

TITLE: A Position Paper on Accident Proneness and Driver-Oriented Safety Models

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AUTHOR(S): Raymond C. Peck & Ronald S. Coppin

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PROJECT OBJECTIVE:

To advance the state of knowledge regarding accident proneness theory.

SUMMARY:

The authors took the approach that people do vary in accident proneness, and that there are numerous human factor variables which interact to influence the probability of an individual's being involved in an accident. In addition, some of the sources of variation are transitory whereas others are more persistent, although even the latter vary within subjects over time and across context.

The optimum research paradigm from their standpoint was to view accidents and driving as a problem in systems analysis, in which the driver is one component and variable in a drive-task system. It was noted that such a model would permit one to talk not only of accident-labile drivers, but also of accident-labile vehicles and accident-labile systems. In such a system, certain drivers might be prone to certain types of accidents only under certain conditions. For example, a driver with poor glare recovery might be predisposed only to night accidents on open highways.

Despite the many complexities inherent in person-centered accident liability models, the report noted that differences in proneness have been convincingly demonstrated by many investigators and these differences take on increasing significance under conditions of high exposure (e.g., high mileage, dense traffic, etc.).

IMPLEMENTATION STATUS OF FINDINGS AND RECOMMENDATIONS:

Not applicable.

SUPPLEMENTARY INFORMATION:

Published in *Accident Proneness*, Shaw, L. and Sichel, H., 1971, 232-236, Pergamon Press.