

Personal Characteristics of Chronic Violators And Accident Repeaters

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● THE New Jersey Accident Prevention Clinic was set up by the Division of Motor Vehicles in October of 1952. Its purpose was to test and examine poor drivers of various types, as indicated by New Jersey's point system and other data; to identify personal characteristics associated with their driving records; and to inform the drivers examined of any important deficiencies noted. The Center for Safety Education at New York University was invited to provide technical guidance in this program.

In more than two and a half years of operation, well over 5,000 referrals were interviewed and tested at the clinic. Of this number, complete and usable IBM record cards were obtained for 941 accident repeaters, 809 chronic violators, and 424 control subjects with good driving records (the latter to provide a basis for evaluating test results for the chronic violators and accident repeaters).

For justifiable conclusions, it was necessary to equate the three groups with respect to driving exposure, education, and income, and to control for age differences, so that any significant test findings might be attributed to basic differences between the groups rather than to the variables mentioned. As a result of this equating, the study populations were further reduced to 375 chronic violators, 133 accident repeaters, and 124 control subjects. Thus, the final total of 632 cases represents carefully selected samples of the original populations. All of these cases are between 26 and 57 years of age. Some 450 cases under 26 years will be the subject of a special report at a later date.

In the present report, then, the concern is with the significance of the findings for basically comparable groups of "good" and "bad" drivers between 26 and 57 years of age. The test of significance in all cases was the statistical device known as chi square, except that critical ratios were employed in evaluating reaction time data. Wherever the term "significant" is used, it refers to a confidence level of 5 percent or better. The findings were as follows:

<u>Function(s) Examined</u>	<u>Finding</u>
Simple reaction time	No significant difference between control subjects, chronic violators, and accident repeaters in 5 out of 8 comparisons of subjects by age groupings ¹ ; two such comparisons favored the control subjects, one the accident repeaters.
Complex reaction time	No significant difference between control subjects and chronic violators in 7 out of 8 age-group comparisons.
Glare recovery time	Mixed results throughout, probably due to test invalidity. The test produced a tri-modal distribution (clusters of good, fair, and poor scores) for all three categories of subjects.
Depth perception (day and night tests)	No significant difference between control subjects, chronic violators, and accident repeaters, probably because of questionable test validity.
Field of vision	Control subjects significantly better than chronic violators in one or the other eye; no significant difference between control subjects and accident repeaters.
Visual acuity	No significant differences were noted between control subjects and accident repeaters. However, chronic violators as a group had significantly better visual acuity than the control subjects as a group!

¹ 26-33, 34-41, 42-49, and 50-57 years of age.

Function(s) Examined

Personal adjustments and personality trends (Sacks Sentence Completion Test)

Finding (continued)

There were found in this highly complex and difficult field of testing, 11 significant differences that tended to favor control subjects over accident repeaters, compared to 3 favoring accident repeaters over control subjects. However, 14 significant differences were found that tended to favor chronic violators over control subjects, compared to 2 that favored control subjects over chronic violators! Outstanding areas of difference in these two sets of comparisons included: attitude toward parents, guilt feeling, fears, and reality level.

Comment: Originally, it was reasoned that in general the control subjects would be better adjusted in their everyday living than the accident repeaters and chronic violators. Since the literature strongly supports this hypothesis, the mixed findings just noted suggest that the Sacks test is not suitable for these particular purposes because of inherent subjectivity—or else chronic violators tend to respond to such test items in some peculiarly defensive manner.

A few other findings of interest were derived from intake interviews and biographical questionnaires. It was thus ascertained that 93 percent of the control subjects were married as compared to only 73 percent of the chronic violators and 79 percent of the accident repeaters. The differences, though not very large, are statistically significant.

Another finding of importance related to job stability. Intake interviews and questionnaires showed that control subjects have been significantly more stable in this respect (that is, did less job-changing) than chronic violators during the five-year period preceding their examination at the clinic. However, no significant difference was noted between control subjects and accident repeaters.

Three general conclusions can be drawn from these findings and from supporting findings of other research studies:

1. The problem of safe, lawful, and courteous driving is primarily a problem of emotional makeup and social adequacy. So-called psychophysical functions (reaction time, glare recovery time, etc.) do not, per se, differentiate between good and bad drivers. The latter may excel in these functions in many instances, while the former may occasionally be inferior without jeopardy to their driving records.

2. With regard to the psychological (as distinguished from the psychophysical) factors noted above, other research studies indicate that the following specific characteristics tend to be evidenced by chronic violators and accident repeaters: They are apt to be aggressive and intolerant of others. They tend to resent authority. They are inclined to have an exaggerated opinion of their importance and their abilities. They are likely to be lacking in responsibility and often act impulsively, on the spur of the moment. The basis for such characteristics is likely to be obscure. Just as eight-ninths of an iceberg lies below the surface of the water, most of the factors and forces that shape an individual's personality are hidden in his background, often in early childhood experience.

3. Obviously, here is an extremely difficult and complicated problem. It is not surprising, therefore, that work at the New Jersey Clinic and similar work elsewhere have not produced simple formulas for detection or correction of problem drivers. While the general importance of personal adjustments and personality trends are indicated, it cannot be said with assurance: use this or that test in screening drivers for licensing purposes or in driver reexamination. But the development of such tests remains one of the prime needs and objectives. Experiments toward that end will be continued.