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DRIVERS BEHAVIOUR BASED ON DEMOGRAPHICAL CHARACTERISTIC IN TAMILNADU

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ABSTRACT

The paper attempts to elaborate drivers behaviour in Villupuram. It is found that the age groups are having higher level of drivers Behaviour. Descriptive research methodology is suited to explore questions regarding the Drivers. There are 11 depots in the Villupuram. In these depots, there are 1578 drivers are working at presently. The researcher has applied convenient sample method to collect the questionnaire. Further, it is identified that less than 30 years drivers are having higher level of behaviour than other age groups. Age was found to be significantly related to driver's behaviour. And also more experiences drivers are understand the situation of the road traffic and potential danger.

KEYWORDS: elaborate drivers behavior, predicting danger, recreational vehicles.

INTRODUCTION

Drivers ability of predicting danger refers to that drivers have lots of driving experience or trained to have been the ability of predicting potential danger through the traffic environment in training, (Weinard, 1996) this kind of ability makes drivers understand potential dangerous situation as early as possible and take essential steps to eliminate potential danger, Zhao Jianyou et al.. (2013). As experience shows that the trained drivers are more skilful than untrained drivers, because trained drivers have more modes to handle different traffic situation, (Center, 1995), it means information had processed when the stimulation or traffic situation from the road is same or similar to the modes in drivers brain, so drivers can take right steps as soon as possible. More than 90 people are killed in a work-related roadway crash each year, according to the Network of Employers for Traffic Safety Transportation, (NETS, www.trafficsafety.org).

NETS indicate driver distraction is a contributing factor in 25-50 percent of all crashes, causing an estimated 4,000 to 8,000 traffic crashes each day. Driver distractions come in many forms, from talking or texting on a cell phone to reading through maps, directions, etc., and directly impact fleet costs, (Mc Coy, 1991). Benekohal, et al., (1994), Bishu, et al., (1992) Drivers behavior modeling has primarily emerged to predict driving maneuvers, driver intent, vehicle and driver state, and environmental factors, to improve transportation safety and the driving experience as whole. Hakamies-Blomqvist (1996) these models are then typically incorporated into Advanced Driver Assistance System in the vehicles. For instance, by coupling sensing information with accurate lane changing prediction models, an Advanced Driver Assistance System can prevent accidents by warning the driver ahead of time of potential danger, (Eberhard, 1996).

Usually, large vehicles such as trucks, buses, and recreational vehicles take a longer time to react to traffic signal changes, (Mullapudi and Lu, 1998); Michalik (1996). Thus, large vehicles have longer start-up lost time and lower saturation flow rate compared with passenger vehicles, (Dai and Lu, 1997); Mc Shane and Roess (1991). In this research, to focus on analysis of driving behavior differences among different driver age groups and experience. Therefore, this research only focused on passenger buses at villupuram depots.

OBJECTIVE OF THIS STUDY

- To analyze the level of Drivers Behaviour based on Age
- To examine the Drivers Behaviour based on Experience

HYPOTHESES OF THE STUDY

- Ho: There is no association between Drivers Behaviour based on Age
- Ho: There is no association between Drivers Behaviour based on their Experience

RESEARCH METHODOLOGY

The purpose of this research is to examine the Drivers Behaviour in Villupuram depots, Tamil Nadu, India. Descriptive research methodology is suited to explore questions the bus Drivers. There are 11 depots in Villupuram. In these depots there are 1578 working at present under the hospital data (2018). The research has applied convenient sample method to collect the questionnaire. There are 404 samples are collected based on sample size formula. Finally, percentage analysis and chi-square analysis were computed. The purpose of chi-square analysis is to identify the association between two test variables.

ANALYSIS AND INTERPRETATION

Demographic	al characteristic	Frequency	Percent
Age	Below 30	174	43.1
	30 to 40	167	41.3
	Above 40	63	15.6
Experience	Less than 5	269	66.6
	5 to 10	65	16.1
	Above 10	70	17.3

Table 1 Demographical characteristic of the Drivers

Source: Primary data computed

Table 1 display the Demographical characteristic of the Drivers in villupuram depots. There are 404 drivers are participated in this study, out of 404 respondents, 43.1 percent are below 30 age groups, and 41.3 percent are belongs to 30 to 40 age groups, and 15.6 percent are having above 40 age groups drivers. Further, Experience of the Drivers, 66.6 percent are belongs to less than 5 years experience drivers, 16.1 percent are having to 5 to 10 years experience drivers and remain 17.3 percent are belongs to above 10 years experience drivers was considered for this study.

Table 2 Level of Drivers Behaviour

Level	Frequency	percent	
Low	97	24.0	
Medium	71	17.6	
High	236	58.4	

Source: Primary data computed

Table 2 elaborates the level of driver's behaviour. 24 percent are low level drivers behaviour and followed by 17.6 are medium level driver's behaviour and 58.4 are high level driver's behaviour.

DRIVERS BEHAVIOUR BASED ON DEMOGRAPHICAL CHARACTERISTIC IN TAMILNADU

Table 3 Drivers Behaviour based on Age					
Age	Leve	Level of Drivers Behaviour		X ² -value	p-value
	Low	Medium	High	A -value	p-value
Below 30	58	10	106		
	[35.4%]	[12.2.0%]	[52.4.6%]		
30 to 40	32	45	90	C0 225	0.001*
	[18.1%]	[31.1%]	[50.8%]	68.235	0.001
Above 40	7	16	40		~
	[11.1%]	[25.4%]	[63.5%]		
Source: Primary data computed: * Significant at 1 per cent level:					

Source: Primary data computed; * Significant at 1 per cent level;

Table 3 explains the level of drivers behaviour based on the age of respondent. From the data, in the group of below 30 years old, 52.4 percent of the drivers are having high level of drivers Behaviour, 35.4 per cent are having low level of drivers Behaviour and rest of them are having moderate level of drivers Behaviour. In the case of 30 to 40 age group drivers, 50.8 percent of them perceive high level of drivers Behaviour, 31.1 percent of them experienced moderate level of drivers Behaviour and rest of them are having low level of drivers Behaviour.

In above 40 age groups, 63.5 percent are having high level of drivers Behaviour, 25.4 percent have moderate level of drivers Behaviour and rest of them have low level of drivers Behaviour.

Ho: There is no significant association between level of drivers Behaviour and age of the drivers

Chi-square test is applied to examine the above stated hypothesis. The calculated chi-square value is found to be 68.235 and p value is 0.001 which is significant at one percent level. Hence the hypothesis is rejected. It is found that all the age group is having higher level of driver's behaviour. Further it is identified that less than 30 years drivers are having higher level of behaviour than other age groups. Age was found to be significantly related to drivers behaviour.

Experience	Level of Drivers Behaviour		X ² -value		
	Low	Medium	High	X -value	p-value
Less than 5	82	20	167	65.976	0.001*
	[30.5%]	[7.4%]	[62.1%]		
5 to 10	8	28	29		
	[12.3%]	[43.1%]	[44.6%]		
Above 10	7	23	40		
	[10.0%]	[32.9%]	[57.1%]		

Table 4 Drivers Behaviour based on Experience

Source: Primary data computed; * Significant at 1 per cent level;

Table 4 explains the level of driver's behaviour based on the experience. From the table it is observed that the less than 5 years experience group, 62.1 percent of the drivers are having primary level drivers behaviour, 30.5 percent of chi-square analysis are having low level of drivers behaviour and rest of them are having moderate level of drivers behaviour. In the group of 5-10 years experiences, 44.6 percent of the drivers are experienced high level of drivers behaviour followed by moderate level (43.1%) and lower (12.3%) of drivers Behaviour. In the above 10 years of experience group, 57.1 percent of the drivers are having high level of driver's behaviour. 32.9 percent of them are having moderate level of drivers behaviour and rest of them are having low level of drivers behaviour.

Ho: There is no significant association between level of drivers Behaviour and experience of the respondents

In order to examine the above stated hypothesis, chi-square test is applied. The calculated chisquare value is found to be 65.976 and p value is 0.001 which, is significant a one percent level. Hence the hypothesis is rejected. It shows that drivers behaviour are having association with experience of the drivers. It is found that less than 5 years of experienced drivers and the above 10 years of experienced drivers are having high level of driver's behaviour. The less experience drivers are having high level of driver's behaviour. This is because they want to be job security, more salary, promotion and etc. At the mean time, more experienced drivers are also having better drivers Behaviour. Experience would make the drivers more confident in placing their demands for their prospects and organisation productivity as well.

CONCLUSION

The study attempts to examine the driver's behaviour and personal characteristics of drivers in Villupuram. It is found that all the age group are having higher level of drivers Behaviour. Further it is identified that less than 30 years drivers are having higher level of Behaviour than other age groups. Age is found to be significantly related to driver's behaviour. And also more experiences would understand the situation. Experience would make the drivers more confident in placing their demands for their prospects and organisation productivity as well. The design with such a consideration may provide a better traffic service to older drivers and improve the safety of older drivers. The implication of the study is to it was likelihood of crashes and fatalities when an adolescence drivers. And also the drivers fatigue is highly likelihood for making accidents.

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