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THE ACCIDENT-PRONE DRIVER: THE
AUTOMOTIVE AGE'S BIGGEST
UNSOLVED PROBLEM*

FRANK E. MALONEY and WILLIAM J. RISH**

Studies of the causes of accidents reveal that certain individuals are much more likely to be involved in accidents than the average member of the public. Such individuals are commonly referred to as "accident-prone." Accident proneness, of course, may be found in a number of activities and locations, including the home, industry, and sports, as well as the operation of motor vehicles.¹ Industry has taken effective steps to minimize accidents in plants and factories, no doubt because of the positive correlation between accidents and profits as well as from humanitarian motives. Society has not been so responsive to the problem created by accident-prone drivers. More effort should be expended to remedy the needless waste and suffering caused by accident-prone automobile operators. The importance of helping these individuals is immediately grasped when one considers the high probability that accidents in this area may involve other members of the public. Almost forty per cent of the deaths caused by automobile accidents in 1960 resulted from collisions between two or more vehicles.² This figure does not include the running-down of pedestrians or the killing of passengers when an automobile leaves the road.

This article will be limited to accident proneness of automobile drivers, except for occasional references to parallel problems in industry and the home. Within these limits, it is planned (1) to analyze briefly the causes of automobile accidents and to point up the relationship between accident rates and accident proneness of the individual driver; (2) to discuss various factors entering into the complex picture of accident proneness, including, but not limited to, age and experience, defective operating habits and skills, and mental characteristics and attitudes; (3) to analyze the present legal and

*A part of the research for this article was done in preparation for a symposium on Automobile Accidents at the Eighty-Fifth Annual Meeting of the Florida Medical Association and was published in 47 J. FLA. MED. ASS'N 31 (1960). The complete article was presented by Dean Maloney at the Ninth Annual Institute of the College of Law, Florida A. & M. University, on March 3, 1962, as part of a two-day institute on Recent Trends in Torts.

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1. Henderson, *Accident-Proneness*, 3 LAWYERS' MEDICAL CYCLOPEDIA §18.4 (1959).

2. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS 1961, 42.

societal approach to the problem; and (4) to offer some tentative suggestions for decreasing the number of accidents resulting from accident proneness.

AUTOMOBILE ACCIDENTS AND THE ACCIDENT-PRONE DRIVER

Before exploring the causes of motor vehicle accidents, it might be well to consider the epidemic proportions such accidents have reached in the last few years. The waste of lives and property was dramatically emphasized by an Air Force study revealing that at the height of the Korean War more Air Force personnel were being injured or killed in automobile accidents than by enemy action. Further investigation indicated that this was true for the other military services. The injuries were not only more numerous but were also apparently more serious, since a longer period of hospitalization was required for the accident victim than for the battle casualty.³ During 1960, 38,200 persons were killed and 3,078,000 were injured as the result of automobile accidents.⁴ About one half of the injuries were disabling beyond the day of the accident.⁵ Stated differently, traffic accident casualties in 1960 exceeded all casualties in the armed services during World War I and World War II. Injuries during the same year represented a number in excess of the combined populations of Colorado, Delaware, Nevada, New Hampshire, Vermont and Wyoming.⁶ Florida, with its myriad tourist attractions and beckoning highways, had more than its share of traffic accidents, with 1,245 deaths and 44,433 injuries resulting from motor vehicle accidents.⁷

The major causes of automobile accidents are improper driving, alcohol, and faulty mechanisms such as brakes or lights. A recent analysis⁸ indicated that ninety per cent of all *fatal* motor vehicle accidents were attributable to improper driving, about eight per cent to alcohol, and less than two per cent to faulty mechanisms. In the largest category — improper driving — excessive speed was the major cause in thirty-one per cent of all fatal accidents, and driving left of the center line was a factor in fifteen per cent. Other important causes were running stop signs, failing to yield the right of way, disregarding traffic signals, and improper passing. Improper driving also caused more than ninety per cent of the *non-fatal* accidents.⁹ The

3. Moynihan, *Epidemic on the Highways*, The Reporter, April 1959, p. 16.

4. INSURANCE INFORMATION INSTITUTE, INSURANCE STATISTICS 1961, 32.

5. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS 1961, 40.

6. INSURANCE INFORMATION INSTITUTE, INSURANCE STATISTICS 1961, 21.

7. FLA. DEP'T OF PUBLIC SAFETY, SUMMARY OF MOTOR VEHICLE TRAFFIC ACCIDENTS IN FLORIDA (1960).

8. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS 1960, 52.

9. *Ibid.*

most important factors were failure to yield the right of way, speeding, and following too closely, which accounted for approximately twenty-one per cent, seventeen per cent, and thirteen per cent, respectively.

Statistics indicate that, in a ten-year period, seventy per cent of all drivers have no accidents and about twenty-five per cent have one or two accidents.¹⁰ Studies of these groups would doubtless be rewarding. This article, however, will be limited to an analysis of the relatively small group that causes an even more disproportionate share of all motor vehicle accidents.

One study has attributed one third of all automobile accidents to a mere four per cent of drivers.¹¹ Other studies, although agreeing that from two to four per cent of all drivers are accident prone, attribute as low as fourteen per cent of all accidents to them.¹² Either set of statistics is alarming. Is it possible to determine the causes of the accident proneness of these drivers and to devise means to cope with the problem?

It may be well to point out initially that the mere fact of having more than one accident proves nothing about an individual driver. Chance alone will result in some drivers having more accidents than the average, and studies have shown that ten per cent or more of the accident repeaters are not accident prone.¹³ This article will be concerned with the remaining ninety per cent of the accident repeaters who exhibit accident-prone traits.

SOME FACTORS CONTRIBUTING TO ACCIDENT PRONENESS

The multifariousness of causes of accident proneness has led one writer to say:¹⁴ "It would demonstrate gross ignorance to presume that a simple system can be devised for ready identification of accident-prone individuals. There are too many causes of injury proneness." This statement suggests the problem involved in the selection of factors to be treated in this article. To provide more complete coverage of the topics that, in the writers' views are most important, such factors as physical defects and psychomotor characteristics are given only passing comment.

Age

Age is the most outstanding characteristic associated with frequency of accidents. Any classification of accidents will show that persons

10. LAUER, *THE PSYCHOLOGY OF DRIVING* ix (1960).

11. *Ibid.* See also Blain, *The Automobile Accident — A Medical Problem*, 3 J. CRIM. PSYCHOPATHOLOGY 272, 275 (1941).

12. Johnson, *The Detection and Treatment of Accident-Prone Drivers*, 43 PSY. BULL. 489, 500 (1946).

13. *Ibid.*

14. McLean, *Accident Proneness — A Clinical Approach to Injury-Liability*, 24

under twenty-five and over sixty-five are likely to have more than their share. Young drivers have consistently accounted for more than twice the number of accidents warranted by the number of drivers in their group.¹⁵ Curiously, during the first six years of driving, the record of the young male driver gets progressively worse, while during the same period the record of the female driver improves.¹⁶ The pattern of the male driver is perhaps as much the result of exuberant attitudes as of lack of skill. His record tends to level off at about age twenty-five; then it remains relatively stable until age sixty or sixty-five, when accidents again increase.¹⁷ The record of the female driver also levels off at about age twenty-five, and remains fairly constant to approximately age thirty-five. At this age there is a slight increase in the accident rate. The rate then remains constant to about age fifty, when it is again accelerated. One writer suggests that the rise at age thirty-five may be attributable to family worries, children riding in the car, or certain physiological factors.¹⁸

One of the writers of this article participated in a survey of reported accidents on a college campus.¹⁹ Of 7,400 automobiles registered on campus, more than 5,400 — or in excess of seventy-three per cent — were registered in the names of students. Despite the high ratio of cars registered by students, it was found that less than one half of the accidents were caused by student drivers. Firm conclusions cannot be drawn from this isolated study, but such figures certainly raise some questions to be considered in further studies of this general age group. Is it possible that on a campus students drive more carefully because of the likelihood of becoming "involved" with the administration in case of an accident? Or does slower driving alone account for the difference, even though the young driver seemingly takes as many chances on the campus as on the open highway? If the latter is the answer, the inference may be that the young driver is actually more skilled or has better psychomotor reactions than older drivers, but that these superior skills are not sufficient to extricate him from emergencies when traveling at a high rate of speed. One might hastily discard this study by saying that college students, in so far as intelligence and other factors are concerned, are not typical of young drivers as a whole. As will be pointed out in a subsequent section, however, recent studies indicate that intelligence alone is a

INDUS. MED. & SURG. 121, 122 (1955).

15. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS 1961, 54.

16. LAUER, THE PSYCHOLOGY OF DRIVING 28 (1960).

17. *Id.* at 29.

18. *Ibid.*

19. Campus Police Dep't of the University of Florida, Summary of Campus Automobile Accidents: Jan. 1, 1954 — Apr. 21, 1955, Report to University of Florida Campus Safety Committee (Dean Maloney, Chairman). A parallel study of campus accidents in 1960 tends to confirm the more complete study of 1954-55.

poor measure for determining the safest drivers. In the absence of further studies to explain the discrepancy between the student group examined and the average young driver on the public highways, it seems anomalous that these young people should have such a fine record while driving on campus and yet become such a detriment to the public as soon as they leave this restricted environment. The study does suggest, however, that under proper supervision young drivers might become one of the safest groups instead of the most hazardous.

Older citizens also have a disproportionate number of accidents, although not to the same extent as young drivers.²⁰ With the older group, the causes are more likely to be physical, such as deterioration of vision or the slowing down of physical reactions. Methods of identifying these defects among the aged must be devised through some type of re-examination. One state initiated a program under which every driver sixty-five or older who was involved in a reportable accident would have to submit to examination. Barely one third of these drivers were able to pass the examination.²¹ Such a program need not necessarily deprive senior citizens of all driving privileges; it might be restrictive rather than prohibitory, and driving might be permitted only in certain areas or at particular times of day when the danger to these citizens themselves as well as to others would be minimized.

Experience

It has been said that inexperience is one of the causes of accident proneness.²² Such a categorical statement seems suspect when accident percentages attributable to persons who may be considered inexperienced are taken into account. A recent study revealed that over ninety-six per cent of the accidents in 1961 were caused by persons who had been driving longer than one year.²³ It is to be expected that experienced drivers will cause considerably more accidents than the inexperienced because of the differences in the sizes of the two groups. No studies were found that compared experienced to inexperienced drivers on the basis of the total number of miles driven, which would be the only adequate way to evaluate experience as a factor in acci-

20. In 1960 the percentage of accidents appearing in the age group of sixty-five to sixty-nine increased substantially. After sixty-nine there is a sharp decline, which might be accounted for by the fact that those seventy and over, though still having licenses, do relatively little driving as compared to the younger groups. NATIONAL SAFETY COUNCIL, ACCIDENT FACTS 1960, 53; ACCIDENT FACTS 1961, 54.

21. Bell, *When Are You Too Old to Drive?*, Today's Health, July 1958, p. 20.

22. 2 HARPER & JAMES, TORTS 740 (1956).

23. THE TRAVELERS INSURANCE COMPANIES, DEADLY RECKONING 10 (1961).

dent proneness. It should be remembered that young male drivers, as previously noted, defy all experience ratings by becoming progressively worse during the first few years of driving.

After studying some 14,000 accidents in a large industrial plant, Dr. Ernest Wolff concluded that experience is a definite factor in industrial accident proneness.²⁴ It is entirely possible, however, that accumulation of vocational experience may have a more pronounced effect on accident proneness than experience in driving an automobile. Extended exposure to industrial discipline would seem to provide conditioning of a different order from that provided by additional driving experience. It is perhaps suggestive that Dr. Wolff found a higher rate of accidents among workers who moved from job to job than among those who stayed on a single job for a long period of time.

Although there may be a correlation between experience and accident proneness in some settings, available data is insufficient to provide a clear answer in the automobile-driving context. The matter remains largely in the realm of speculation. The writers feel that driving experience may have some relationship to accident proneness, but would give the factor a low rating in comparison to such factors as mental attitudes and characteristics.

Physical Defects and Psychomotor Characteristics

Physical defects cause a small but by no means inconsequential number of accidents each year. Although physical impairments may prevent one from getting a license in the first instance, there is at present no adequate way to ferret out individuals who develop physical defects after being licensed. This weakness in the present licensing system can be corrected only by a system of re-examination. Re-examination is treated in a note in this issue and will not be considered further here.²⁵ The most important physical defect contributing to accident proneness is defective vision.²⁶ This is followed in importance by the myriad impairments that may cause drivers to lose consciousness while driving.²⁷ The success of any system for either correcting these physical impairments or removing the drivers from the highways will depend on the cooperation of the medical profession and law enforcement agencies. Some states have instituted

24. *Accident Proneness: A Serious Industrial Problem—What Can the Industrial Physician Do About It?*, 19 *INDUS. MED. & SURG.* 419 (1950).

25. Note, *Compulsory Periodic Re-examination of Drivers*, 14 *U. FLA. L. REV.* 443 (1961).

26. Johnson & Lauer, *A Study of the Effect of Induced Manual Handicaps on Automotive Performance in Relation to Reaction Time*, 21 *J. APPL. PSY.* 85 (1937).

27. McFarland & Moore, *Human Factors in Highway Safety*, 256 *NEW ENGLAND J. MED.* 837 (1957).

procedures by which drivers with physical infirmities are kept under continuing medical surveillance.²⁸ The safety record of this group of "special risk" drivers seems to be satisfactory where such a system has been initiated.

Neither slow perception time nor poor coordination has been found to be a major cause, in itself, of accident proneness. But an early study revealed that a person who reacts more quickly than he perceives is more likely to have accidents than one who perceives more quickly than he reacts.²⁹ Tests have been devised to detect slow reaction and poor coordination. Because of the relatively low correlation between these characteristics and accident proneness, however, it would appear that such tests are not indispensable elements of a minimum driver examination program. Other characteristics are more significant.

Defective Operating Habits and Skills

Defective operating habits and skills often render drivers accident prone. Improper use of brakes and clutch, habitual failure to use the rear-view mirror, failure to give proper signals, and cutting in and out of traffic are some of the many improper driving habits that can lead to multiple traffic accidents. One writer has classified such habits in three general categories:³⁰ skill at the wheel; knowledge of driving ordinances, road signs, and the like; and attitudes on the highway. For drivers in the first two categories, proper training seems to reduce accident rates for a period of time following the training program.

One study has indicated that the accident rate for trained drivers is about one half of that for untrained drivers, but this difference tends to disappear about five years after the training period.³¹ Standard examinations all too frequently are concerned only with an understanding of traffic signs, signals, permissible road speeds, and the like, and do not give proper attention to driving skills and attitudes. Modern driver training programs under the auspices of the American Automobile Association are beginning to place more emphasis upon skill in estimating speed, judging distances, and so forth. More extensive use of these training programs would no doubt reduce the number of accidents caused by all drivers, including those who are not accident prone.

28. For a discussion of this program in Massachusetts see McFarland & Moore, *supra* note 27, at 839.

29. Drake, *Accident Proneness: A Hypothesis*, 8 CHARACTER & PERSONALITY 335, 339 (1940).

30. LAUER, *THE PSYCHOLOGY OF DRIVING* 86 (1960).

31. See McFarland & Moore, *supra* note 27, at 839.

As important as physical driving skills are, however, it appears that the most important single factor in accident proneness is the mental attitude of the driver.

Mental Characteristics and Attitudes

Studies of industrial workers and drivers of commercial vehicles, including buses, street cars, and taxicabs indicate that certain mental characteristics and attitudes are conducive to accidents.³² The problem is to define precisely those traits most closely related to accident proneness and to devise tests that reliably detect these traits in motorists. Many drivers exhibit complex patterns of personal and social maladjustment, so that effective diagnosis and treatment must take many factors into account. The clinical approach to the problem directs attention to "the whole individual."³³

Writers have variously classified the mental characteristics and attitudes leading to accident proneness.³⁴ The purpose of this section is to point up briefly those traits that seem to be most important, in the hope that the doctor, lawyer and lawmaker may join together in an effort to study further some of the underlying factors in accident proneness. If the thesis "a man drives as he lives" is correct, more study of the way drivers live may yield fruitful explanations of the way they drive.³⁵

Before exploring the emotional problems of the accident-prone driver, it may be well to comment briefly on the relationship between intelligence and accident repetition. The old adage that the moron makes the best driver is not entirely accurate. A certain amount of basic intelligence is required for the proper operation of a motor vehicle, though superior intelligence is no guarantee of safe driving. Dr. A. R. Lauer, in *The Psychology of Driving*, has concluded:³⁶

"Persons who might tend to have accidents are those who are about twenty per cent or more below normal and those, again, who are twenty per cent or more above normal. The group below normal apparently are not attentive enough at times or

32. VITELES, *INDUSTRIAL PSYCHOLOGY* ch. 18 (1932); Brandaleone & Flamm, *Psychological Testing—Effect on the Accident-Frequency of Bus Operators*, 24 *INDUS. MED. & SURG.* 296 (1955); Jenkins, *The Accident-Prone Personality*, *Personnel*, July 1956, p. 29; Tillmann & Hobbs, *Accident-Prone Automobile Drivers: Study of Psychiatric & Social Background*, 106 *AM. J. PSYCHIATRY* 321 (1949).

33. VITELES, *INDUSTRIAL PSYCHOLOGY* 377 (1932).

34. Jenkins, *The Accident-Prone Personality*, *supra* note 32; Tuchler, *Personality Factors in Traffic Accidents: Psychiatric Aspects*, 3 *J. FOR. SCI.* 5 (1958).

35. Tillmann & Hobbs, *supra* note 32.

36. LAUER, *THE PSYCHOLOGY OF DRIVING* 30 (1960).

let their attention lapse and get into trouble. Those who are above normal may get into trouble for inattentiveness but for a different reason. They tend to be dissatisfied with what they are doing and inclined to be hasty.”

Dr. Lauer explains that “normal” has reference to an intelligence quotient score of 100. This would mean that the safest drivers are those with I. Q. scores ranging from 80 to 120.³⁷

A number of the emotional problems of accident-prone individuals result from traits developed in early childhood. Such problems may stem from early insecurity or rebellion against parental authority.³⁸ These traits lead to accident proneness in children as well as in adults.³⁹

One study has compared the social backgrounds of accident-prone and accident-free taxi drivers.⁴⁰ The past experience of the two groups with adult courts (non-motor vehicle charges), credit and collection agencies, juvenile courts, venereal disease and public-health clinics and social-service agencies was recorded and analyzed. Sixty-six per cent of the accident-prone group, as opposed to only nine per cent of the accident-free group, were known to one or more of the above agencies.⁴¹ Upon clinical examination, the accident-prone drivers as a group were found to exhibit neurotic personality traits.⁴² Members of this group were found to be egocentric, resentful of authority, exhibitionistic, impulsive, and lacking in social responsibility. Other studies of accident-prone individuals have revealed similar traits. Dr. Flanders Dunbar, in investigating causes of disease among certain fracture patients discovered that as a group they had previously had an excessive number of accidents.⁴³ Further study revealed that the patients had many neurotic traits in common, for example, impulsiveness, aggressiveness, and a tendency to rebel against authority. Most of the patients, at the time of their accidents, were found to have been in a state of anger toward some authority. Dr. Dunbar

37. *Id.* at xi.

38. Henderson, *supra* note 1, at §18.5; Menninger, *Mental Attitudes and Safety: Accidents Are Not Controlled by Chance*, 25 VITAL SPEECHES 311, 313 (1959).

39. Krall, *Personality Characteristics of Accident Repeating Children*, 48 J. ABNORMAL & SOC. PSY. 99 (1953).

40. Tillmann & Hobbs, *supra* note 32, at 324.

41. *Id.* at 328. See also Davis & Coiley, *Accident Proneness in Motor-Vehicle Drivers*, 2 ERGONOMICS 239, 244 (1959).

42. See, however, Davis & Coiley, *supra* note 41, at 243, for an interesting finding that drivers with a history of definite mental illness are more likely to be safe than accident prone.

43. Dunbar, *The Psychic Component of the Disease Process (Including Convalescence) in Cardiac, Diabetic and Fracture Patients*, 95 AM. J. PSYCHIATRY 1319, 1327 (1939).

attributed this resentment against authority to unduly strict environments during early childhood.

While the accident-prone driver tends to rebel against authority, he also has feelings of guilt about this tendency, which may be assuaged by suffering injury.⁴⁴ Dr. Thomas Jenkins, in an extensive study of accidents in several occupations,⁴⁵ found also that the reaction of the accident-prone person to pain is different from that of the non-accident-prone person. His study revealed that accident-prone individuals not only have less regard for physical pain but in some cases derive pleasure from the pain of minor injuries, or experience a sort of thrill from being hurt by others.

The level of emotional stress is another factor that may be of importance.⁴⁶ All people have cycles of exhilaration and depression. Industry has long been concerned with these cycles because of their important relationship to accidents and productivity rates. An early study indicated that some fifty per cent of the industrial accidents analyzed occurred during individual periods of depression.⁴⁷ It is not as feasible, of course, to make on-the-spot inquiry into the mental state of traffic accident victims as in the case of industrial accident victims. One may reasonably speculate, however, that the findings of studies in the industrial setting are probably relevant in the traffic accident context. Against the background of industrial study results, the following comment from the *British Medical Journal* may well convey a true picture of the accident-prone driver:⁴⁸

"The mature, well-balanced person faces the road without a qualm; he estimates the danger accurately and is confident of his powers to cope with it. He also faces his social responsibilities squarely. The immature, unstable person reacts not only to the traffic but at the same time to his own fantasies of violence, aggression, fear, and power as symbolized by the traffic. Consequently, the likelihood of the unstable person doing foolish and inappropriate things is greatly increased. It is probably fair to conclude that road accident prevention is intimately

44. "In the unconsciously provoked accident [the victim] is able to express his resentment and revenge while at the same time atoning for his rebellion by suffering the injury." McLean, *supra* note 14, at 126.

45. *The Accident-Prone Personality*, *supra* note 32.

46. "The mental state of the driver has a great deal to do with his willingness and ability to drive safely. If he is excited or strongly moved to get somewhere because of an emergency, he may exceed the speed limit or fail to notice a STOP sign. If worried and under mental tension because of events transpiring immediately around him, he may be in such a state of mind as to neglect the common courtesies of the road . . ." LAUER, *THE PSYCHOLOGY OF DRIVING* 27 (1960).

47. Hersey, *Emotional Factors in Accidents*, 15 *PERSONNEL J.* 49 (1936).

48. Soddy, *Psychological Aspects of Accidents and Accident Prevention*, 2 *BRIT. MED. J.* 623, 625 (1947).

bound up with the broad principles of mental health to a degree far greater than is generally realized in both its personal and its social aspects."

If these observations are correct, to achieve any real success in curbing accident repeaters more tests will be required that will measure not only basic physical skills and knowledge of existing laws but also the psychological make-up of the driver.

CURRENT LEGAL ATTITUDES TOWARD ACCIDENT-PRONE DRIVERS

Before considering possible ways to correct accident proneness or remove accident-prone drivers from the highways, it might be well to examine briefly the present attitude of the law toward these drivers. Broadly stated, the legal doctrines that affect drivers fall within the classification of either tort law or criminal law, with licensing statutes cutting across both fields but falling principally within the latter. Much of the law that affects accident-prone drivers must necessarily apply to all automobile drivers. The purpose here, however, is to show how these doctrines and statutes operate vis-à-vis the accident-prone driver.

Civil liability, as developed in tort law, has as its chief goal the payment of compensation to persons who have been injured. Florida has taken several steps to broaden the liability of owners and operators of automobiles. Included in these measures is the classification of automobiles as "dangerous instrumentalities."⁴⁹ Also included are Florida's financial responsibility law,⁵⁰ reinforced by the assigned risk plan for drivers most frequently involved in accidents,⁵¹ and the

49. The Supreme Court of Florida was among the first to recognize the desirability of making the owners of automobiles responsible for the negligence of drivers to whom they entrusted their vehicles. This the Court accomplished by extending the dangerous instrumentality doctrine to automobiles in *Southern Cotton Oil Co. v. Anderson*, 80 Fla. 441, 86 So. 629 (1920). About half of the American courts have brought about a similar extension of liability, though on a more limited scale, through the family car doctrine. PROSSER, *TORTS* 369 (2d ed. 1955). The legislatures of a number of other states, recognizing the desirability of the approach evolved by the Florida Court, have enacted statutes making vehicul owners liable for the negligence of those to whom they entrust their vehicles. CAL. VEHICLE CODE §402; D.C. CODE ANN. §§40-417 to 40-498 (1961); IDAHO CODE ANN. §49.1404 (1948); MICH. STAT. ANN. §9.2101 (1952); MINN. STAT. ANN. §170.54 (1960); N.Y. VEHICLE & TRAFFIC LAW §388; R.I. GEN. LAWS §31-31-3 (1956).

50. FLA. STAT. ch. 324 (1961). Comment, 6 Kan. L. Rev. 358 (1958), indicates that laws providing for financial responsibility were found in 46 states, with compulsory insurance required in the other two, New York and Massachusetts. For a note on the New York law, see 32 N.Y.U.L. REV. 147 (1957). For a general comment on financial responsibility laws, see Comment, 4 MIAMI L.Q. 502 (1950).

51. FLA. STAT. §627.351 (1961).

recent Florida law requiring all insurance companies to issue the uninsured motorist endorsement.⁵²

Florida's financial responsibility statute has as its aim the assurance that, when an accident occurs, an owner or operator of a privately-owned vehicle will be able to respond in damages for injuries caused and that, within certain limits, he will be in a position to respond for damages caused in future accidents.⁵³ The act provides considerable assistance to the innocent plaintiff in most situations. With regard to the accident-prone driver, however, it contains an inherent weakness. The insurance required under the act is \$10,000 for one person and \$20,000 for one accident for personal injury and \$5,000 for property damage.⁵⁴ If the defendant-insured is otherwise judgment proof, these figures may be completely unrealistic in accidents resulting in serious bodily injury or death. The accident-prone driver, who has in most cases had several accidents, is as a result often placed in an assigned risk pool with coverage limited to the minimum requirements stated above. The result is that the person most likely to cause harm to the public is the one with the lowest coverage and therefore in the poorest position to respond in case of a serious accident.

The Florida uninsured motorist endorsement is exhaustively treated in another section of this issue.⁵⁵ Generally speaking, however, it is a plan under which the insurer agrees to pay its insured all sums that he is legally entitled — but unable — to recover as damages for bodily injury from the owner or operator of an uninsured automobile. Asking an innocent party to buy insurance against the negligence of others who may injure him may be placing the premium on the wrong party, but the low rates involved make the purchase of this added coverage preferable to leaving the innocent party without recourse.

One recent study indicates that less than two per cent of the innocent traffic victims in Florida are completely uncompensated for damages caused to them.⁵⁶ But the receipt of some payment for their injuries is, of course, far less preferable than the reduction of the accident rate. Even if it be assumed that to some limited extent society must settle for monetary payment as adequate relief, it is still important to consider the deterrent effect that the civil law may have on the small group of accident-prone drivers who cause such a disproportionate share of all accidents.

52. FLA. STAT. §627.0851 (1961).

53. FLA. STAT. §324.011 (1961).

54. FLA. STAT. §324.021 (7) (1961).

55. Note, *Uninsured Motorist Coverage in Florida*, *infra* p. 455.

56. STAFFS OF THE ATTORNEY GENERAL & THE STATE TREASURER & INSURANCE COMMISSIONER, *THE UNINSURED MOTORIST PROBLEM IN FLORIDA* 3 (1960).

Generally, the accident-prone driver is treated no more harshly, in so far as civil liability is concerned, than other drivers. In fact, if he is a minor, he may receive better treatment, in theory at least, than the average adult driver. When a minor is involved in a lawsuit growing out of an accident, the court will instruct the jury that in determining whether the minor was negligent they should take into account his age and experience.⁵⁷ This introduces a subjective factor that jurors are not authorized to consider in the case of the adult driver, who is held to the standard of care of the theoretical reasonable man of average prudence.⁵⁸ The extent to which juries actually make this distinction in assessment of liability seems questionable, however, since insurance premiums for young drivers indicate that they are expensive risks. In point of fact, the rate for liability coverage for male drivers under twenty-five years of age is about three times the premium for older drivers.⁵⁹ While this higher rate is for the most part explainable by the higher accident rates of such drivers, it probably also indicates that there is little favoritism shown to this group in jury verdicts in spite of the more lenient instructions.

The accident-prone driver is also favored with respect to civil liability by the rule of evidence that prevents the admission of evidence in motor vehicle accident cases that the driver was involved in previous accidents, on the grounds that such evidence is immaterial in the determination of the driver's negligence in the accident in litigation,⁶⁰ or that prior accidents have no causal relation to the accident under consideration.⁶¹ Arguably the exception that is sometimes made to admit evidence of previous accidents in cases involving defective vision⁶² could be carried over to other causes of accident

57. *Harvey v. Cole*, 159 Kan. 239, 153 P.2d 916 (1944); *Charbonneau v. MacRury*, 84 N.H. 501, 153 Atl. 457 (1931); *Shulman, The Standard of Care Required of Children*, 37 YALE L.J. 618, 621 (1927). For a criticism of the rule see 2 HARPER & JAMES, TORTS §§13.4, 16.8 (1956).

58. 2 HARPER & JAMES, TORTS §13.4 (1956).

59. *Automobile Insurance*, 27 CONSUMER REPORTS 112, 115 (1962). Current statistics on Florida rates for minimum liability coverage (\$10,000/\$20,000/\$5,000) are as follows:

County	No male Drivers Under 25 Not Used for Business	Single Male Driver Under 25 as Principal Operator or Owner
Alachua	\$35.00/year	\$125.00/year
Dade	84.00/year	261.00/year
Duval	58.00/year	179.00/year

NATIONAL BUREAU OF CASUALTY UNDERWRITERS, AUTOMOBILE CASUALTY MANUAL, FLORIDA RATES 1, 2 (Dec. 1, 1961).

60. *Hall v. Young*, 218 Ark. 348, 236 S.W.2d 431 (1951); *Shmatovich v. New Sonoma Creamery*, 187 Cal. App. 2d 342, 9 Cal. Rep. 630 (1960); *Lizzo v. O'Connor*, 286 App. Div. 1021, 145 N.Y.S.2d 101 (2d Dep't 1955).

61. *Fleming v. McMillan*, 125 W. Va. 556, 26 S.E.2d 8 (1943).

62. *Bachman v. Ambos*, 83 Ohio App. 141, 79 N.E.2d 177 (1947); *Hiller v.*

proneness on the basis that it might well be negligent for a person who knew he was accident-prone to continue to drive or to fail to take extra precautions to compensate for his known defects. No court has yet taken this position, although one court did admit evidence of three previous accidents after the defendant denied knowing that driving at a very fast rate around sharp curves and over steep hills was dangerous.⁶³

The rule denying admission of evidence of previous accidents is paralleled by a similar rule denying admission of evidence of conviction of previous traffic law violations.⁶⁴ Again there is an exception, recognized in a minority of jurisdictions, allowing admission of such convictions for purposes of impeaching the credibility of the driver as a witness.⁶⁵ A number of states deny admission of such convictions on the ground the evidence would have no bearing on the veracity of the witness.⁶⁶ In a recent Florida case, the court permitted such inquiry after the defendant denied he had ever been convicted of a crime, even though the conviction for reckless driving did not reflect moral turpitude, pointing out that "the witness . . . could have avoided his predicament by telling the truth in the first instance."⁶⁷ The limited exception thus made available in Florida seems logically sound. As a practical matter it probably has the additional effect of creating an inference of negligent driving habits on the part of the traffic violator, but such an inference may be well justified in view of the close relationship between accident proneness and previous traffic violations.⁶⁸ From the viewpoint of the accident victim, it is unfortunate that the exception is so limited in scope.

It seems apparent, that from the viewpoint of civil liability the

Shaw, 45 Ohio App. 303, 187 N.E. 130 (1932).

63. Allen v. McLain, 75 S.D. 520, 69 N.W.2d 390 (1955).

64. Shmatovich v. New Sonoma Creamery, 187 Cal. App. 2d 342, 9 Cal. Rep. 630 (1960); Black v. Wachs, 130 Ind. App. 293, 163 N.E.2d 894 (1960); Buras v. Peck, 83 So. 2d 783 (La. App. 1955). The rule denying admissibility has been applied even after the defendant had testified that he considered himself to be a good driver. Nesbit v. Cumberland Contracting Co., 196 Md. 36, 75 A.2d 339 (1950).

65. Monaghan v. Keith Oil Corp., 281 Mass. 129, 183 N.E. 252 (1932); Brown v. Howard, 43 R.I. 571, 114 Atl. 11 (1921).

66. Dixie Culvert Mfg. Co. v. Richardson, 218 Ark. 427, 236 S.W.2d 713 (1951); Nesbit v. Cumberland Contracting Co., 196 Md. 36, 75 A.2d 339 (1950) (admission denied even after plaintiff testified he was a good driver); De Stasio v. Janssen Dairy Corp., 279 N.Y. 501, 18 N.E.2d 833 (1939) (following N.Y. statute).

67. Hendrick v. Strazzulla, 135 So. 2d 1, 3 (Fla. 1961).

68. Blain, *The Automobile Accident—A Medical Problem*, 3 J. CRIM. PSYCHOPATHOLOGY 272, 273 (1941). See discussion in text at note 74 *infra*. It is significant that approximately 85% of personal injury accidents result from violations of motor vehicle laws by at least one of the drivers. THE TRAVELERS INSURANCE COMPANIES, DEADLY RECKONING 4, 29 (1961).

rules of evidence are generally weighted in favor of the accident-prone driver. And in terms of deterrent effect, it appears that the only appreciable influence that civil liability has on such drivers results from the indirect manner in which insurance premiums may affect them. Insurance carriers *do* take previous accidents into consideration when premium rates are established.⁶⁹ But since most of the causes of accident proneness operate at the subconscious level, it seems extremely doubtful that the higher insurance rate will have any real deterrent effect, except for the few individuals who may be shocked into the realization that they need psychiatric or other help.⁷⁰ There may be instances in which the accident-prone driver will be prevented from causing subsequent accidents because he is unable to purchase insurance or otherwise comply with the financial responsibility laws, but these will be rare. In short, civil law is presently inadequate to resolve problems caused by accident proneness. Do other areas of the law offer a more adequate solution?

The criminal law has also met with little success in curbing the accident-prone driver. In many localities he can have a series of minor accidents, or be cited for a series of traffic violations, and escape with nothing more than payment of a fine or forfeiture of a small bail.⁷¹ Unless an accumulation of such incidents results in the loss of the privilege of driving, the process may amount, in effect, to licensing violators of traffic laws and encouraging motorists to take calculated risks of incurring small fines of predictable amounts. A California judge who has studied the problems confronting the traffic courts in San Francisco feels that standard five-dollar fines or forfeiture of small bonds has, to some extent, brought disrepute on the entire system of justice. This sobering conclusion does not lack plausibility, since it has been estimated that more than ninety per cent of all citizens who become involved with the criminal law do so because of minor traffic violations.⁷² Impressions made on a person by the traffic court will no doubt be reflected in his attitude toward other aspects

69. With regard to individuals who are under the assigned risk plan, one insurance executive made the following observation: "[A] large number of accident-prone and otherwise unfit drivers are among the assigned risks, and these persons should not be licensed to drive. A driver's license is a privilege, not a right. A person who is unable to earn a license should not be entitled to drive. Under such circumstances he would not require insurance, and rates undoubtedly could be kept at a lower level." Spotke, *Automobile Insurance Rates Make a Barometer of Accident Costs*, 434 INS. L.J. 162, 168 (1959).

70. See Jones, *Contribution Among Tortfeasors*, 11 U. FLA. L. REV. 175, 180 (1958).

71. St. Clair, *The Traffic Problem: The Lawyers' Responsibilities*, 44 A.B.A.J. 633, 635 (1958).

72. *Id.* at 636.

of the judicial system. One traffic judge made the following observations with regard to the standard fine:⁷³

"The procedure in question amounts to licensing violations of the law. A moment's reflection will show the emphasized statement is correct. If a motorist knows it will cost \$5.00 if he is caught failing to stop at an arterial stop, the factors are present for him to take a calculated risk. The habitual runner of stop signs is a potential killer, and that is how accidents are born. If this habitual runner knew that the punishment would be tailored to fit him and the particular crime, he would hesitate."

The problem of the chronic traffic law violator is, of course, merely a reflected image of the problem of the accident-prone driver. Studies have shown that the group of accident "repeaters" contains significant numbers of persons who are frequently involved with traffic courts. One such study dealing with accident-prone drivers who have low intelligence quotients showed that more than fifty per cent had five or more traffic arrests.⁷⁴

It is to be hoped that new traffic regulations will discourage "betting with the law." The Florida legislature has recently enacted a point system, under which points are assessed against a driver for traffic offenses, the number of points assigned depending on the seriousness of the offense.⁷⁵ A record is kept of the cumulative points each driver has had assessed against him, and if it reaches a given number of points within a specified period his driver's license is suspended or revoked. This point system supplements earlier legislation that provided for suspension or revocation of a driver's license when the holder had been convicted of more serious offenses, such as manslaughter or driving while intoxicated. The effectiveness of the point system cannot be evaluated properly until it has been in operation for a longer period of time.⁷⁶ If the program is properly administered, it should be a step toward accident prevention; however, like other provisions of the law, it gives a driver several chances to produce accident statistics before he is removed from the highway.

Florida, like most other states, requires an examination before permitting one to drive a motor vehicle.⁷⁷ This examination consists of a written test dealing with traffic signs, speed laws, and similar matter, plus a short drive with the examiner during which the appli-

73. *Id.* at 635.

74. Blain, *supra* note 68.

75. FLA. STAT. §322.27 (1961).

76. For a description and evaluation of the Connecticut system, see KRAFT, DRIVER CONTROL, ACHIEVING GREATER TRAFFIC SAFETY THROUGH EFFICIENCY AT THE WHEEL (1954).

77. FLA. STAT. §322.12 (1961).

cant exhibits his skill in operating a motor vehicle. Drivers are licensed after demonstrating sufficient skill to drive around the block and parallel park without having an accident. But it is estimated that an emergency situation arises only once in 3,000 hours of driving.⁷⁸ Thus the chance that the accident-prone applicant will have to exhibit his reactionary skills and emotional stability on a short drive with the examiner is virtually non-existent. The matter of examination will be discussed further in the section dealing with suggested remedies. Suffice it to say here that the present system of examination leaves much to be desired as a means of preventing accident-prone drivers from taking to the highways.

Is There a Remedy?

Accident-prone drivers, though they comprise only from two to four per cent of the driving population, account for up to one third of all accidents. Can anything be done to reduce the large role of such drivers in determining the size and pattern of traffic accident statistics? Industrial experience has demonstrated that motor vehicle accident rates can be lowered drastically by removing the accident-prone individual from the driver's seat. In one instance, accidents among a group of bus drivers were reduced by more than forty-two per cent from one year to the next.⁷⁹ In another case, it was found that bus drivers hired on the basis of psychological tests administered along with standard driving tests achieved a significantly better safety record than drivers hired on the basis of the driving tests alone.⁸⁰

In dealing with the accident-prone driver in the role of actual or potential employee, industry is in a position to apply summary measures. Once potentially accident-prone drivers are identified, they can be reassigned to non-driving work or not hired in the first instance.⁸¹ The problem becomes much more difficult when the group to be regulated is the citizenry at large. Seemingly the same technique should be applicable—locate the accident-prone drivers and revoke their licenses. But it is difficult to single out these drivers from the population at large with unquestionable accuracy.

Two approaches have been suggested. The first is to use a series

78. LAUER, *THE PSYCHOLOGY OF DRIVING* xv (1960).

79. VITELES, *INDUSTRIAL PSYCHOLOGY* 383 (1932) (study of Cleveland Ry.). Viteles quotes even more impressive statistics of accident reduction by the Boston Elevated Ry. *Id.* at 385. For a discussion of Viteles' study see Arbous & Kerrich, *The Phenomenon of Accident Proneness*, 22 *INDUS. MED. & SURG.* 141, 147 (1953).

80. Brandaleone & Flamm, *supra* note 32, at 297.

81. For a general discussion of accident proneness in industry and the importance of job placement in its reduction, see TIFFIN & McCORMICK, *INDUSTRIAL PSYCHOLOGY* ch. 14 (4th ed. 1958).

of tests of attention, motor skills, and information, plus a driving test, to locate potentially accident-prone persons at the point of initial license application. As yet, however, it is doubtful that sufficiently accurate tests have been devised to accomplish this purpose without denying the driving privilege to a substantial group who on actual experience would not fall within the accident-prone category.⁸² But this does not mean that the attempt should not be made. Better testing methods and devices exist than those in common use today, and with them many more accident-prone individuals among driver's license applicants could be identified. The usual check on knowledge of driving rules and regulations is necessary in any testing program, but this alone is not sufficient. Nor is the present short drive with a patrolman adequate. Use of mock driving devices to simulate a variety of driving situations, including emergencies, would provide a more realistic picture of the applicant's driving skill.⁸³

Psychological tests might also be used to help identify the accident-prone driver. But here the problem lies in selecting an optimum test that will be economically and administratively feasible and that will at the same time achieve accurate results. Moreover, the accuracy of psychological tests depends in large part on the truthfulness of the answers given, and once applicants know the purpose of the test and that their licenses depend on it, truthfulness may become very difficult to obtain. Sufficient accuracy in psychological testing apparently has not yet been achieved,⁸⁴ but at least one authority believes it is not beyond reach.⁸⁵

If the tests for physical and emotional defects were reasonably accurate, their use as a basis for denying license applications might be justified as a proper exercise of the police power of the state in the furtherance of public safety. The Supreme Court of Florida has declared that a driver's license is a privilege and that a license confers no absolute property right in the use of the public highways.⁸⁶ The requirement of due process does not demand absolute accuracy in the state's exercise of its police power, and a program reasonably calcula-

82. Johnson, *The Detection and Treatment of Accident-Prone Drivers*, 43 *PSY. BULL.* 489, 509 (1946).

83. For a description of presently available equipment see AMERICAN AUTOMOBILE ASSOCIATION, *DRIVER EDUCATION EQUIPMENT* (AAA Bull. No. 3614). See also LAUER, *THE PSYCHOLOGY OF DRIVING* (1960).

84. VERNON, *ACCIDENTS AND THEIR PREVENTION* 37, 46 (1936); Davids & Mahoney, *Personality Dynamics and Accident Proneness in an Industrial Setting*, 41 *J. APP. PSY.* 303, 305 (1957); Jenkins, *supra* note 32.

85. Drake, *supra* note 29, at 341. For a collection and evaluation of all of the major research experiments through 1957, see Goldstein, *Research on Human Variables in Safe Motor Vehicle Operation*, *THE DRIVER BEHAVIOR RESEARCH PROJECT*, GEO. WASH. U. (June 1961).

86. *Smith v. City of Jacksonville*, 93 So. 2d 105, 106 (Fla. 1957).

ted to achieve substantially accurate results should meet legal requirements. Even so, the political problems involved in enacting legislation to deny drivers' licenses to applicants on the basis of psychological tests may be insurmountable at the present time. Perhaps as an initial step, however, licenses could be denied to applicants with those serious physical or psychological defects usually associated with the most extreme accident-prone group. Alternatively, applicants failing the tests might be issued restricted or conditional licenses pending proof of satisfactory driving performance.⁸⁷

Much of what has been said about examination could be applied to a program of periodic re-examination. This subject is discussed separately in this issue.⁸⁸ As a minimum measure, steps should be taken to deal with those people who become incapable of driving safely because of age, physical defects, or emotional problems.

As an alternative to denying licenses to accident-prone applicants, a second approach might be to keep records of previous accidents and personal histories of individual drivers and classify them as accident-prone if they have a certain number of accidents within a definite time period. This method also presents problems. To begin with, not all accidents are reported, even in a state like Florida, which requires the reporting of every accident involving personal injuries or property damage of over \$50.00.⁸⁹ Accidents in which no other vehicle is involved, or after which the driver promptly settles with the injured party, may never reach the record books.

It may be appropriate for an organization such as the Air Force or a large trucking company to exclude everyone in the repeater group from driving. But in the final analysis it is questionable whether such drastic measures can be applied to the general public. By operation of the laws of chance, about ten per cent of the repeater class will be found to be non-accident-prone.⁹⁰

Perhaps the withdrawal of driving privileges would be more palatable if a combination of the two approaches were used. When a driver develops a history of repeated accidents, he might be given performance tests to check his attentiveness, motor skills, and the like, and if these tests indicate accident proneness, the legality and desirability of suspending his license would be much less likely to be

87. The restricted license technique is authorized in Florida. FLA. STAT. §322.16 (1961). For a case illustrating the need for certainty in spelling out such restrictions, see *State v. Moseng*, 254 Minn. 263, 95 N.W.2d 6 (1959), 44 MINN. L. REV. 152 (1959).

88. Note, *infra* p. 443.

89. FLA. STAT. §§317.12, .13 (1961).

90. Johnson, *supra* note 82, at 500. But see McFarland & Moore, *Human Factors in Highway Safety*, 256 NEW ENGLAND J. MED. 837 (1957), for a view that the laws of chance account for a much higher percentage of accident repeaters. Menninger sets the figure at 15%, *supra* note 38, at 312.

open to serious question. In one way, of course, this is like shutting the stable door after the horse is gone, but it may nevertheless provide an initial improvement over the present total lack of treatment of the problem.

Training and retraining may offer another solution for curbing accidents, not only among accident-prone drivers but also among those who are not so classified. Some authorities in the commercial transportation field advocate periodic retraining of all bus drivers.⁹¹ The licenses of drivers involved in a given number of accidents in a given period might be suspended; these drivers could then be tested to pin down more exactly the causes of their accident proneness. A period of driver re-education, with particular emphasis on the problem areas of the individual drivers, followed by a driving test before the suspension was removed, might aid substantially in cutting the accident rate. Although such a program would affect a group likely to include a high percentage of accident-prone drivers, it might be difficult to administer on a broad scale among private motorists. But it is not entirely visionary in states such as Florida where drivers' records are already being maintained under the point system.⁹² Both the Michigan Bar Association⁹³ and the American Bar Association⁹⁴ have supported the re-education approach, and when it has been employed in industry it has led to a substantial reduction in accidents.⁹⁵

An added reason for use of the training school is that many drivers would find assignment to such a school a much more unpleasant prospect than paying the standard fine. The aggressive driver might feel that the penalty was too great and channel his aggressiveness into areas less dangerous than the highway.

Any system for dealing with the problems of accident proneness will require strict enforcement by law enforcement agencies. Drivers who violate the law by driving when their licenses have been suspended or revoked must expect meaningful sanctions when they are apprehended. Youthful drivers in particular often disregard license suspensions,⁹⁶ while if they were certain that such a violation would automatically result in serving a jail sentence, compliance would be much more widespread.⁹⁷

91. Brandaleone & Daily, *A Method of Reducing the Accident Rate in Bus Operation*, 19 *INDUS. & MED. SURG.* 231, 234 (1950).

92. *FLA. STAT.* §322.27 (1961).

93. *ABA AWARD OF MERIT, SUMMARY* 18 (1957).

94. St. Clair, *supra* note 71.

95. Bingham, *Individual Differences in Industrial Personnel*, 15 *EUGENICAL NEWS* 19, 23 (1930); Miles, *The Psychology of Accidents*, 5 *J. NAT'L INST. INDUS. PSY.* 183 (1930); Myers, *The Human Factor in Accidents*, 8 *HUMAN FACTOR* 266, 269-70 (1934).

96. St. Clair, *supra* note 71, at 635.

97. The Florida statutes so provide. *FLA. STAT.* §322.34 (1961).

Elimination of the possibility of "fixing" traffic tickets or buying one's way out of serious traffic violations is also essential. One authority states that elimination of fixing and "fronting" — having someone else appear in court for a traffic law violator — reduces accidents by one third.⁹⁸ Although the statistic may be questioned as a generalization, it is clear that the demoralization of enforcement officials that results from such practices cannot fail to have its ultimate effect in increased accidents.

Courts and law enforcement officers cannot solve the problem of accident proneness alone. The medical profession must help devise more effective methods of identifying and rehabilitating accident-prone drivers, particularly those whose accident proneness has emotional or psychological roots. The lawyer and the lawmaker must see that policies are devised and implemented to obtain maximum social benefit from present medical knowledge. And public support is crucial. As one authority has aptly put it:⁹⁹

"Until such time as there is real public support to sound legislation, appropriation of adequate funds, and courageous administration of driver licensing laws . . . there is little probability that we will eliminate the many who are not qualified to drive a motor vehicle under present-day conditions."

In summary, cooperative action by all elements of society is essential if we are to isolate and rehabilitate the small percentage of automobile drivers who today are responsible for such a substantial part of the slaughter on our highways — the automotive age's biggest unsolved problem.

98. GREENWOOD, *WHO PAYS?* 219 (1934).

99. KRAFT, *op. cit. supra* note 76, at 13.