's Responses on Excise Tax and Alcohol Consumption

Table 2 shows that most people know about excise tax, and some even mentioned that it is found in other products such as tobacco. Most respondents (69.5%) highlighted that accidents are caused by alcohol usage by motorists, while 30.5% were against that. The reason for the increase in alcohol consumption is that it makes them relax, and they drink it for enjoyment. The people who were interviewed highlighted that today's youths are unemployed and resort to crime and substance abuse. About 57.6% of the respondents said youths drink more than adults in this survey. When asked about the increase in excise tax and consumption of alcohol, 20.7% highlighted they would decrease their consumption, while 79.3% would not. This shows how important alcohol is to people in South Africa and many other parts of the world.

Table 2. Respondents' responses to excise tax and alcohol consumption.

Variable	Yes	%	No	%
Drinking and driving causes accidents	141	69.5	62	30.5
Youths drink more alcohol than adults	117	57.6	86	42.4
An increase in excise tax means that there will be a decrease in alcohol purchases	42	20.7	161	79.3
Individual behaviour is a result of alcohol	105	51.7	98	48.3
An increase in excise tax can be negatively associated decline in road accidents	70	33.8	133	66.2
The government is doing enough to combat drinking and driving	136	67	67	33
If the price of alcohol you consume increases, are you likely to switch to a low-priced alternative?	45	22.2	158	77.8
A high percentage increase in the price of alcohol you consume. Are you likely to decrease/give up consumption?	39	19.2	164	80.8

Table 2 shows that people still feel that a change in the price of alcohol has no impact on the quantities bought. This indicates that the price elasticity of alcohol is inelastic due to drastic price changes. The most fundamental law of economics links the price of a product to the demand for that product. Accordingly, increases in the price of alcohol (i.e., through excise tax increases) would be expected to lower alcohol consumption and its adverse consequences. Unfortunately, under the current circumstances in Durban, the respondents are not willing to decrease their consumption.

About 67% of the respondents highlighted that the government was doing more than enough through various media channels such as radio and social sites to make people aware of the dangers of drinking and driving. The other 33% of respondents had an antagonistic view about the role of the government in combating drinking and driving in Durban. In South Africa, the South African Police and Metropolitan Police have tried to place roadblocks and close shops that sell alcohol on weekends to avoid alcohol purchases.

From Table 2, the respondents were asked if the excise tax was increased tremendously, would they switch or quit alcohol consumption. Most people (80.8%) argued that they would not, while on the other hand, those that were asked if the price was high, would they go for alternatives. About 77.8% of the respondents said they would not switch to low-priced alcohol. This tells a great story since during the Covid-19 pandemic, people in South Africa would do anything to get alcohol or cigarettes at whatever the price on the black market. The respondents highlighted that they would continue to buy alcohol and that they drink because it is for leisure, traditional ceremonies, weddings, and engagement parties. On top of that, the respondents argued that alcohol was one of the biggest industries employing both skilled and unskilled personnel.

4.7. Inferential Statistics -Chi-Square and T-Test

In trying to understand the impact of an increase in excise tax and alcohol consumption, a t-test was used to assess the following items: what is the probability that the relationship exists, and if it does, how strong is the relationship between an increase in excise tax and road accidents in Durban? Table 3 shows the relationship between the dependent and independent variables in trying to explain the significance of the variables. Hence, the price of alcohol and excise tax were used to determine the probability of respondents not engaging in alcohol-related activities that could cause accidents.

Table 3. Excise tax and alcohol consumption.

A	Variable	Minimum	Maximum	Mean	Std. deviation
Excise tax	Dependency value	1	5	2.98	1.669
	Switch to a low-priced alternative	1	5	6.91	2.767
Price increase	Dependency value	1	5	2.00	1.240
	Spending on alcohol	1	6	4.93	1.439
Chi-squared test					
Variables		Chi-square		p-value	
Excise tax		0.159		0.014*	
Alcohol consumption		0.832		0.000**	

Note: **, * Correlation is significant at the 0.01 and 0.05 levels, respectively.

A closer look at the Chi-square statistics results shows that excise tax and alcohol consumption influence the promotion of road accidents in Durban. Alcohol consumption in Durban is usually done for fun or binge drinking by tourists and locals residing in Durban. The Chi-square test reveals that at a 5% significance level, an increase in excise tax results in a small increase in alcohol consumed by about a 1.5% increase. Smaller standard deviation values indicate that the excise tax and alcohol consumption are related in terms of the reasons portrayed by the respondents. In some instances, the excise tax was found to play a significant role in reducing alcohol consumption, but on the other hand, it was found that people would continue to drink whatever they could afford as long as it was alcohol, and they wanted to be happy while still enjoying the city that rocks. The other issue to be considered is the fact that these respondents

have money to blow, and they would buy anything to be intoxicated while in Durban. So even if the excise tax is increased to a level above 20%, they would still purchase and consume alcohol. On the other hand, though alcohol can be hazardous to one's health and impair their vision and judgment while driving, it does not mean people coming for a holiday in Durban would stop drinking alcohol.

The p-value for the dependent variable, which is "the impact of excise tax on alcohol consumption," shows a significant value of 1%. This points out the fact that people would normally act rationally in a situation that involves the lives of other road users. Table 3 shows a positive and significant p-value of 0.000 and 0.014, highlighting that those respondents who consume alcohol are not risk-averse when it comes to drinking and driving. The result could mean that more people who drink and drive require greater awareness of the dangers of drinking and driving under the influence of toxic substances. The correlation is significant and highlights a negative attitude among the people who consume alcohol and were interviewed for this study.

Such findings suggest that an increase in excise tax does not directly mean people stop consuming alcohol. Inasmuch as this could be an issue, some respondents highlighted that alcohol is so addictive that they cannot spend a day without drinking. However, the hypothesis of this study was that excise tax is meant to have an inverse relationship with alcohol consumption, but this was not the case with this data. Alcohol consumers do not see the complications that are brought by alcohol in terms of road accidents, road safety, crime, violence at home, effects of driving under the influence of alcohol, and the consequences. However, resolving such issues is rather complex even if laws are instituted to control this.

5. CONCLUSION

The results show that the excise tax on alcohol has an impact on drinking and driving in Durban, as shown by the respondents' responses to this study. Contrary to popular belief, alcohol is said to affect drivers' behavior and attitude after its consumption, but most people interviewed highlighted that alcohol is not the reason why there are many accidents in Durban; rather, it is people's negligence that causes accidents. Some respondents highlighted that changes in the prices of alcohol could not significantly mean a decrease in alcohol consumption, but it could somewhat limit the way people drink alcohol in terms of frequency.

Alcohol is by far the major substance of abuse in most provinces of South Africa. Alcohol is more common among youths, as seen by those attending treatment centers. Durban, Mpumalanga, Johannesburg, and Cape Town continue to experience a dramatic increase in the use of substances such as alcohol and drugs. Substance misuse is most prevalent among males, with trends suggesting roughly an 80/20 male/female split across the country. Young people appear to be the highest users of substances, and they enjoy galivanting from one club to the next looking for fun.

Because of this galivanting, youths drink and drive around the city of Durban. The results show that people have their own judgments when it comes to alcohol and its impact on individuals. Excise tax, on the other hand, has an impact on reducing the quantities people would buy, but the overall effect is that people are reluctant to stop drinking. Alcohol in society has several roles it plays apart from cultural and religious ceremonies. It is a form of employment, as most people are employed in the beverage sector in the country. Alcohol is also used as a source of energy and is utilized by pharmaceutical companies for drugs. The study could have been improved by further investigating the tax that is reasonable on excise goods. However, more research must be done using longitudinal studies to assess the impact of rising prices of alcohol and other excise products on the economy of South Africa.

5.1. Recommendations

The recommendation of this study is to encourage people to use alternative modes of transport after drinking, such as taxis, Uber, and Taxify, to various destinations. This will help curb road accidents in Durban and other cities. Another approach is to have sober drivers when going out for drinks so that there is a reduction in road accidents. The government and the Department of Transport must provide a reliable, effective, and fast public transport system

like those in the US and European countries to avoid people using their own transport when visiting these social recreational areas. The transport system in South Africa requires a movement towards an age of technological sustained growth and accelerated 4th Industrial Revolution (4IR) development. This can enable all South Africans, including the unemployed and poor, to enjoy greater access to economic and employment opportunities as well as social recreational facilities around the country.

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