

## ACCIDENT PREDICTION MODEL FOR PASSENGER CARS

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### ABSTRACT

*Presently about 40% of the vehicles plying on the roads of Lahore consist of passenger cars. The quantity of passenger cars is on rise with of time. This huge quantity of passenger cars necessitates the need to study the mechanical state of cars and behaviour of car drivers towards safety. For this purpose a questionnaire comprising more than 100 vehicular and drivers characteristics of passenger cars was prepared to conduct a field survey at 100 locations of a sample of 3,800 passenger cars. Statistical analyses using SPSS software was done to identify the most significant vehicular and drivers characteristics contributing to annual number of accidents by each car driver. An attempt is also made to develop an accident prediction model (APM) using linear multiple regression technique to estimate the annual number of accidents per car driver relating to the most significant vehicular and driver's characteristics of the passenger cars.*

*Keywords: passenger cars, accidents, Lahore, vehicular characteristics, driver's characteristics, accident prediction model.*