Contributing Factors of Louisiana Teenage Driver Injury Levels in Motor Vehicle Crashes

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The purpose of this experiment is to analyze teen driver crashes in the state of Louisiana by using statistical tests and creating a dashboard to illustrate the following purposes: purpose A. age, purpose B. time of day, purpose C. day of week, purpose D. gender, purpose E. protection system use, purpose F. alcohol use, and purpose G. vehicle year. The hypothesis for these purposes is that each independent variable will influence the number of crashes involving young drivers in Louisiana. The data was collected from the Highway Safety Research Group of Louisiana State University in an Excel file that was used to perform an f-test and a t-test for each independent variable. The data was also transferred into Tableau to create charts and graphs for each element and then converted into a dashboard encompassing these charts and graphs. All of the independent variables from the statistical test proved to be statistically significant; each elements does influence the number of crashes involving young drivers in Louisiana. When analyzing the data using the dashboard, it is easy to identify that most crashes occur between the hours of 12 p.m. to 6 p.m. every day with Friday having the most. Alcohol influences seatbelt usage. More males drive cars manufactured before the year 2000 than females. Females are more likely to wear their seatbelts while under the influence of alcohol than males. The results found can help change young drivers' behavior to limit the number of crashes in Louisiana.

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