CHAPTER – VI

SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 Summary of Findings

6.1.1 Socio-Economic Profile of Drivers

More than one-third of drivers (39.40 per cent) are in the age group of 20 – 29 years and more than one-third of drivers (37.00 per cent) have primary education. More than one-third of drivers (37.60 per cent) have occupation of sedentary and nearly half of drivers (45.60 per cent) have driving experience of less than two years, More than half of drivers (45.60 per cent) have used cars

6.1.2 Socio-Economic Profile of Drivers and Errors

The results show that 74.00 per cent of drives opined that the level of errors at moderate level followed by low level (14.80 per cent) and high level (11.20 per cent).

The chi-square value of 13.673 is significant at one per cent level indicating that there is significant association between age group of drivers and errors at one per cent level because 0.006. Hence, the null hypothesis of there is no significant association between age group of drivers and errors is rejected. It implies there is significance association with errors based on the age. It is further observed from the frequency that the error is decreasing with increase in age.

The chi-square value of 13.707 is significant at one per cent level indicating that there is significant association between educational qualification of drivers and errors. Hence, the null hypothesis of there is no significant association between educational qualification of drivers and errors is rejected. The higher the qualification the lower the error is observed.

The chi-square value of 13.676 is significant at one per cent level indicating that there is significant association between occupation of drivers and errors. Hence, the null hypothesis of there is no significant association between occupation of drivers and errors is rejected. It is least among students.

.The chi-square value of 28.559 is significant at one per cent level indicating that there is significant association between driving experience of drivers and errors. Hence, the null hypothesis of there is no significant association between driving experience of drivers and errors is rejected. More the experience lesser is the error.

The Chi-square value of 20.732 is significant at one per cent level indicating that there is significant association between vehicles used by drivers and errors. Hence, the null hypothesis of there is no significant association between vehicles used by drivers and errors is rejected. It is found that the error is high with lorry and cars compared to other vehicle drivers.

6.1.3 Socio-Economic Profile of Drivers and Lapses

The results indicate that 71.40 per cent of drives opined that the level of lapses at moderate level followed by low level (16.60 per cent) and high level (12.00 per cent).

The chi-square value of 1.557 is not statistically significant indicating that there is no significant association between age group of drivers and lapses. Hence, the null hypothesis of there is no significant association between age group of drivers and lapses is accepted. Age and lapses are not associated.

The chi-square value of 1.573 is not statistically significant indicating that there is no significant association between educational qualification of drivers and lapses. Hence, the null hypothesis of there is no significant association between educational qualification of drivers and lapses is accepted. Lapses are same among all categories.

The chi-square value of 0.369 is not statistically significant indicating that there is no significant association between occupation of drivers and lapses. Hence, the null hypothesis of there is no significant association between occupation of drivers and lapses is accepted. Lapses levels are same among all the categories.

The chi-square value of 4.478 is significant at one per cent level indicating that there is significant association between driving experience of drivers and lapses. Hence, the null hypothesis of there is no significant association between

driving experience of drivers and lapses is rejected. It was observed that when experience increased lapsed found to decrease.

The chi-square value of 3.917 is significant at one per cent level indicating that there is significant association between vehicles used by drivers and lapses. Hence, the null hypothesis of there is no significant association between vehicles used by drivers and lapses is rejected. Lapses wee high among car and lorry drivers.

6.1.4 Socio-Economic Profile of Drivers and Violations

The results reveal that 73.40 per cent of drives opined that the level of violations at moderate level followed by low level (13.60 per cent) and high level (13.00 per cent).

The chi-square value of 4.381 is significant at one per cent level indicating that there is significant association between age group of drivers and violations. Hence, the null hypothesis of there is no significant association between age group of drivers and violations is rejected. It was the highest with middle of experience drivers than their juniors and seniors.

The chi-square value of 5.002 is significant at one per cent level indicating that there is significant association between educational qualification of drivers and violations. Hence, the null hypothesis of there is no significant association between educational qualification of drivers and violations is rejected. It is found that the violation was highest among the lowest qualified drivers.

The chi-square value of 2.355 is not significant at five per cent level indicating that there is no significant association between occupation of drivers and violations. Hence, the null hypothesis of there is no significant association between occupation of drivers and violations is accepted. The violation attitude is the same among all the categories of drives

The chi-square value of 3.250 is significant at five per cent level indicating that there is significant association between driving experience of drivers and violations. Hence, the null hypothesis of there is no significant association between driving experience of drivers and violations is rejected. Violations were high among less experienced drivers.

The chi-square value of 7.602 is significant at one per cent level indicating that there is significant association between vehicles used by drivers and violations. Hence, the null hypothesis of there is no significant association between vehicles used by drivers and violations is rejected. It is found that violation is highest among car and lorry drivers.

6.1.5 Socio-Economic Profile of Drivers and Traffic Awareness

The results imply that 73.00 per cent of drives opined that the level of traffic awareness at moderate level followed by low level (14.80 per cent) and high level (12.20 per cent).

The chi-square value of 6.264 is significant at one per cent level indicating that there is significant association between age group of drivers and traffic

awareness. Hence, the null hypothesis of there is no significant association between age group of drivers and traffic awareness is rejected. It is seen from the frequency the traffic awareness is lower among elder people and youngsters are aware of it much better.

The chi-square value of 6.718 is significant at one per cent level indicating that there is significant association between educational qualification of drivers and traffic awareness. Hence, the null hypothesis of there is no significant association between educational qualification of drivers and traffic awareness is rejected. It is further observed that the traffic association is high with higher level of education.

The chi-square value of 4.970 significant at one per cent level indicating that there is significant association between occupation of drivers and traffic awareness. Hence, the null hypothesis of there is no significant association between occupation of drivers and traffic awareness is rejected. Sedentary group has the minimum level of awareness.

The chi-square value of 9.203 is significant at one per cent level indicating that there is significant association between driving experience of drivers and traffic awareness. Hence, the null hypothesis of there is no significant association between driving experience of drivers and traffic awareness is rejected. The awareness level is high with high experience.

The chi-square value of 6.869 is significant at one per cent level indicating that there is significant association between vehicles used by drivers and traffic awareness. Hence, the null hypothesis of there is no significant association between vehicles used by drivers and traffic awareness is rejected. Lory drivers have the least level of awareness.

6.1.6 Socio-Economic Profile of Drivers and their Driving Behaviour (Critical)

The results show that 49.80 per cent of drivers opined that the level of driving behaviour (Critical) at low level followed by moderate level (33.40 per cent) and high level (16.80 per cent).

The chisquare value of 11.053 is significant at one per cent level indicating that there is significant association between age group of drivers and driving behaviour (Critical). Hence, the null hypothesis of there is no significant association between age group of drivers and driving behaviour (Critical) is rejected. The critical behaviour increases with increase in age.

The chi-square value of 10.174 is significant at one per cent level indicating that there is significant association between educational qualifications of drivers and driving behaviour (Critical). Hence, the null hypothesis of there is no significant association between educational qualifications of drivers and driving behaviour (Critical) is rejected. The critical behaviour reduced with increase in educational level.

The chi-square value of 9.564 is significant at one per cent level indicating that there is significant association between occupations of drivers and driving behaviour (Critical). Hence, the null hypothesis of there is no significant association between occupations of drivers and driving behaviour (Critical) is rejected.

The chi-square value of 12.329 is significant at one per cent level indicating that there is significant association between driving experiences of drivers and driving behaviour (Critical). Hence, the null hypothesis of there is no significant association between driving experiences of drivers and driving behaviour (Critical) is rejected. Critical behaviour was observed to be low mainly in the least experienced person.

The chi-square value of 9.294 is significant at one per cent level indicating that there is significant association between vehicles used by drivers and driving behaviour (Critical). Hence, the null hypothesis of there is no significant association between vehicles used by drivers and driving behaviour (Critical) is rejected. The critical behaviour was found more among auto and lorry drivers.

6.1.7 Influence of Errors, Lapses, Violations and Traffic Awareness of Drivers on their Driving Behaviour (Critical)

The multiple determination (R^2) is 0.56 and adjusted R^2 is 0.54 indicating the regression model is moderately fit. It implies that 54.00 per cent of the variation in dependent variable (Driving Behaviour (Critical)) is explained by the

independent variables (Error, Lapses, Violations and Traffic Awareness). The F-value of 34.272 is significant at one per cent level revealing that the model is significant.

The results indicate that traffic awareness, errors and violation are significantly and positively influencing the driving behaviour (Critical) at one per cent level, while, lapses is negatively and significantly influencing the driving behaviour (Critical) at one per cent level. Therefore, the null hypothesis of there is no significant influence of errors, lapses, violations and traffic awareness of drivers on their driving behaviour (Critical) is rejected.

6.1.8 Socio-Economic Profile of Drivers and Dula Dangerous Driving Index

The results reveal that 70.60 per cent of drivers opined that the level of Dula dangerous driving index at moderate level followed by low level (17.20 per cent) and high level (12.20 per cent).

The chi-square value of 1.771 is not statistically significant indicating that there is no significant association between age group of drivers and Dula dangerous driving index. Hence, the null hypothesis of there is no significant association between age group of drivers and Dula dangerous driving index is accepted. The index is the same among all the age groups.

The chi-square value of 7.861 is significant at one per cent level indicating that there is significant association between educational qualification of drivers and Dula dangerous driving index. Hence, the null hypothesis of there is no

significant association between educational qualification of drivers and Dula dangerous driving index is rejected. The dangerous index was highest among illiterate.

The chi-square value of 5.427 is significant at one per cent level indicating that there is significant association between occupation of drivers and Dula dangerous driving index. Hence, the null hypothesis of there is no significant association between occupation of drivers and Dula dangerous driving index is rejected. The index was considerably high for business class and retired personnel.

The chi-square value of 6.702 is significant at one per cent level indicating that there is significant association between driving experience of drivers and Dula dangerous driving index. Hence, the null hypothesis of there is no significant association between driving experience of drivers and Dula dangerous driving index is rejected. The index was high with increase in experience.

The chi-square value of 4.428 is significant at one per cent level indicating that there is significant association between vehicles used by drivers and Dula dangerous driving index. Hence, the null hypothesis of there is no significant association between vehicles used by drivers and Dula dangerous driving index is rejected. The index was high among the drivers of van, auto and lorry.

6.1.9 Relationship between Errors, Lapses, Violations and Traffic Awareness of Drivers

The correlation co-efficient between errors and lapses is moderately and positively associated with each other at one per cent level of significance. The errors and violations are moderately and positively correlated with each other at one per cent level of significance.

The correlation co-efficient between lapses and violations is moderately and positively associated with each other at one per cent level of significance. The lapses and traffic awareness is poorly and negatively correlated with each other at one per cent level of significance.

The correlation co-efficient between violations and traffic awareness is poorly and negatively associated with each other at one per cent level of significance. Hence, the null hypothesis of there is no significant relationship between errors, lapses, violations and traffic awareness of drivers is rejected.

6.1.10 Socio-Economic Profile of Drivers and Self Reported Speeding Behaviour

The results reveal that 64.20 per cent of drivers opined that the level of self reported speeding behaviour at moderate level followed by low level (23.00 per cent) and high level (12.80 per cent).

The Chi-Square value of 34.643 is significant at one per cent level indicating that there is significant association between age group of drivers and

self reported speeding behaviour. Hence, the null hypothesis of there is no significant association between age group of drivers and self reported speeding behaviour is rejected.

The Chi-Square value of 25.772 is significant at one per cent level indicating that there is significant association between educational qualification of drivers and self reported speeding behaviour. Hence, the null hypothesis of there is no significant association between educational qualification of drivers and self reported speeding behaviour is rejected.

The Chi-Square value of 29.094 is significant at one per cent level indicating that there is significant association between occupation of drivers and self reported speeding behaviour. Hence, the null hypothesis of there is no significant association between occupation of drivers and self reported speeding behaviour is rejected.

The Chi-Square value of 30.486 is significant at one per cent level indicating that there is significant association between driving experience of drivers and self reported speeding behaviour. Hence, the null hypothesis of there is no significant association between driving experience of drivers and self reported speeding behaviour is rejected.

The Chi-Square value of 40.832 is significant at one per cent level indicating that there is significant association between vehicles used by drivers and self reported speeding behaviour. Hence, the null hypothesis of there is no

significant association between vehicles used by drivers and self reported speeding behaviour is rejected.

6.1.11 Socio-Economic Profile of Drivers and Propensity for Aggression

The results imply that 68.20 per cent of drivers opined that the level of propensity for aggression at moderate level followed by low level (18.60 per cent) and high level (13.20 per cent).

The Chi-Square value of 34.643 is significant at one per cent level indicating that there is significant association between age group of drivers and propensity for aggression. Hence, the null hypothesis of there is no significant association between age group of drivers and propensity for aggression is rejected.

The Chi-Square value of 16.640 is significant at five per cent level indicating that there is significant association between educational qualification of drivers and propensity for aggression. Hence, the null hypothesis of there is no significant association between educational qualification of drivers and propensity for aggression is rejected.

The Chi-Square value of 24.534 is significant at one per cent level indicating that there is significant association between occupation of drivers and propensity for aggression. Hence, the null hypothesis of there is no significant association between occupation of drivers and propensity for aggression is rejected.

The Chi-Square value of 27.857 is significant at one per cent level indicating that there is significant association between driving experience of drivers and propensity for aggression. Hence, the null hypothesis of there is no significant association between driving experience of drivers and propensity for aggression is rejected.

The Chi-Square value of 39.249 is significant at one per cent level indicating that there is significant association between vehicles used by drivers and propensity for aggression. Hence, the null hypothesis of there is no significant association between vehicles used by drivers and propensity for aggression is rejected.

6.1.12 Structural Relationship Between of Errors, Lapses, Violations, Traffic Awareness, Self Reported Speeding Behaviour, Propensity for Aggression, Dula Dangerous Driving Index and Driving Behaviour of Drivers

The results indicate that the standardized coefficient for Dula Dangerous Driving Index (DDDI) against Violations (VIA) is 0.377 and the standardized coefficient for Dula Dangerous Driving Index (DDDI) against Self Reported Speeding Behaviour (SRSB) is 0.608 and the standardized coefficient for Dula Dangerous Driving Index (DDDI) against Propensity For Aggression (PFA) is 0.342 and the standardized coefficient for Dula Dangerous Driving Index (DDDI) against Errors (ERR) is 0.362 and these values are significant at one per cent level. Therefore, it is inferred that violations, self reported speeding behaviour,

propensity for aggression and errors are directly and positively influencing the Dula dangerous driving index of drivers. Meanwhile, the standardized coefficient for Dula Dangerous Driving Index (DDDI) against Traffic Awareness (TAWA) is -0.432 and it is significant at one per cent level. It reveals that traffic awareness is directly and negatively influencing the Dula dangerous driving index of drivers.

Besides, the standardized coefficient for Driving Behaviour (DB) against Dula Dangerous Driving Index (DDDI) is -0.750 and it significant at one per cent level. Hence, it is inferred that Dula dangerous driving index is directly and negatively influencing the driving behaviour of drivers.

Hence, the null hypothesis of there is no significant structural relationship between errors, lapses, violations, traffic awareness, self reported speeding behaviour, propensity for aggression, Dula dangerous driving index and driving behaviour of drivers is rejected.

6.1.13 Alcohol Consumption

Two-fifth of drivers (40.60 per cent) opine that peer pressures is the main reason for consuming alcohol and nearly half of drivers (49.80 per cent) consume alcohol 3-5 times a week. Nearly one-third of drivers (28.80 per cent) have 5-6 drinks and nearly one-third of drivers (29.60 per cent) have 3-5 times having 5 or more drinks at a sitting.

More than half of drivers (58.80 per cent) have ability to stop drinking when they want and more than half of drivers (58.60 per cent) are ever passed out

or experienced memory loss due to drinking. Two-third of drivers (66.60 per cent) are driving after drinking and two-third of drivers (66.80 per cent) have drink to feel good/ to function better.

Half of drivers (51.80 per cent) have history of alcohol or drug problems in their family and more than three-fifth of drivers (61.00 per cent) are violent or aggravated while drinking. More than three-fifth of drivers (63.40 per cent) have drinks to escape pain, either physical or emotional. Nearly three-fifth of drivers (59.40 per cent) end up at the hospital as a result of drinking and nearly two- third of drivers (62.60 per cent) are arrested, even for a few hours because of drunken behaviour and nearly two-third of drivers(64.00 per cent) are arrested for drunk driving (DUI or DWI).

6.2 Suggestions

On the basis of findings, the following are suggested to improve driving behaviour of drivers.

The drivers should notice traffic signals and obey traffic rules strictly. At the same time, the drivers must not violate the traffic rules and drive safely. The drivers should aware of traffic signs, speed limits and safety measures in order to avoid unnecessary accidents and they should not use mobile phones during driving.

The drivers should not be tensed, irritated, nervous, aggressive and anger while driving and they should also not drive vehicles after drinking or consuming

alcohol. The drivers must drive vehicles within prescribed speed limits in certain specific areas.

The Government and NGOs should involve in creating awareness among drivers about, traffic rules, road and driver safety programmes through campaign via various media, road shows, pamphlets, poster campaigns and community outreach activities such as large-scale publicity events. Proper road safety strategies should be improved and implemented efficiently and heavy penalty should be imposed for violations of rules and regulations of driving.

The transport police and health personals should be coordinated and implement road safety measures comprehensively in to avoid accidents. The refresher course or skill associated driving training programme should be given to drivers periodically to enrich their skills and knowledge and also to avoid rash driving and accidents. Besides, the drivers should give up their bad habits.

The study suggests establishing Driver Training and Testing Group which will monitor the licensing process and upgrade this system time to time. In addition, penalty, traffic law enforcement per se needs to be made more visible, as the perception of a likelihood of being caught is a much stronger deterrent than the severity of penalty.

The findings also suggest making road safety a political priority, and highlights recommendations with regard to policy, legislation and enforcement, and development of institutional capacity to improve road safety.

6.3 Scope for Future Research

1. The future study may be carried out on personality factors in the perception of traffic signs and driver violations and accidents.
2. A separate study on the effects of trait driving anger and stimuli on aggressive driving behaviour may be studied in future research work.
3. The influence of psychosocial and physical factors on risky behaviour of young drivers may be alone examined in future research work.
4. The further study may be carried out to examine women driver's behaviour and accidents.
5. The attitudinal predictors of interpersonally aggressive violations of drivers on the road may be studied in future research work.

6.4 Conclusion

Nearly three-fourth of drives opined that the level of errors,lapses and violations are at moderate level. Nearly half of drivers opined that the level of driving behaviour (Critical) at low level and there is significant difference between socio-economic profile of drivers and their driving behaviour (Critical). Nearly three-fourth of drives opined that the level of Dula dangerous driving index at moderate level The errors and lapses are moderately and positively associated with each other and the errors and violations are moderately and positively correlated with each other. Nearly two-third of drivers opined that the level of self reported

speeding behaviour at moderate level .Majority of drivers opine that peer pressures are the main reason for consuming alcohol and most of drivers consume alcohol 3-5times a week. Majority of drivers have 5-6 drinks and most of drivers have 3-5 times having 5 or more drinks at a sitting. Majority of drivers have ability to stop drinking when they want and most of drivers are ever passed out or experienced memory loss due to drinking.

The violations, self reported speeding behaviour, propensity for aggression and errors are directly and positively influencing the Dula dangerous driving index of drivers and traffic awareness is directly and negatively influencing the Dula dangerous driving index of drivers. Besides, Dula dangerous driving index is directly and negatively influencing the driving behaviour of drivers