

TITLE: The Identification of Multiple Accident Correlates in High Risk Drivers with Specific Emphasis on the Role of Age, Experience & Prior Traffic Violation Frequency

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PROJECT OBJECTIVE:

To summarize the state of current knowledge on multiple risk factors among driver accident correlates.

SUMMARY:

This paper reviews a number of studies which have attempted to isolate driver accident risk correlates through multivariate and multiple regression techniques. Rather than evaluating single risk factors, multivariate approaches evaluate the interrelation among multiple risk factors and attempt to establish the relative predictive power of each variable within the context of a larger set of variates. The review is limited to studies of general (non-commercial) driver populations.

It is shown that no single variable, or set of variables, can accurately predict the subsequent accident involvement rates of individual drivers. This limitation is largely due to the stochastic nature of traffic accidents. However, a large number of driver characteristics affect the likelihood of a driver's accident involvement, and these relationships can be used to make actuarial predictions. Among the most consistent predictors of increased risk are: a prior history of accidents and traffic convictions; being young; being male; being inexperienced; being from a lower socioeconomic status (SES) background; increased exposure (e.g., high mileage); poor social adjustment (e.g., poor school performance, criminality, family disorganization); and certain attitudinal and personality traits. A hypothetical schema is presented for integrating the preceding relationships into a comprehensive explanatory model.

IMPLEMENTATION STATUS OF FINDINGS AND RECOMMENDATIONS:

Not applicable.

SUPPLEMENTARY INFORMATION:

This paper was presented at the annual International Symposium on Alcohol, Drugs and Driving, Santa Monica, California, May 6-9, 1993. It was subsequently published in *Alcohol, Drugs and Driving*, 9(3-4), 145-166, 1993.