

A STUDY ON AWARENESS AND BEHAVIOUR OF PUBLIC TOWARDS ROAD ACCIDENTS IN COIMBATORE CITY

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ABSTRACT: *Transport plays an important role in the economic development of any region. Transport infrastructure is tied to every sector of the economy. Roads provide a very important means of transport and communication throughout the world and have a great role to play in the development of nations and people through improving access to information and resources, leading to better health outcomes among populations. In the recent years increasing amount of traffic on roads have been witnessing, leading to increased risk of road traffic accidents. Evidence from developed especially developing countries indicates that road traffic accidents are on the rise and are the fifth important cause of deaths globally, leading to a significant proportion of injuries, deaths and disabilities in the population.*

Key Words:

INTRODUCTION

Road accidents are one of the major causes of death, injury and disability in all over the world both in developed and developing countries. With a broad estimate, in every 1 min, 2 people are killed and 95 people are severely injured or permanently disabled in traffic accidents worldwide. Traffic accident related deaths and injuries result in not only substantial economic losses but also serious physical and mental sufferings.

Road accident is most unwanted thing to happen to a road user, though they happen quite often. The most unfortunate thing is that we don't learn from our mistakes on road. Most of the road users are quite well aware of the general rules and safety measures while using roads but it is only the laxity on part of road users, which cause accidents and crashes. Main cause of accidents and crashes are due to human errors. Major causes of road accidents are as follows:

1. Over Speeding.
2. Drunk and Driving.
3. Distractions to Driver
4. Banners and bill boards.
5. Red Light Jumping.
6. Avoiding Safety Gears like Seat belts and Helmets.

STATEMENT OF THE PROBLEM

Road accidents are one of the most relevant problems in today's humanity. By and large, it is necessary to control road accident as its impact on the family and society. This study is made to find out the root causes of increasing road accidents which is the major reason for death among youth and to know the behavioural pattern while driving the vehicle.

The aim of this study is to find out what extent the driving people in Coimbatore city are aware of road safety, knowledge of which would contribute to further implementation of road safety. Hence, a need arises to identify the major causes of road accidents.

OBJECTIVES OF THE STUDY

- To identify the major causes of accidents and the practice of road safety measures followed by the respondents.

RESEARCH METHODOLOGY

The study was conducted for a period of 7 months. The survey is undertaken in and around Coimbatore city. Both Primary and Secondary data have been used for study. The primary data is collected through questionnaire method. Secondary data was collected from magazines, journals and research

articles. The size of sample is 200. For the purpose of the study, Purposive Sampling method has been adopted for the selection of respondents. The statistical tools used for the analysis are Simple Percentage Analysis, Descriptive Statistics, Chi –Square and Friedman Rank Test.

LIMITATIONS OF THE STUDY

- The study was restrained to Coimbatore city only.
- The data collected for the study was only from 200 respondents by circulating questionnaires.
- The results of the study may vary from time to time.

REVIEW OF LITERATURE

Yazan Issa (2016), in this research “Effects of drivers personal characteristics on traffic accidents in Tabuk city in Saudi Arabia” is to examine the factors contribute to road accidents and to evaluate statistically the effect of certain driver’s personal characteristics on road accidents. It helps to find that young drivers (less than 30 years) are involved in around 60% of the accidents and more than 80% of the accidents related to human factors. The findings had shown the variables that had significant relationships with accidents in the city and those that did not have significance. The findings suggest a need for intensive efforts to be undertaken in Tabuk city to raise public awareness of road safety issues and to educate drivers in safe driving practices. Conclusions were drawn as to deficiencies in driver training in Saudi Arabia and inadequacies of supervision by the law enforcement agents.

Bokhari (2017), in his article titled “Maxillofacial injuries due to road traffic accidents in Saudi Arabia: a review of incidence, demographic factors & prevention strategies” had conducted his review through a literature search over a Period of 25 years. He had revealed that the incidence and causes of road traffic accidents vary with geographical location, socioeconomic status, religion and era. The incidence of traffic accidents is high in Saudi Arabia. Age of the driver, education level, profession, violation record, vehicle ownership, joy riding, poor eye sight, sun haze, sand storm, long hours driving, non-observance of speed limit, emerging and exiting from roads without signals, presence of stray animals, non-marking of the road, non-familiarity with the road, lack of regular checking of vehicles, lack of regular servicing of vehicles and driving under medication are factors associated with high incidence of road traffic accidents in Saudi Arabia. He had concluded that Simple measures such as seat belt legislation, traffic monitoring, creation of awareness among youth will significantly bring down loss of lives.

Shaban Harun Juma (2017), in his article titled “Assessment Of Road User’s Awareness On Strategies For Controlling Road Traffic Accidents: A Case Study Of Kigoma- Ujiji Municipality” has said that Road traffic accidents are on the increase in Kigoma, causing injuries, loss of lives and damage of properties. The process of urbanization, the resultant motorization and the recent developments in road infrastructure, more specifically the construction of tarmac roads, had contributed to more road accidents. He had concluded that although the government has put in place the construction of road in Kigoma until the main road and small roads in the streets which are needed to make sure that all roads had walking way that is pavement in order to help innocent people like pedestrian to pass through without any problems.

ANALYSIS AND INTERPRETATION

Table 1: Respondents Demographic Profile

DEMOGRAPHIC PROFILE	PARTICULARS	NO. OF RESPONDENTS	PERCENT
Gender	Male	110	55.0
	Female	90	45.0
	Total	200	100.0
Age	18-27 years	40	20.0
	28-37 years	69	34.5
	38-47 years	56	28.0
	Above 47 years	35	17.5
	Total	200	100.0
Marital Status	Married	107	53.5
	Unmarried	93	46.5
	Total	200	100.0
Educational Qualification	No Formal Education	22	11.0

	School Level	60	30.0
	Graduate	76	38.0
	Professional	42	21.0
	Total	200	100.0
Status of the Respondents	Student	51	25.5
	Professional	31	15.5
	Business	33	16.5
	Employed	33	16.5
	Home Maker	29	14.5
	Others	23	11.5
	Total	200	100.0
Family Monthly Income	Upto Rs.20000	41	20.5
	Rs.20001-Rs.40000	59	29.5
	Rs.40001-Rs.60000	53	26.5
	Above Rs.60000	47	23.5
	Total	200	100.0
Type of Vehicle	Two wheeler with gear	93	27.0
	Two wheeler without gear	139	40.3
	Four wheeler with gear	78	22.6
	Four wheeler with auto gear	35	10.1
	Total	200	100.0
Type of Driving	Rash Driving	56	28.0
	Moderate Driving	78	39.0
	Slow Driving	66	33.0
	Total	200	100.0
Respondents Age at when they got License	18 to 22 years	94	47.0
	23 to 27 years	60	30.0
	Above 27 years	46	23.0
	Total	200	100.0
Source of Learning for Driving	Family Members	69	34.5
	Friends	36	18.0
	Driving School	54	27.0
	Self Driving	41	20.5
	Total	200	100.0

Source: Primary data

It is found from the above table shows that 55 per cent of the respondents are male and 45 per cent of the respondents. Most of the respondents (34.5 per cent) are in the age group of 28-37 years. 53.5 per cent of the respondents are married and 46.5 per cent of the respondents are unmarried. Majority of the respondents (53.5 per cent) are married. Most of the respondents (38 per cent) completed graduation. Most of the respondents (25.5 per cent) are students. Majority of the respondents (29.5 per cent) earn a family monthly income of Rs.20001-Rs.40000. 28 per cent of the respondents prefer rash driving. Followed by 39 per cent of respondents prefer moderate driving. And 33 per cent of respondents prefer slow driving. Majority of the respondents (39 per cent) prefer Moderate Driving. Majority of the respondents (47 per cent) got license at the age of 18-22 years. 34.5 per cent of the respondents learnt driving through family members. Followed by 18 per cent of the respondents learnt driving with the help of friends, 27 per cent of the respondents learnt driving by driving school and 20.5 per cent of the respondents learnt driving by self. Most of the respondents (34.5 per cent) learnt driving with the help of family members.

DESCRIPTIVE STATISTICS

Descriptive statistics has been used to find the mean scores for the factors of opinion towards major cause for accidents. The opinion towards major cause for accidents is measured by summing up the ratings given by the respondents for 20 statements at three point scale. The mean ratings have been assigned as 1

for Disagree,2 for Neutral and 3 for Agree .High score indicates high opinion towards major cause for accidents.

Table 2: Opinion Towards Major Cause For Accidents

Major Cause For Accidents	N	Minimum	Maximum	Mean	Std. Deviation
Driving when tired	200	1.00	3.00	2.40	.687
Following the vehicle in front too closely	200	1.00	3.00	2.21	.654
Driving too fast	200	1.00	3.00	2.66	.630
Poor road condition	200	1.00	3.00	2.09	.692
Traffic Jam	200	1.00	3.00	1.67	.688
Bad weather condition	200	1.00	3.00	1.91	.714
Impatience of road users	200	1.00	3.00	2.59	.620
Mechanical failure	200	1.00	3.00	2.55	.599
No usage of horns	200	1.00	3.00	2.28	.651
Poor sight	200	1.00	3.00	2.29	.639
Absence of rear view	200	1.00	3.00	2.46	.693
Drunk and Drive	200	1.00	3.00	2.83	.515
Violation of traffic rules	200	1.00	3.00	2.68	.598
Overtaking Vehicles	200	1.00	3.00	2.67	.577
Rash driving	200	1.00	3.00	2.63	.619
Night drive	200	1.00	3.00	2.30	.656
Usage of Mobile phone	200	1.00	3.00	2.16	.721
Lack of Concentration	200	1.00	3.00	2.11	.690
Chatting with Co-traveller	200	1.00	3.00	1.81	.751
Sudden physical illness	200	1.00	3.00	2.70	.578
Total	200	20	60	47	12.972

Source : Primary data

The total mean rating of the opinion with regard to the opinion towards major cause for towards major cause for s is 47.The highest mean score (2.83) has been found for Drunk and Drive with the standard deviation .515 and the lowest mean score (1.81) has been found for Chatting with Co-traveller with the standard deviation .751. The respondent's opinion towards major cause for accidents is highly with regards to Drunk and Drive.

Hence, it is inferred that opinion towards major cause for accidents on drunk and drive has the highest mean value (2.83).

CHI-SQUARE ANALYSIS

Table 3: Demographic Factor and Major Cause of Accidents

H₀: There is no significant relationship between marital status and major cause for accidents.

Particulars	Major Cause of Accidents		Total	Chi square value	Sig	S/NS
	Low	High				
Marital Status Unmarried	10	97	107	.212 ^a	.645	NS

	Married	7	86	93			
Total		17	183	200			

Source: Primary data S-significance at 5% level Ns- not significant

Chi-square test has been applied to find whether there is a significant relationship between marital status and major cause of accidents.

From the above table 3 depicts that chi-square calculated value for major cause of accident is .212^a. Since significance value is .645 which is less than significance level (0.05), it is found that there is no significant relationship between marital status and major cause for accidents.

Hence the hypothesis is accepted.

FRIEDMAN RANK TEST

“Ranking” refers to the data transformation in which numerical or ordinal values are replaced by their rank when data are sorted. Ranks are assigned to the values in ascending order (in some other cases, descending ranks are used). Ranks are related to the indexed list of order statistics, which consist of the original data set rearranged into ascending order.

Table 4: Road Safety Practice Measures

Problems	Ranking	Mean of Ranks
Mobile phone should not be used while driving	4	3.42
Maintenance of vehicle	3	3.10
Not listening to music while driving	5	4.32
Avoid alcohol while driving	1	1.97
Wearing helmet/seat belts	2	2.18

Source: primary data

Test Statistics	
N	200
Chi-Square	293.372
Df	4
Asymp. Sig.	.000
a. Friedman Test	

From the above table, it is clearly shown that the avoid alcohol while driving has the highest mean value (1.97) is ranked higher by the respondents, wearing helmet/seat belts mean value (2.18) is ranked the second highest value and not listening to music while driving mean value (4.32) is ranked the least by the respondents. The ranking as per the above table is valid as the chi square table values (293.372, p<0.000) are statistically significant. It is clear that most of the road accidents are caused due to drunk and drive so it is better to avoid alcohol while diving which is the result of the analysis done above.

FINDINGS

SIMPLE PERCENTAGE ANALYSIS

- 55 per cent of the respondents are male.
- 34.5 per cent of the respondents belong to the age group of 28-37 years.
- 53.5 per cent of the respondents are married.
- 38 per cent of the respondents are graduates.
- 25.5 per cent of the respondents are students.
- 29.5 per cent of the respondents earn a family monthly income of Rs.20001- Rs.40000.
- 40.3 per cent of the respondents used two wheeler without gear
- 39 per cent of the respondents prefer moderate driving.
- 47 per cent of the respondents got their license at the age of 18 to 22 years.
- 34.5 per cent of the respondents learnt driving with the help of family members.

Descriptive Analysis

- It is inferred that the major cause for accidents were drunk and drive with highest mean value (2.83).

Chi-Square Analysis

- There is no significant relationship between marital status and major cause for accidents. Hence the null hypothesis is accepted.

Friedman Rank Test

- The Friedman rank analysis reveals that avoiding alcohol while driving has the highest mean value (1.97) is ranked higher by the respondents, wearing helmet/seat belts mean value (2.18) is ranked the second highest value and not listening to music while driving mean value (4.32) is ranked the least by the respondents. Thus avoiding alcohol while driving can control most of the accidents on road.

SUGGESTIONS

- Strict laws should be passed to obey traffic rules, in default the public should be subject to punishments and fines.
- Wearing seat belts should be made mandatory.
- Drunk and drive should be avoided if not severe punishments should be imposed on the driver.

CONCLUSION

The accidents which are mainly caused due to drunk and drive,so it is better to avoid alcohol while diving.These are considered as a very good change for the individual as well as the society. The study concludes that accidents where caused due to insufficient bylaws, so therefore the government wants to make severe rules and regulation to avoid road accidents and conduct more awareness campaigns among the public.

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