

TITLE: Evaluation of Third-Party Drive Testing of Passenger Vehicle Operators

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PROJECT OBJECTIVE:

To compare the driving records of passenger vehicle (PV) operators who passed a third-party (DL 170) drive test with those of PV drivers who passed a drive test administered by Department of Motor Vehicles (DMV) or California Highway Patrol (CHP).

SUMMARY:

This study analyzed the driving records of drivers who in 1989 were issued a Class A or B (heavy vehicle) license and a PV endorsement, and who had not previously held a Class 1 or 2 license (i.e., a heavy-vehicle license issued prior to implementation of California's Commercial Driver Licensing program on January 1, 1989). Analysis of covariance (ANCOV A) was used for the analysis because it enabled the criterion measures for the two groups to be statistically adjusted for group differences on gender, age, percent holding a Class A license, and I-year prior accidents and convictions. The DL 170 group was found to have a significantly ($p < .05$) higher rate of total accident involvements in which they were operating a heavy vehicle than did the DMV / CHP group during the 2-year period subsequent to PV endorsement issuance date, both with and without the statistical adjustments (which made only negligible changes in group means). However, the two groups did not differ significantly on unadjusted or adjusted rates of fatal/ injury accident and conviction involvements in which they were operating a heavy vehicle during this 2-year period.

The worse showing of the DL 170 group on total accidents may have been due to an accident reporting bias. That is, this group may have been more likely than the DMV / CHP group to have driven heavy vehicles insured by an employer during the criterion period, and therefore to have reported a higher proportion of property-damage-only accidents in these vehicles to DMV. Fatal/ injury accident rates would have been relatively unaffected by such a reporting bias.

A related hypothesis is that the poorer showing of the DL 170 group may have been caused simply by their driving more in heavy vehicles during the criterion period, as a consequence of having been hired sooner than were drivers taking their endorsement test at DMV or CHP. (However, under this hypothesis, it would be expected that their conviction rate would be higher as well.)

Because this study was quasi-experimental in nature--subjects were not randomly selected and assigned to one or the other type of drive testing--no cause-and-effect relationship can be inferred from the study findings. The results could be due largely to self-selection biases associated with unknown and uncontrolled relevant driver characteristics or to characteristics involving the quantity and quality of heavy-vehicle driving. However, the results do support a statistical association between risk and type of testing in the case of drivers obtaining a PV endorsement.

IMPLEMENTATION STATUS OF FINDINGS AND RECOMMENDATIONS:

None.

SUPPLEMENTARY INFORMATION:

None.