

REPORT OF COMMITTEE ON TRAFFIC

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PSYCHOLOGICAL TESTS OF DRIVERS

By W A VAN DUZER

Last year a preliminary report was submitted of the results of a psychological study which was being made of motor vehicle drivers¹. This report adds the additional information acquired since that time.

As we go more deeply into this subject we are impressed with the complexity of the problems which are involved in the initial licensing of automobile operators, not only with respect to measurement of ability to drive, but also with respect to the need for securing the collaboration of all the various jurisdictions associated with the automotive problem. The one thing which seems obvious is the need for a greatly expanded program.

There are many factors involved in the operation of the automobile. Although the manufacturers are endeavoring to make cars almost automatic the human equation must still be considered.

These studies thus far convince us that the more factors we can measure the better will be our prediction as to how a person will succeed in the operation of his car. If it were possible, we would like to know three things about a person before he is allowed to drive:

- 1 Is he physically and mentally able to control a motor vehicle and to realize readily the hazards of the highway?
- 2 Will he be able to form proper driving habits?
- 3 Does he know the motor vehicle laws, regulations and rules of the road?

The results of the short answer tests, as used in the licensing of automobile drivers, are self-explanatory. Only a few States use them. The reasons for this are, first, they are difficult to make up and, second, they have never been adequately checked to prove their worth. From the work thus far carried on, we are lead to the conclusion that written examinations are superior to oral tests.

The most important features brought out by this study on the short answer written test are:

- 1 Time saving. In twenty minutes, rules of the road, judgment, information on motor vehicle laws and driving technique can all be tested in the short answer forms.

¹ Proceedings, Highway Research Board, Vol 13, p 348

2 The test was valid, reliable and objective

3 It may be used as a record

4 Alternate forms can be made to avoid coaching

5 Its use is justified in the initial selection of automobile drivers

A driver's reaction time, as measured by the Brown Chronoscope, probably has a definite relation to his ability to drive a motor vehicle safely. The driver whose reaction time is slow shows a tendency to have the most accidents. From the results thus far obtained it appears that reaction time is an important factor in the initial licensing of drivers and that this test should be used periodically, even on drivers who have been driving for years, especially if they have accidents.

Of 124 applicants whose average reaction time was 0.2 second, 78 were without a record. These 78 cases had an average reaction time of 0.18 second. Forty-six cases had a record, and these had an average reaction time of 0.225 second. Thirty-three, or 72 per cent, of those having a record had an average reaction time above 0.20 and 13 had an average reaction time below 0.20.

Of the 220 persons taking the short answer test, 144 had no record, and the average score was 38. Fifty-one of these were below average and only 10 were in the lower 25 per cent. There were 76 who had records. Their average score was 30. Thirteen, or 17 per cent, of the 76 had scores above the average and 63, or 83 per cent, were average or below.

PROGRESS IN STUDY OF DRUNKEN DRIVING

By BURTON W. MARSH

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Last year Dr. W. R. Miles of the Yale Institute of Human Relations presented an excellent paper on Alcohol and Motor Vehicle Drivers.¹ Since that time we have seen Repeal go into effect and have had practically a year's experience with it.

Some months ago the American Automobile Association decided to institute a study of "Drunken Driving." The first part of the study was an analysis of penalties which may be imposed in the various states and a discussion of existing laws on the subject. It is interesting to know that fines for drunken driving may vary from one cent—assuming that to be the minimum assessable fine—to \$300, and jail sentences from one day—assuming that to be the minimum jail sentence—to five years.

This wide variance in penalties is but one indication of the fact that opinion on this important subject varies greatly. Our analysis of the laws brought out a number of other significant points, one of which was

¹ Proceedings, Highway Research Board, Vol. 13, p. 362.