

A Study on Adherence to Traffic Signals in Chennai

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ABSTRACT:

The study discusses the adherence to traffic signals and road safety laws .The major objective of the research paper is to create awareness about the adherence to traffic signals in chennai. The research method followed is descriptive research. The data is collected through a questionnaire and the sample size is 200 . Convenience sampling method is adopted in the study to collect the data. The samples were collected from the general public with special reference to the Chennai region. The independent variables are gender, income level and education level of respondents. The dependent variables are level of awareness of road safety laws and options regarding Does wearing a helmet decrease the rate of accidents. The researcher used graphs to analyse the data collected Overall, this study suggests much potential for public transport as a road safety solution through a macroscopic analysis of road safety in Chennai. It is evident that mode shift from private vehicles to public transport, including train, tram, and bus, for commuting would reduce not only total crashes, but also severe crashes. In the study, there is a high level of awareness of public transportation and road safety laws. The male members are more aware about public transportation and road safety laws Female are less aware about the Road safety laws. The government can take a step to improve the awareness of road safety laws and adherence of traffic signals and improve their morale To improve Road facilities.

KEYWORDS: *public transport ,safety and security , vehicles , accident , measures*

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I. INTRODUCTION:

In most transportation scenarios, reliance on buses has a positive impact on air quality because they pollute less per person mile and create less congestion because of their smaller road-use footprint. In addition to these benefits, it is usually assumed that buses are among the safest modes of transport available because they are much larger in size and mass than most other road vehicles.the Bus users face risks of road traffic injuries on access trips and buses also are associated with road traffic crashes with other road users this research is to explore the perception of safety and security problems on the part of those parties involved in the operation of public transportation. This perception is used as a base to develop an improvement agenda for the particular context of developing countries. The research employs a questionnaire survey to collect the perception data.

Many factors affect road safety and public transportation road safety. The most important factors are driver behaviour, construction and condition of the vehicle and condition of infrastructure. The narrowly defined factors by the mean causal network. The causal network has three levels: the first level concerns global factors such as demographic structure of the population, which influence at the second level the states of the triad, in order from left to right host as the road user, environment as the infrastructure and the traffic conditions, and the vehicle. At the third level, interactions of these components lead under the major influence of speed to crashes and injuries, which could be minor, severe or fatal.

The behavior of pedestrians under mixed traffic conditions especially in India is comparatively different from that of other countries. Every year in India, around 150,000 people are killed in road traffic incidents. Three experts give their views on how the country can improve its road safety record.India has a poor record on road safety, with recent research from the India State-Level Disease Burden Initiative showing that

road injuries were the leading cause of death among males aged 15-39 and the second leading cause of death in this age group for both sexes combined. In developed countries, traffic and pedestrian movements are controlled based on certain priorities at uncontrolled intersections whereas in India rules of priority are not fully respected. Even though proper control measures like signals are provided at uncontrolled intersections, Hence, it is clear that pedestrian safety is the major concern of transport planners, traffic engineers and policy makers in India. The **Aim** of the research is to find the adherence to traffic signals in Chennai

II. OBJECTIVES:

- To find out their option regrading Does wearing helmet decrease the rate of accident
- To study about effectiveness of road safety laws and Does wearing helmet decrease the rate of accident
- To study about adherence to traffic signals in chennai.
- To find out the purpose of Which public transport do you prefer the most
- To understand the level of awareness about road safety laws in chennai

III. REVIEW OF LITERATURE

(Yannis et al., 2007)The author in his paper “A critical study on Multilevel modeling for the regional effect of enforcement of road accidents” An Empirical Study highlighted some important provisions of the road safety laws in India relating to protection, privacy and other transportation activities A new concept of mobility was introduced. The survey was conducted by means of questionnaires the sample size is 2400(Rao et al., 2018) studied the features of Accident study on National Highway.The survey was conducted by means of questionnaires the sample size is 200 This study defined MCS as an interdisciplinary approach used in accounting with the help of economic management of transportation .(Mittal, 2008) in his research papers 'Division of Environment and Road Traffic safety, Central Road Research Institute, New Delhi, India, 2008, discussed different issues and problems related to urban transportation and road safety laws in India and solutions to them. Sample size of the study was 1400 According to him, growing economies like India are not able to respond effectively to the need and urge for mobility.(M. et al., 2004) Studied World report on road traffic injury prevention”, World Health Organization, Geneva, 2004.This paper reviewed market failures and policy failures in The Netherlands for various transport markets .The survey was conducted by means of questionnaires the sample size is 1200 Nishant and Sharif (2007) in this article author discussed the utility of information systems in Road transport. There were two information systems called road information systems (RrS) and Geographical Information Systems (GIS).Sayeed (1997) in this article author discussed making Performance Appraisal of the Bihar Stage Road Transport Corporation (BSRTC) by comparing with the U.P. Stage Road Transport Corporation (UPSRTC) recommended some steps to improve the performance.M.K. Agarwal(1997) in his book ‘Urban Transportation in India’ published in 1997, discussed different issues and problems related to urban transportation in India and solutions to them. According to him, growing economies like India are not able to respond effectively to the need and urge for mobility. (Freeman & Watson, 2006)entitled “Emerging Transportation Scenario in Delhi”. In this article, the author has discussed different aspects and problems of DTC.(Clifton & Kreamer-Fults, 2007)- paper titled “Traffic Crisis in Big Cities Causes and Cures.” In this paper the author firstly points out that the traffic in big cities is in a mess.(Lenne MG2007)paper titled “Resolving Urban Gridlock.” According to him, long term vision coupled with short term and medium term measures are necessary if the problems of urban air quality, congestion and energy security have to be resolved.(Sagberg, 1999)- Paper entitled “Urban Bus Transit System in Delhi- an assessment of the quality of service” In this paper the author presents a comparative study of assessment of the quality of service provided by private and public bus transport in Delhi.(Sicińska & Dąbrowska-Loranc, 2017) “Customer Value Management- A key to Success in Public Transport Services”.This article provides a framework for the STUs in order to create superior customer value through customer value management which would eventually form the underpinning of all successful marketing strategies in future.(Innocenzi, 2015) paper titled “Productivity Improvement and Cost Reduction at Depot and Workshop Levels”.The author suggests some technological advances for improving the productivity of the manpower employed in garages/workshops. He has pointed out that mechanics in most of the workshops suffer from ill- designed work areas, lack of proper jigs and fixtures.(Victoria et al., 2011) in this article the author explains about Mini bus operations in some districts of Tamil Nadu - A case study by In this paper, the researchers have taken Tamil Nadu mini bus operation for two districts and explained the-benefits of mini bus to commuters and owners.(Brusyanin & Vikharev, 2014) has developed a model for passenger transport that contains elements determining travel behaviour, locations of activities, transport resistances (generalized transport costs), needs, opportunities and abilities.The survey was conducted by means of questionnaires the sample size is 200 mark et al.(2009). These goals are best served by models with a limited number of factors, such as the model and the three traffic safety pillars Both models have mutually interacting factors, recognizing that accidents can result from combinations of interacting variables. (wto2007)Heinrich’s Domino Theory assumes that accidents result from a series of events or circumstances and

are thus preventable by eliminating one of the causes in the linear sequence. **Toft Et Al (2012)** According to this , because accidents often result from combinations of mutually interacting variables, modeling approaches for crash research need to shift from linear models to non-linear models. **(Mahmud et al., 2014)** have researched the stressors that professional truck drivers experience and the impact these stressors may have on road safety. Both quantitative and qualitative data gathered from 435 professional drivers measured attitudes and behaviors related to safety and compliance. **(Maclure & Mittleman, 1997)** One of the major problems of road safety research is that most of it does not have a strong theoretical basis. The lack of such a basis makes it difficult to design suitable studies and interpret findings. The survey was conducted by means of questionnaires the sample size is 300

IV. METHODOLOGY

The research method followed is descriptive research. The data is collected through a questionnaire and the sample size is 200 . Convenient sampling method is adopted in the study to collect the data. The samples were collected from the general public with special reference to the Chennai region. The independent variables are gender, income level and education level of respondents. The dependent variables are level of awareness of road safety laws and options regarding Does wearing a helmet decrease the rate of accidents. The researcher used graphs to analyse the data collected

INDEPENDENT VARIABLE:

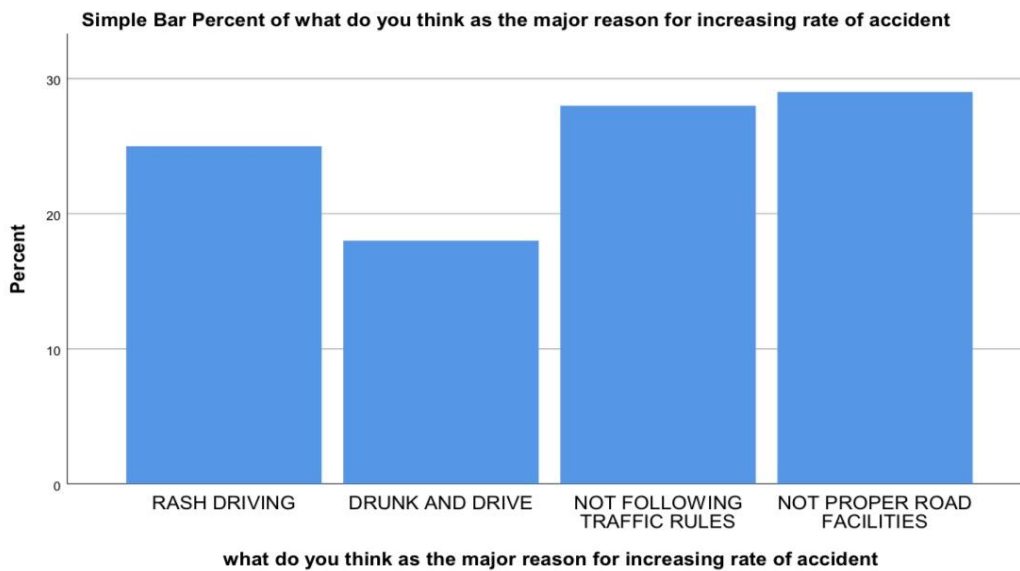
Age, Gender, educational qualification, Marital status, occupation.

DEPENDENT VARIABLE:

- 1) On what scale of 1 to 10 ,rate whether the traffic signals followed by the public or effective in Chennai
- 2) What do you think as the major reason for increasing rate of accident
- 3) Which public transport do you prefer more?
- 4) what can be done to prevent accidents?
- 5) Does wearing helmet decrease the rate of accident
- 6) Do you agree that the people Following traffic signals in day to day life

ANALYSIS GRAPH:

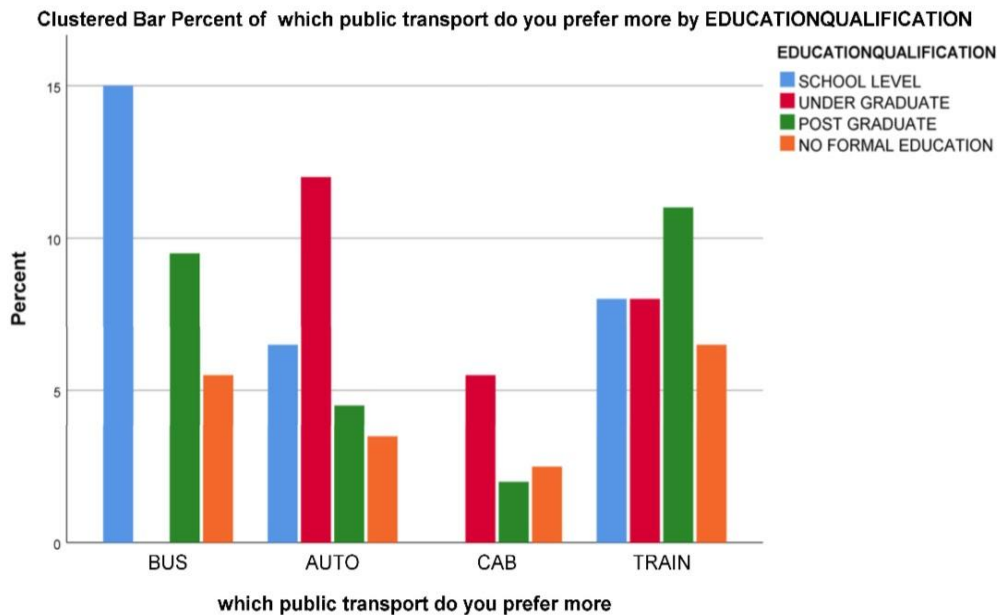
FIGURE 1:



LEGEND :

Figure 1 it is clearly shows that the respondents says that not proper road facility is the major reason for increasing rate of accident

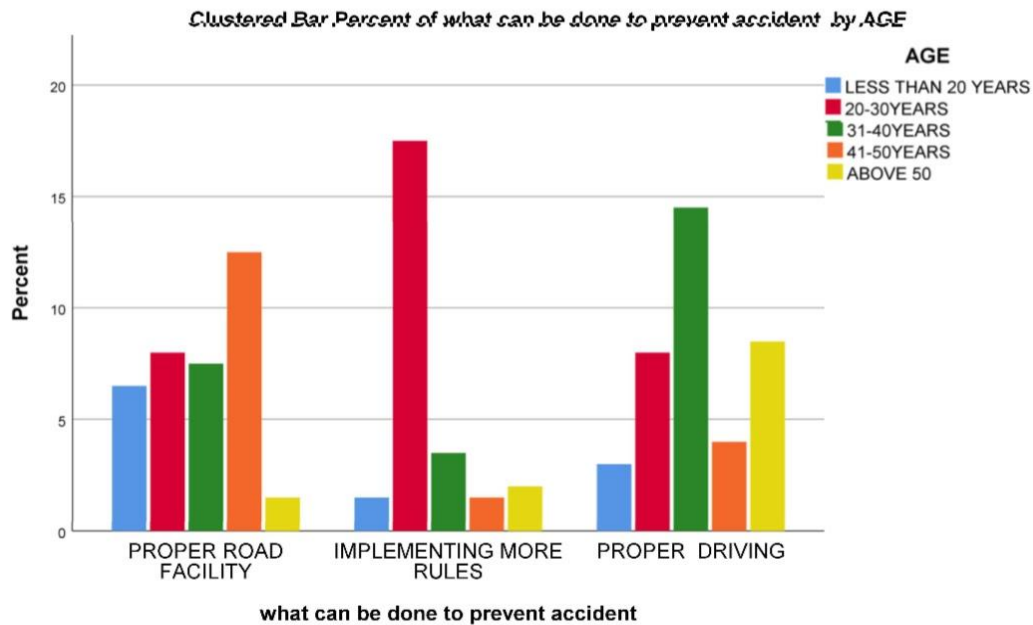
FIGURE 2:



LEGEND :

In figure 2 The responses were taken through online where 200 responses were taken into consideration where the independent variables were taken such as gender, age ,education qualification and occupation

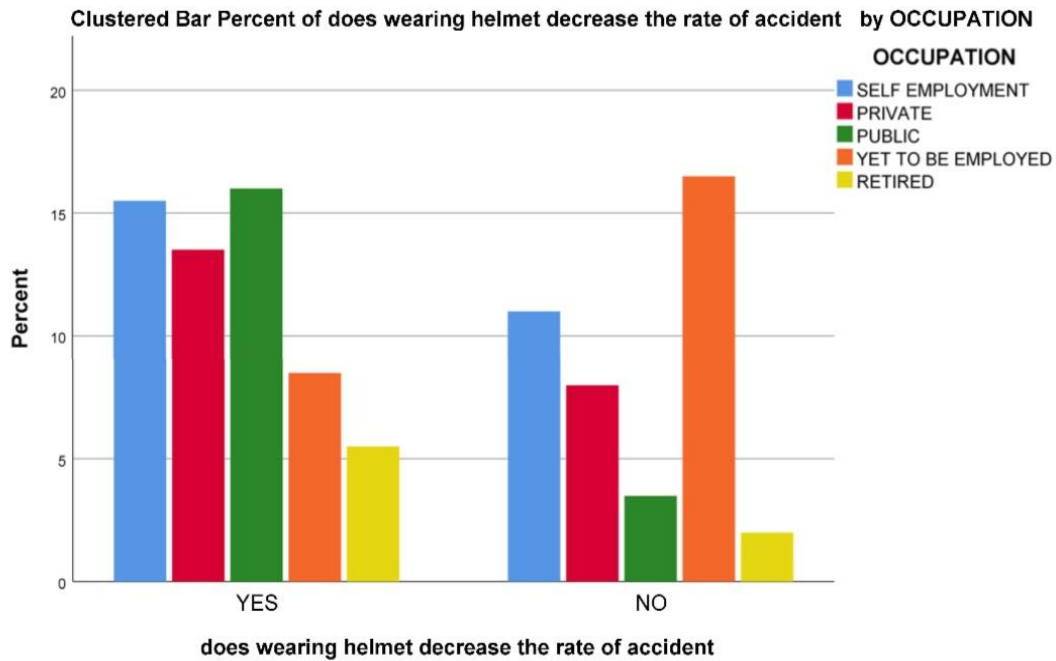
FIGURE 3:



LEGEND :

In figure 3 The responses were taken through online where 200 responses were taken into consideration where the independent variables were taken such as gender, age ,education qualification and occupation

FIGURE 4:



LEGEND :

In this above figure shows the variability in the awareness of does wearing helmet decrease the rate of accident with occupation of the respondents

CHI SQUARE TEST 1:

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
GENDER * what do you think as the major reason for increasing rate of accident	200	99.5%	1	0.5%	201	100.0%

GENDER * what do you think as the major reason for increasing rate of accident Crosstabulation

Count		what do you think as the major reason for increasing rate of accident				Total
		RASH DRIVING	DRUNK AND DRIVE	NOT FOLLOWING TRAFFIC RULES	NOT PROPER ROAD FACILITIES	
GENDER	FEMALE	0	16	38	24	78
	MALE	50	20	18	34	122
Total		50	36	56	58	200

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	52.156 ^a	3	.000
Likelihood Ratio	69.036	3	.000
Linear-by-Linear Association	23.422	1	.000
N of Valid Cases	200		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.04.

LEGEND :

It shows the preference of the respondent on various major reasons for increasing the rate of accidents based on their gender group. Independent variable and dependent variable is nominal. It proves the NULL HYPOTHESIS : there is no association between choice of major reason for increasing rate of accident and gender

INTERPRETATION:

The calculated P value is 0.000. Since P value < 0.05, Null hypothesis is rejected at 5% level of significance. So there is association between choice of major reason for increasing rate of accident

CHI SQUARE TEST 2:

Crosstabs

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
EDUCATIONQUALIFICATION * which public transport do you prefer more	200	99.5%	1	0.5%	201	100.0%

EDUCATIONQUALIFICATION * which public transport do you prefer more Crosstabulation

Count		which public transport do you prefer more			
		BUS	AUTO	CAB	TRAIN
EDUCATIONQUALIFICATION	SCHOOL LEVEL	30	13	0	16
	UNDER GRADUATE	0	24	11	16
	POST GRADUATE	19	9	4	22
	NO FORMAL EDUCATION	11	7	5	13
Total		60	53	20	67

**EDUCATIONQUALIFICATION * which public transport do you prefer more
Crosstabulation**

Count

		Total
EDUCATIONQUALIFICATION	SCHOOL LEVEL	59
	UNDER GRADUATE	51
	POST GRADUATE	54
	NO FORMAL EDUCATION	36
Total		200

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	50.898 ^a	9	.000
Likelihood Ratio	67.698	9	.000
Linear-by-Linear Association	3.521	1	.061
N of Valid Cases	200		

a. 1 cells (6.3%) have expected count less than 5. The minimum expected count is 3.60.

LEGEND :

It shows the preference of the respondent on various public transport do you prefer more based on their education qualification group Independent variable and dependent variable is nominal.It prove the NULL HYPOTHESIS there is no association between choice of public transport do you prefer more and education qualification

INTERPRETATION

The calculated P value is 0.000. Since P value<0.05, Null hypothesis is rejected at 5%level of significant. So there is association between choice of public transport do you prefer more

V. RESULTS:

The above figure 1 shows the major reason for the increasing rate of accidents in chennai . 29% of people says that not proper road facilities it is the major reason for increasing rate of accidents.27% of people says that not following traffic rules it is a major reason for increasing rates of accident and 17% of people says That drunk and drive is the major reason for increasing rate of accident 25% of people says that increasing rate of accidents .In figure 2 shows that the responses majority of the school level students more preferred school bus under under graduate more preferred auto and postgraduate more preferred from train and no formal education preferred mix it with all group categories. In figure 3 shows that the responses Less than 20 years of student says that proper road facility Are the major way to prevent accidents and 25 to 30 years old people says that implementing more rules to prevent accident and 31 to 40 years old peoples more preferred and proper driving to prevent accidents and 41 to 50 years old people says that proper road facilities it can prevent accidents and above 50 people says that proper driving is a major thing to prevent accident. In figure 4 shows that the responses Those who are self-employment says that wearing helmet decrease in the rate of accident and those who are yet to be employed it says that not wearing helmet is a decreasing the rate of accident. The respondents of the gender group Who are female preferred not following traffic rules is the major reason for increasing the rate of accidents but male respondents Highly preferred rash driving is the major reason for the increasing rate of accidents.The respondents of the education qualification group Those who her school level students highly

preferred buses and under graduate highly preferred auto and train postgraduate peoples highly preferred it train and no formal education people mix it with all

VI. DISCUSSION:

Figure 1 It is Clearly from the figure 1 that the respondents say that not proper road facility is the major reason for increasing rate of accident. This is might/may be because of not proper road facilities it is clearly explained that people Are against the government. This major reason for the increasing rate of accidents in chennai .In Figure 2 it is Clearly from the figure 2 that respondent of the education qualification of school level students preferred more school buses and under graduate more preferred auto post graduate more prefer to train and no formal education before the mixed with all. This is might/may be because of In school level students only more preferred buses and auto because they did not know how to use public transport. Figure 3 is clearly from figure 3 that respondents of age group preferred implementing more rules to prevent accidents and 31 to 41 old peoples are more preferred proper driving to prevent accidents. This is might/may be because are those your age group of 20 to 30 who are all more aware about laws and those who are 31 to 40 years old more A proper driving to prevent accidents. Figure 4 is clearly from figure 4 that respondents Those who are self-employment says that wearing helmet decrease in the rate of accident and those who are yet to be employed it says that not wearing helmet is a decreasing the rate of accident This is might/may be because What are educated people is more aware about the Roadsafe Laws Yet to be employed unaware about the road safety laws. In this table the gender group those who are female highly preferred not following traffic rules is the major reason for increasing date of accident but male response highly preferred rash driving is the major reason for the increasing rate of accidents it is clearly explain that male are more aware about road safety laws and major reason for the increasing rate of accidents. In this table those who are all school level students highly preferred the school buses this public transport they preferred more because students and all how to book cab and train so these are the major reasons school level students highly preferred buses

LIMITATION :

The Major limitation of the study is the sample frame. The sample frame Collected through online platforms like sending mail, sending links via WhatsApp is the limitation of the study, the real field experience is missed out due to corona pandemic. The restrictive area of sample size is yet another drawback of the research. Collection of data via online platforms is limiting the researcher to collect data from the field. Since the data is collected on an online platform wherein the respondent is not known, the original opinion of the respondent is not found, this research could only come to an approximate conclusion of what the respondent is feeling to convey.

VII. CONCLUSION:

Generally, the need to put proper measures in place to reduce road transport accidents was recognized by all the countries, the issue that had to be dealt with was how these countries would work to comply with these directives given that the mortality figures due to road traffic accidents Overall, this study suggests much potential for public transport as a road safety solution through a macroscopic analysis of road safety in Chennai. It is evident that mode shift from private vehicles to public transport, including train, cab, and bus, for commuting would reduce not only total crashes, but also severe crashes. In the study, there is a high level of awareness of public transportation and road safety laws The male members are more aware about public transportation and road safety laws FeMale are less aware about the Road safety laws. The government can take a step to improve the awareness of road safety laws and adherence of traffic signals and improve their morale To improve Road facilities.

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INTRODUCTION

In most transportation scenarios, reliance on buses features a positive impact on air quality because they pollute less per person mile and make less congestion due to their smaller road-use footprint. additionally to those benefits, it's usually assumed that buses are among the safest modes of transport available because they're much larger in size and mass than most other road vehicles.the Bus users face risks of road traffic injuries on access trips and buses are also related to road traffic crashes with other road users this research is to explore the perception of safety and security problems on the a part of those parties involved within the operation of public transportation. This perception is employed as a base to develop an improvement agenda for the actual context of developing countries. The research employs a questionnaire survey to gather the perception data.Many factors affecting road safety and public transportation road safety. the foremost important factors are driver behaviour, construction and condition of the vehicle and condition of infrastructure. The narrowly defined factors by the mean causal network. The causal network has three levels: the primary level concerns global factors like demographic structure of the population, which influence at the second level the states of the triad, so as from left to right host because the road user, environment because the infrastructure and therefore the traffic conditions, and therefore the vehicle. At the third level, interactions of those components lead under the main influence of speed to crashes and injuries, which might be minor, severe or fatal.The behavior of pedestrians under mixed traffic conditions especially in India is relatively different from that of other countries. per annum in India, around 150,000 people are killed in road traffic incidents. Three experts give their views on how the country can improve its road safety record.India features a poor record on road safety, with recent research from the India State-Level Disease Burden Initiative showing that road injuries were the leading explanation for death among males aged 15-39 and therefore the second leading explanation for death during this age bracket for both sexes combined. In developed countries, traffic and pedestrian movements are controlled supported certain priorities at uncontrolled intersections whereas in India rules of priority aren't fully respected. albeit proper control measures like signals are provided at uncontrolled intersections ,Hence, it's clear that pedestrian safety is that the major concern of transport planners, traffic engineers and policy makers in India.

Sources	Similarity
(PDF) Factors Affecting the Road Safety - ResearchGate Many factors influence the road safety. The most. important factors are driver behaviour, construction, and condition of the vehicle and condition of. infrastructure. https://www.researchgate.net/publication/305080373_Factors_Affecting_the_Road_Safety	13%

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ABSTRACT:

The study discusses about the adherence to traffic signals and road safety laws .The major objective of the research paper is to create awareness about the adherence to traffic signals in chennai. The research method followed is descriptive research. The data is collected through a questionnaire and the sample size is 200 . Convenience sampling method is adopted in the study to collect the data. The samples were collected from the general public with special reference to the Chennai region. The independent variables are gender, income level and education level of respondents. The dependent variables are level of awareness of road safety laws and options regarding Does wearing a helmet decrease the rate of accidents. The researcher used graphs to analyze the data collected Overall, this study suggests much potential for public transport as a road safety solution through a macroscopic analysis of road safety in Chennai. It is evident that mode shift from private vehicles to public transport, including train, tram, and bus, for commuting would reduce not only total crashes, but also severe crashes. In the study, there is a high level of awareness of public transportation and road safety laws The male members are more aware about public transportation and road safety laws Female are less aware about the Road safety laws. The government can take a step to improve the awareness of road safety laws and adherence of traffic signals and improve their morale To improve Road facilities.

KEYWORDS:

public transport ,safety and security , vehicles , accident , measures

Sources	Similarity
<p>A STUDY ON AWARENESS OF TAXATION AMONG ... - SERSC</p> <p>Jun 1, 2020 — The independent variables are gender, income level and education level of respondents. The dependent variables are level of awareness of ...</p> <p>http://sersc.org/journals/index.php/IJAST/article/view/23161</p>	13%

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OBJECTIVES:

- To find out their option regrading Does wearing helmet decrease the rate of accident
- To study about effectiveness of road safety laws and Does wearing helmet decrease the rate of accident
- To study about adherence to traffic signals in chennai.
- To find out the purpose of Which public transport do you prefer the most
- To understand the level of awareness about road safety laws in chennai

Sources	Similarity
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before the mixed with all. This is might/may be because of In school level students only more preferred buses and auto because they did not know how to use public transport

LEGEND :

In figure 3 The responses were taken through online where 200 responses were taken into consideration where the independent variables were taken such as gender, age ,education qualification and occupation

RESULTS :

In figure 3 shows that the responses Less than 20 years of student says that proper road facility Are the major way to prevent accidents and 25 to 30 years old people says that implementing more rules to prevent accident and 31 to 40 years old peoples more preferred and proper driving to prevent accidents and 41 to 50 years old people says that proper road facilities it can prevent accidents and above 50 people says that proper driving is a major thing to prevent accident

DISCUSSION :

Figure 3 is clearly from figure 3 that respondents of age group preferred implementing more rules to prevent accidents and 31 to 41 old peoples are more preferred proper driving to prevent accidents. This is might/may be because are those your age group of 20 to 30 who are all more aware about laws and those who are 31 to 40 years old moreA proper driving to prevent accidents

LEGEND :

In this above figure shows the variability in the awareness of does wearing helmet decrease the rate of accident with occupation of the respondents

RESULTS : In figure 4 shows that the responses Those who are self-employment says that wearing helmet decrease in the rate of accident and those who are yet to be employed it says that not wearing helmet is a decreasing the rate of accident

DISCUSSION :

Figure 4 is clearly from figure 4 that respondents Those who are self-employment says that wearing helmet decrease in the rate of accident and those who are yet to be employed it says that not wearing helmet is a decreasing the rate of accident This is might/may be because What are educated people is more aware about the Roadsafe Laws Yet to be employed unaware about the road safety laws

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<p>A STUDY ON AWARENESS OF TAXATION AMONG ... - SERSC</p> <p>Jun 1, 2020 — The independent variables are gender, income level and education level of respondents. The dependent variables are level of awareness of ...</p> <p>http://serisc.org/journals/index.php/IJAST/article/view/23161</p>	25%
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CHI SQUARE TEST 1:

LEGEND :

It shows the preference of the respondent on various major reasons for increasing the rate of accidents based on their gender group. Independent variable and dependent variable is nominal. It proves the NULL HYPOTHESIS : there is no association between choice of major reason for increasing rate of accident and gender

INTERPRETATION:

The calculated P value is 0.000. Since P value < 0.05, Null hypothesis is rejected at 5% level of significant. So there is association between choice of major reason for increasing rate of accident

RESULTS:

The respondents of the gender group who are female preferred not following traffic rules is the major reason for increasing the rate of accidents but male respondents highly preferred rash driving is the major reason for the increasing rate of accidents.

DISCUSSION:

In this table the gender group those who are female highly preferred not following traffic rules is the major reason for increasing date of accident but male response highly preferred rash driving is the major reason for the increasing rate of accidents it is clearly explain that male are more aware about road safety laws and major reason for the increasing rate of accidents.

CHI SQUARE TEST 2:

LEGEND :

It shows the preference of the respondent on various public transport do you prefer more based on their education qualification group Independent variable and dependent variable is nominal. It proves the NULL HYPOTHESIS there is no association between choice of public transport do you prefer more and education qualification

INTERPRETATION

The calculated P value is 0.000. Since P value < 0.05, Null hypothesis is rejected at 5% level of significant. So there is association between choice of public transport do you prefer more

RESULTS:

The respondents of the education qualification group Those who her school level students highly preferred buses and under graduate highly preferred auto and train postgraduate peoples highly preferred it train and no formal education people mix it with all

DISCUSSION:

In this table those who are all school level students highly preferred the school buses this public transport they preferred more because students and all how to book cab and train so these are the major reasons school level students highly preferred buses

CONCLUSION:

Generally, the need to put proper measures in place to reduce road transport accidents was recognized by all the countries, the issue that had to be dealt with was how these countries would work to comply with these directives given that the mortality figures due to road traffic accidents Overall, this study suggests much potential for public transport as a road safety solution through a macroscopic analysis of road safety in Chennai. It is evident that mode shift from

private vehicles to public transport, including train, cab, and bus, for commuting would reduce not only total crashes, but also severe crashes. In the study, there is a high level of awareness of public transportation and road safety laws The male members are more aware about public transportation and road safety laws Female are less aware about the Road safety laws. The government can take a step to improve the awareness of road safety laws and adherence of traffic signals and improve their morale To improve Road facilities.

Sources	Similarity
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REVIEW OF LITERATURE

Akinyemi (1997)The author in his paper "A critical study on road safety measures" An Empirical Study highlighted some important provisions of the road safety laws in India relating to protection, privacy and other transportation activities A new concept of mobility was introduced. The survey was conducted by means of questionnaires the sample size is 2400

Pradhan and Jayant (1993) studied the features of MCS in the context of Manipur State Road Transport Corporation (MSRTC). The survey was conducted by means of questionnaires the sample size is 200 This study defined MCS as an interdisciplinary approach used in accounting with the help of economic management of transportation .

M.K.Agarwal(1996) in his research papers 'Road Safety law in India' published in 1996, discussed different issues and problems related to urban transportation and road safety laws in India and solutions of them. Sample size of the study was 1400 According to him, growing economies like India are not able to respond effectively to the need and urge for mobility.

Piet Rietveld (2004) Studied Urban Transport Policies.The Dutch Struggle with Market Failures and Policy Failures.This paper reviewed market failures and policy failures in The Netherlands for various transport markets .The survey was conducted by means of questionnaires the sample size is 1200

Nishant and Sharif (2007) in this article author discussed the utility of information systems in Road transport. There were two information systems called road information systems (RrS) and Geographical Information Systems (GIS). Sayeed (1997) in this article author discussed making Performance Appraisal of the Bihar Stage Road Transport Corporation (BSRTC) by comparing with the U.P. Stage Road Transport Corporation (UPSRTC) and recommended some steps to improve the performance.

M.K. Agarwal(1997) in his book 'Urban Transportation in India' published in 1997, discussed different issues and problems related to urban transportation in India and solutions to them. According to him, growing economies like India are not able to respond effectively to the need and urge for mobility.

Taranjeet Singh Chopra(2000) entitled "Emerging Transportation Scenario in Delhi". In this article, the author has discussed different aspects and problems of DTC.

Mohinder Singh's(2006) - paper titled "Traffic Crisis in Big Cities Causes and Cures." In this paper the author firstly points out that the traffic in big cities is in a mess.

Omprakash Agarwal's(2008) paper titled "Resolving Urban Gridlock." According to him, long term vision coupled with short term and medium term measures are necessary if the problems of urban air quality, congestion and energy security have to be resolved.

Tripta Goel's(2010)- Paper entitled "Urban Bus Transit System in Delhi- an assessment of the quality of service" In this paper the author presents a comparative study of assessment of the quality of service provided by private and public bus transport in Delhi.

G. Somayajulu(2012). "Customer Value Management- A key to Success in Public Transport Services".This article provides a framework for the STUs in order to create superior customer value through customer value management which would eventually form the underpinning of all successful marketing strategies in future.

Sardesai's(2000) paper titled "Productivity Improvement and Cost Reduction at Depot and Workshop Levels".The author suggests some technological advances for improving the productivity of the manpower employed in garages/workshops. He has pointed out that mechanics in most of the workshops suffer from ill- designed work areas,

lack of proper jigs and fixtures.

Page 2

Dr Nadogopal and P. Chinnaiyan(2020)in this article the author explains about Mini bus operations in some districts of Tamil Nadu - A case study by In this paper, the researchers have taken Tamil Nadu mini bus operation for two districts and explained the-benefits of mini bus to commuters and owners.

Van (2009) has developed a model for passenger transport that contains elements determining travel behaviour, locations of activities, transport resistances (generalized transport costs), needs, opportunities and abilities.The survey was conducted by means of questionnaires the sample size is 200

mark et al.(2009). These goals are best served by models with a limited number of factors, such as the model and the three traffic safety pillars Both models have mutually interacting factors, recognizing that accidents can result from combinations of interacting variables.

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Heinrich, (1931)Heinrich's Domino Theory assumes that accidents result from a series of events or circumstances and are thus preventable by eliminating one of the causes in the linear sequence.

Toft Et Al (2012)According to this , because accidents often result from combinations of mutually interacting variables, modeling approaches for crash research need to shift from linear models to non-linear models.

Kopps & Kemp (2013), have researched the stressors that professional truck drivers experience and the impact these stressors may have on road safety. Both quantitative and qualitative data gathered from 435 professional drivers measured attitudes and behaviors related to safety and compliance.

(Elvik, 2004)One of the major problems of road safety research is that most of it does not have a strong theoretical basis. The lack of such a basis makes it difficult to design suitable studies and interpret findings.The survey was conducted by means of questionnaires the sample size is 300

Sources	Similarity
<p>transportation policy: Topics by WorldWideScience.org</p> <p>The study reveals that while the policy initiatives could be said to be ... Urban Transport Policies: The Dutch Struggle with Market Failures and Policy Failures ... This paper reviews market failures and policy failures in The Netherlands for ...</p> <p>https://worldwidescience.org/topicpages/t/transportation+policy.html</p>	13%
<p>10.1016/j.aap.2013.03.032 10.1016/j.aap.2013 ... - DeepDyve</p> <p>Both models have mutually interacting factors, recognizing that accidents can result from combinations of interacting variables. In contrast, crash-phase models such as Heinrich's Domino Theory (Heinrich, 1931) assume that accidents result from a series of events or circumstances and are thus preventable by eliminating one of the causes in the linear sequence.</p> <p>https://www.deepdyve.com/lp/elsevier/a-conceptual-framework-for-road-safety-and-mobility-applied-to-cycling-B9eUVQ7g4J</p>	4%
<p>Six days on the road: Will I make it home safely tonight ...</p> <p>Both quantitative and qualitative data gathered from 435 professional drivers measured attitudes and behaviors related to safety and compliance. Interviews with professional truck drivers provided an assessment of the stressors that they experience. The insights offered from these individuals were then integrated into a conceptual model. The model was tested via data collected ...</p> <p>https://www.emerald.com/insight/content/doi/10.1108/IJLM-08-2012-0080/full/html</p>	3%

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METHODOLOGY

The research method followed is descriptive research. The data is collected through a questionnaire and the sample size is 200 . Convenience sampling method is adopted in the study to collect the data. The samples were collected from the general public with special reference to the Chennai region. The independent variables are gender, income level and education level of respondents. The dependent variables are level of awareness of road safety laws and options regarding Does wearing a helmet decrease the rate of accidents. The researcher used graphs to analyze the data collected

INDEPENDENT VARIABLE:

Age, Gender, educational qualification, Marital status, occupation.

DEPENDENT VARIABLE:

- 1)On what scale of 1 to 10 ,rate whether the traffic signals followed by the public or effective in Chennai
- 2)What do you think as the major reason for increasing rate of accident
- 3)Which public transport do you prefer more?
- 4)what can be done to prevent accidents?
- 5)Does wearing helmet decrease the rate of accident
- 6)Do you agree that the people Following traffic signals in day to day life

ANALYSIS GRAPH:

LEGEND :

Figure 1 it is clearly shows that the respondents says that not proper road facility is the major reason for increasing rate of accident

RESULTS :

The above figure 1 shows the major reason for the increasing rate of accidents in chennai . 29% of people says that not proper road facilities it is the major reason for increasing rate of accidents.27% of people says that not following traffic rules it is a major reason for increasing rates of accident and 17% of people says That drunk and drive is the major reason for increasing rate of accident 25% of people says that increasing rate of accidents

DISCUSSION :

Figure 1 It is Clearly from the figure 1 that the respondents say that not proper road facility is the major reason for increasing rate of accident.This is might/may be because of not proper road facilities it is clearly explained that people Are against the government. This major reason for the increasing rate of accidents in chennai

LEGEND :

In figure 2 The responses were taken through online where 200 responses were taken into consideration where the independent variables were taken such as gender, age ,education qualification and occupation

RESULTS :

In figure 2 shows that the responses majority of the school level students more preferred school bus under under graduate more preferred auto and postgraduate more preferred from train and no formal education preferred mix it with all group categories

DISCUSSION :

In Figure 2 it is Clearly from the figure 2 that respondent of the education qualification of school level students preferred more school buses and under graduate more preferred auto post graduate more prefer to train and no formal education

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CONCLUSION:

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