

Part III

Driving Bibliographic Database

1. Adebayo, A. Drunk-driving intervention in an urban community: an exploratory analysis. *Br-J-Addict* ; 1988 Apr; 83(4): 423-9.
2. Akamatsu, T.; Kusumoto, M.; Kamata, K.; Furumi, K.; Ohmine, T.; Inoue, N.; Sato, K.; Kajiwara, M.; Nagamori, H. [An evaluation of the relationship between fatigue and intake of alcohols on the adult workers (I)--Analysis by inquiries and examinations]. *Arukoru-Kenkyuto-Yakubutsu-Ison* ; 1984 Jun; 19(2): 107-17.
3. Alcohol and the driver. Council on Scientific Affairs. *JAMA* ; 1986 Jan 24-31; 255(4): 522-7.
4. Alcohol and the driver [letter]. *JAMA* ; 1986 Jul 4; 256(1): 37.
5. Aldenhovel, H. G. [Gamma-glutamyl-transpeptidase and transaminases in the sera of drunk drivers--some empirical findings]. *Blutalkohol* ; 1985 Jul; 22(4): 290-7.
6. Anda, R. F.; Remington, P. L.; Dodson, D. L.; DeGuire, P. J.; Forman, M. R.; Gunn, R. A. (Bureau of Laboratory and Epidemiological Services, Michigan Department of Public Health). Patterns of self-reported drinking and driving in Michigan. *Am-J-Prev-Med* ; 1987 Sep-Oct; 3(5): 271-5.
7. Argeriou, M.; McCarty, D.; Blacker, E. (Alcohol & Health Research Services, Inc., Stoneham, Massachusetts 02180). Criminality among individuals arraigned for drinking and driving in Massachusetts. *J-Stud-Alcohol* ; 1985 Nov; 46(6): 525-30.
8. Armsby, P.; Boyle, A. J.; Wright, C. C. (Road Traffic Research Centre, Middlesex Polytechnic, London, United Kingdom). Methods for assessing drivers' perception of specific hazards on the road. *Accid-Anal-Prev* ; 1989 Feb; 21(1): 45-60.
9. Armsby, Pauline; Boyle, A. J.; Wright, C. C. (Middlesex Polytechnic, Road Traffic Research Ctr, London, England). Methods for assessing drivers' perception of specific hazards on the road. *Accident Analysis and Prevention*; 1989 Feb Vol 21(1) 45-60; 1989; CODEN: AAPVB5; ISSN: 00014575. Note: Human. 16 18-61 yr old drivers' perceptions of hazards were assessed using interview methods, the Q-sort, and variants of the repertory grid (RG). These techniques were judged on their ability to differentiate between old and young Ss, 2 groups with known differences in accident frequency. Results indicate that the fixed RG differentiated the most between old and young Ss, but all RG variants differentiated Ss to some extent. None of the interview techniques produced useful information, and neither interviews nor the Q-sort discriminated between young and old Ss. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
10. Avolio, Bruce J.; Barrett, Gerald V.; Sterns, Harvey L. Alternatives to age for assessing occupational performance capacity. Note: *Experimental Aging Research*. Summer 1984. Vol. 10, No. 2. p. 101-105. (5p.). Examines alternatives to functional age for assessing variations in levels of ability across the working lifespan. Presents arguments against the use of functional age in employment decision making, and points out that the courts have not accepted functional age as a reliable measure of job performance, but have relied instead on chronological age. Describes a model which uses expectancy tables to relate test scores to specific performance on a criterion task in order to arrive at an indicator of the probability of success. Essential to this model is the transformation of correlation coefficients between predictor and criterion scores into probability estimates for individuals. Reviews empirical justification for evaluating the efficacy of intrinsic attributes in predicting older adult performance, including studies which have shown the utility of information-processing measures in predicting automobile accident involvement and investigations of aircraft flight proficiency. (LS).
11. Bankston, William B.; Jenkins, Quentin A.; Thayer, Doyle, Cheryl; Thompson, C. Arol, Y. (Louisiana State U, Baton Rouge). Fear of the drunk driver: Analysis of an emergent social problem. *Deviant*

Behavior; 1986 Vol 7(2) 107-120; 1986; CODEN: DEBEDF; ISSN: 01639625. Note: Human. Analyzed public perceptions of drunk driving with respect to risk of being victimized, seriousness of the offense, and fear of being victimized in 1,852 Louisiana driver's license holders. Data from questionnaires indicate that, compared with other crimes (e.g., murder, rape), drunk driving ranked highest in its fear invoking quality; risk of being victimized was much higher for drunk driving than for other crimes. Correlations of fear with seriousness and risk were strong and positive. Implications for understanding fear of crime as a function of perceived risk and seriousness and for further legislation and policy action against drunk driving are discussed. (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).

12. Barakat, Sami Jamil; Mulinazzi, Thomas E. Elderly drivers: problems and needs for research. Note: Transportation Quarterly. Apr 1987. Vol. 41, No. 2. p. 189-206. (18p.). Discusses issues related to highway safety and elderly drivers, highlighting research needs. Reviews some of the common myths about the elderly, and summarizes data about elderly drivers presented at a recent workshop. Older people are involved in fatal accidents more often than the middle-aged, but less often than the population as a whole. They also are more likely to be impaired or die as a result of an accident than are younger people, except for very young children. The skills necessary for safe driving begin to deteriorate around age 55, but individual variability is great and most elderly seem to recognize their limitations and voluntarily curtail their driving. Testimony presented before the National Highway Safety Advisory Committee indicated that traffic and highway systems could be designed to give greater consideration to the needs and behavior of the elderly. Research on the driver and driving functions has been limited, and state licensing systems do not adequately screen individuals for their ability to drive safely. The use of human factors research on highway transportation has been hampered by the diverse nature of studies on aging and the complexity of the highway transportation system. In designing roadway systems and vehicles, the focus should be on developing ways of keeping older drivers on the highways as long as they can drive safely. (CM).
13. Beck, K. H. (Department of Health Education, University of Maryland, College Park 20742). Monitoring parent concerns about teenage drinking and driving: a random digit dial telephone survey. Am-J-Drug-Alcohol-Abuse ; 1990; 16(1-2): 109-24.
14. Beck, Kenneth H.; Summons, Terry G. (U Maryland, Safety Education Ctr, College Park). A comparison of the social context for alcohol consumption of college students and convicted DWI offenders. Journal of Alcohol and Drug Education; 1985 Win Vol 30(2) 31-39; 1985; CODEN: JADEDT; ISSN: 00901482. Note: Human. 272 college students (aged 17-45 yrs) and 261 convicted driving while intoxicated (DWI) offenders were surveyed with an anonymous questionnaire to determine which social context of alcohol consumption factors discriminated between the offenders and college students. Results reveal that DWI offenders tended to drink in their own home, alone, and to relieve stress, whereas college students were more likely to drink at a party, for the enjoyment of taste, and to get drunk. There were no major differences among various subgroups of college student alcohol abusers. Six measures of alcohol consumption and abuse (e.g., how often do you usually drink an alcoholic beverage?) were taken for the DWI offenders in an attempt to relate them to various social contexts for drinking. These measures revealed that drinking to relieve stress, aches and pains, and to get drunk were common contexts within which alcohol consumption and abuse took place for these offenders. Results are discussed in terms of alcohol abuse at younger age levels (18-20 yrs) being probably a form of episodic and recreational activity, while alcohol abuse in older ages (e.g., DWI offenders) is more likely a chronic problem. (19 ref) (PsycLIT Database Copyright 1986 American Psychological Assn, all rights reserved).
15. Berger, Dale E.; Snortum, John R. (Claremont Graduate School). Alcoholic beverage preferences of drinking driving violators. Journal of Studies on Alcohol; 1985 May Vol 46(3) 232-239; 1985; CODEN: JSALDP; ISSN: 0096882X. Note: Human. Examined relationships between the preferred type of alcoholic beverage and various drinking-driving behaviors and attitudes in a sample of 1,000 licensed US drivers (aged 16+ yrs) interviewed in a national telephone survey. Results show that, generally, Ss who preferred beer drank to higher levels of intoxication, were more likely to drive after drinking, and tended to consider driving while intoxicated to be less serious; this was generally true regardless of sex, age, education, income, and marital status. It is concluded that findings contradict the perception of beer as a relatively harmless drink of moderation and challenge policies of special concessions for the legal purchasing age and advertising of beer. (32 ref) (PsycLIT Database Copyright 1986 American Psychological Assn, all rights reserved).
16. Bernardelli, B.; Gennari, M.; Leo, C.; Grassi, G. (Istituto di Medicina Legale e delle Assicurazioni,

- Universita degli Studi di Parma). [Analysis and evaluation of blood alcohol values found in victims of fatal traffic accidents in the Parma region (1982-1986)]. *Acta-Biomed-Ateneo-Parmense* ; 1988; 59(3-4): 57-66.
17. Bjmeboe, A.; Bjmeboe, G. E.; Gjerde, H.; Bugge, A.; Drevon, C. A.; Mrland, J. (National Institute of Forensic Toxicology, Oslo, Norway). A retrospective study of drugged driving in Norway. *Forensic-Sci-Int* ; 1987 Apr; 33(4): 243-51.
 18. Blaauw, Gerard J. (TNO Inst for Perception, Soesterberg, Netherlands). Driving experience and task demands in simulator and instrumented car: A validation study. *Human Factors*; 1982 Aug Vol 24(4) 473-486; 1982; CODEN: HUF A A 6; ISSN: 00187208. Note: Human. Studied the validity of research results obtained using the fixed-base vehicle simulator of the Institute for Perception (Dutch Institute for Applied Scientific Research) during straight-road driving. Absolute and relative validities were mainly evaluated in terms of system performance and driver behavior for 24 inexperienced and 24 experienced male drivers (aged 18-36 yrs), who had to perform lateral and longitudinal vehicle control both in the simulator and in an instrumented car on the road. Task demands for each control were varied with a free and forced accuracy instruction. Results show good absolute and relative validity for longitudinal vehicle control; lateral vehicle control offered good relative validity. Lateral control performance lacked absolute validity due to Ss' diminished perception of lateral translations (absence of kinesthetic feedback). Ss were easily able to perceive yaw rotations in the simulator. Performance in the simulator was a more sensitive discriminator of driving experience than was performance in the instrumented car on the road. (20 ref) (PsycLIT Database Copyright 1983 American Psychological Assn, all rights reserved).
 19. Blumenberg, Anne L.; Hull, Stephanie A.; Stoesz, David; Albert, Faye S. Age rating and automobile insurance: its impact on older Americans. Note: American Association of Retired Persons, Public Policy Institute, Washington, DC. Mar 1990. (60p.).
 20. Bourg, C. The mobility of the elderly in a southern metropolitan area. Note: Center for community studies, Fisk University, Nashville, TN. 1972. (281p.). AVAILABILITY: SCAN Microfiche No. CCF 000335. Although a fair amount of attention has been given to the provision of adequate and affordable housing for the elderly, relatively little has been done to ensure the transportation necessary to keep them from becoming captives in their lodgings. The three variables of life-style, motility patterns, and behavioral maps all figure into a satisfactory solution to these problems. Demographic analysis of a sample population in Nashville-Davidson County in Tennessee indicates, as expected, that health and income directly effect motility, but also that men living by themselves are less able to get around than are women, even though the health of men are usually better. Even within the relatively small area of one county, noticeable differences of health and income exist between different subareas, such that an approach of "positive discrimination" may be the only way of treating their specific needs. Today's elderly are the first generation which grew up with access to the automobile for transportation, and they had particular difficulty dealing with the demands of traffic as their own skills deminished, and are especially disturbed by the prospect of losing their driver's licenses. Men drive more frequently than women to various destinations, except to visit children and relatives, and black elderly most frequently take trips out of town. Throughout, the text is illustrated with statistical tables, and a bibliography and sample of the indices used in gathering data are included in appendices. (SR).
 21. Bradstock, M. K.; Marks, J. S.; Fomman, M. R.; Gentry, E. M.; Hogelin, G. C.; Binkin, N. J.; Trowbridge, F. L. (Division of Nutrition, Centers for Disease Control, Atlanta, Georgia 30333). Drinking-driving and health lifestyle in the United States: Behavioral Risk Factors Surveys. *J-Stud-Alcohol* ; 1987 Mar; 48(2): 147-52.
 22. Briggs, J. E.; Patel, H.; Butterfield, K.; Honeybourne, D. (Department of Thoracic Medicine, Dudley Road Hospital, Birmingham, U.K). The effects of chronic obstructive airways disease on the ability to drive and to use a roadside alcolmeter. *Respir-Med* ; 1990 Jan; 84(1): 43-6.
 23. Brorsson, B. [Elderly drivers run a greater risk than middle-aged drivers of being involved in accidents]. *Lakartidningen* ; 1989 May 17; 86(20): 1915-7.
 24. Brown, Nina W. (Old Dominion U). Assessment measures that discriminate between levels of DUI clients. *Psychological Reports*; 1985 Jun Vol 56(3) 739-742; 1985; CODEN: PYRTAZ; ISSN: 00332941. Note: Human. Administered the Adjective Checklist, the Multiple Affect Adjective Check List, the Depression Adjective Checklist, and the Profile of Mood States to 166 males (aged 17-63 yrs) who had been convicted of drunk driving (DUI) and were enrolled in an alcohol safety action program, to

determine if Ss' scores would differ from those of the general population. Results indicate differences with regard to all 4 scales. Although a few individual scales showed significant differences between Ss with regard to treatment level, multiple discriminant analysis of combined test scales identified 2 factors: Intrapersonal Attributes, which accounted for 84% of the variance, and Personal Adequacy, accounting for 15.9% of the variance. The combined test results correctly classified 62% of the Ss according to levels of problem drinking. (4 ref) (PsycLIT Database Copyright 1986 American Psychological Assn, all rights reserved).

25. Bulstrode, S. J. (Royal National Hospital for Rheumatic Diseases, Bath, Great Britain). Car mirrors for drivers with restricted neck mobility. *Int-Disabil-Stud* ; 1987; 9(4): 180-1.
26. Butler, R. N. Driver's license restrictions: approach with caution [editorial]. *Geriatrics* ; 1989 Dec; 44(12): 11.
27. Carney, James. Can a driver be too old? Note: *Time*. Jan 16, 1989. Vol. 133, No. 3. p. 28. (1p.). Considers the possible hazards associated with increasing numbers of older drivers. A 1988 study by the Transportation Research Council discovered that elderly drivers rank second only to 16-to-24-year-olds in the number of accidents per mile driven, and the Insurance Information Institute found that drivers aged 75 and over were more accident prone than all but those under 25. While younger drivers may suffer from poor judgment, the safety of elderly drivers is more likely to be affected by diminished vision and hearing, slowing reflexes, and decreasing attention spans. The driving errors most commonly committed by the elderly are: failing to yield to the right-of-way, making overly wide turns, and backing into other vehicles. Fourteen states, including Pennsylvania and Florida, have passed legislation requiring older drivers to take tests to get their licenses renewed. Attempts to stiffen requirements for older drivers may be affected by the inclination of the insurance companies to offer discount rates to drivers over 65 because of their more cautious driving habits. Suggests that revoking an older individual's driver's license would take away their independence. Recommends teaching elderly motorists to compensate for their physical liabilities. Mentions the American Association of Retired Persons' "55 Alive/Mature Driving" program which is taught in 17,00 classrooms across the United States. (AT).
28. Christian, M. S. (Accident and Emergency Department, Wexham Park Hospital, Slough). Incidence and implications of natural deaths of road users. *BMJ* ; 1988 Oct 22; 297(6655): 1021-4.
29. Christophersen, A. S.; Gjerde, H.; Bjørneboe, A.; Sakshaug, J.; Mørland, J. (National Institute of Forensic Toxicology, Oslo, Norway). Screening for drug use among Norwegian drivers suspected of driving under influence of alcohol or drugs. *Forensic-Sci-Int* ; 1990 Mar; 45(1-2): 5-14.
30. Claybrook, Joan; Seaton, Michael; Powers, Patricia. Retesting older drivers: a question of necessity or discrimination? Note: *State Government News*. Mar 1989. Vol. 32, No. 3. p. 20-21. (2p.). NOTES: Included in special issue "The Politics of Aging". Presents opposing views on the need to require special training programs, testing requirements, or driving limitations on drivers over age 65. Joan Claybrook, president of Public Citizen, a consumer advocate group, argues that states should require periodic retesting of both younger (age 15-24) and older (age 54 and over) drivers because these groups are over-involved in crashes. In a counterargument, Michael Seaton and Patricia Powers of the American Association of Retired Persons (AARP) believe that since no one has yet determined a particular age at which driving skills begin to falter, states need to develop new means of identifying people of all ages who have impairments that affect their driving. They recommend a combination of roadway improvements to better accommodate older drivers, improved license screening and driver testing methods, innovative licensing programs, and the availability of alternative transportation for those who are unable to drive. (WD).
31. Connors, Gerard J.; Maisto, Stephen A.; Ersner, Herschfield, Seth M. (U Texas Medical School, Houston). Behavioral treatment of drunk driving recidivists: Short term and long term effects. *Behavioural Psychotherapy*; 1986 Jan Vol 14(1) 34-45; 1986; ISSN: 01413473. Note: Human. Investigated 36-mo posttreatment the relative effects of 2 behavioral treatment (BT) groups on short-term (knowledge and attitude change) and long-term (recidivism) variables among persons with multiple arrests for driving under the influence of alcohol (DUI). 62 male and 5 female Ss (aged 20-51 yrs) were randomly assigned to a BT that was highly individualized and focused on principles of self-control or to a general BT (which focused on alcohol education, relaxation training, and guided reevaluation of situations typically associated with DUI arrests). Each program lasted 24 wks. 61% of Ss did not perceive they had a drinking problem. Of those who did, the mean perceived duration was 6.4 yrs. Results show that Ss in both groups reported a more frequent use of portable breath test devices for assessing blood alcohol levels and

- perceived an increased probability of being arrested if they drank and drove. In addition, Ss in the individualized groups reported that they subsequently spent more time thinking about avoiding DUI. One third of the Ss were rearrested for DUI during the follow-up period, although there were indications that rearrests may have been delayed as a function of the treatment interventions. Data suggest that drunk-driving recidivists may be responsive to behavioral treatment programs. (24 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
32. Coopersmith, H. G.; Komer, Bitensky N. A.; Mayo, N. E. (Jewish Rehabilitation Hospital, Laval, PQ). Determining medical fitness to drive: physicians' responsibilities in Canada [see comments]. *Can-Med-Assoc-J* ; 1989 Feb 15; 140(4): 375-8.
 33. Copeland, A. R. Sudden natural death 'at the wheel'--revisited. *Med-Sci-Law* ; 1987 Apr; 27(2): 106-13.
 34. Cornwell, M. (Banstead Place Mobility Centre, Surrey, Great Britain). The assessment of people with arthritis who wish to drive a car. *Int-Disabil-Stud* ; 1987; 9(4): 174-7.
 35. Coverston, David Yost. Security for senior citizens: how to make the golden years safer years. Note: Security Seminars Press, Ocala, FL. 1988. (194p.). Makes recommendations to assist senior citizens in maintaining their personal physical safety and security. Describes safety measures that should be taken in the home to prevent accidents, burglaries, and personal assault. Discusses safety issues related to driving an automobile. Suggests actions that can be taken to minimize the risk of being a victim of crime while traveling to and from the workplace, while on the job, and while in public places in the community. Discusses safety and security considerations pertaining to recreational activities, travel, and moving. Describes ways of preventing fires and what to do if one should occur. Highlights basic first aid procedures. Discusses different types of fraud to which the elderly may be vulnerable. Printed in large type. (CM).
 36. Cox, Jennifer L. (Jewish Home for the Elderly of Fairfield County, Fairfield, CT, US). Elderly drivers' perceptions of their driving abilities compared to their functional motor skills and their actual driving performance. Special Issue: Assessing the driving ability of the elderly: A preliminary investigation. *Physical and Occupational Therapy in Geriatrics*; 1988 Vol 7(1-2) 51-82; 1988; ISSN: 02703181. Note: Human. Examined 115 male veteran drivers' (aged 65-95 yrs) perceptions of their driving abilities, compared with their clinically tested functional skills in the area of motor abilities, and their actual in-car driving performance. The specific motor abilities include: range of motion, muscle strength, grip strength, head and trunk control, reaction time (RT), proprioception, and light touch and localization. The results, although nonsignificant, indicate that the elderly Ss were aware of their abilities for range of motion, muscle strength, head and trunk control, grip strength, RT, proprioception, and light touch and localization. The study also indicated that clinically tested motor skills and actual in-car driver performance can be predictive based on RT. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
 37. Cvetkovich, George; Earle, Timothy C. (Western Washington U, Bellingham, US). Decision making and risk taking of young drivers: Conceptual distinctions and issues. Proceedings of an International Symposium: Youth at risk for traffic accidents (1987, Santa Monica, California). *Alcohol, Drugs and Driving*; 1988 Jan-Mar Vol 4(1) 9-19; 1988; ISSN: 08917086. Note: Human. Introduces the concepts of decision frames and information processing to explain why young drivers (aged 16-24 yrs) engage in risk-taking behavior (i.e., driving that places the S at a high statistical chance of experiencing an undesirable outcome). Ss' driving decision frames may not include safety issues; nonsafety issues may be given more importance than safety issues. Frames may include incorrect assumptions about risks, and these may be influenced by Ss' age, coping abilities, and task demands. It is suggested that research concentrate on information processing in driving situations. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
 38. Czaja, Sara J.; Barr, Robin. Technology and the everyday life of older adults. Note: American Academy of Political and Social Science. *Annals*. May 1989. Vol. 503. p. 127-137. (11p.). NOTES: Included in special issue "The Quality of Aging: Strategies for Interventions". Suggests that older adults should be perceived as active users of new technologies rather than as passive recipients. Describes the various technologies encountered by older adults in the workplace, the home, medical environments, and the highway, and considers characteristics of older adults relevant to these environments. Reviews what is known about the physical, sensory, and cognitive capacities and limitations of older adults, and the implications of these for the design of technological systems. Finds that older people can learn to use

computers and other new technologies; however, their learning success is dependent upon the system's complexity and the training strategy employed. Concludes that failure to consider the diversity of the aging population limits the usefulness of any technological innovation and creates an increasingly large group of older adults frustrated by the changes that should have improved their quality of life. (WD).

39. Dahl, C. G. Activities and satisfaction in elderly people. Note: University of Minnesota, Minneapolis, MN. 1978. (157p.). NOTES: In partial fulfillment of the requirements for the degree of Doctor of Philosophy. AVAILABILITY: University Microfilms International, Ann Arbor, MI, Order No. 7823890. Two hypotheses dealing with the use of leisure time by the retired are explored: that satisfaction with activities is a function of the correspondence between the reinforcer system of the environment and the needs of the individual; and that two measures of environmental reinforcers and individual needs developed for the vocational sphere can, with modification, be used in the avocational sphere. The two measures are the Minnesota Job Description Questionnaire and the Minnesota Importance Questionnaire. An Activity Description Questionnaire and an Activity Importance Questionnaire were developed as modifications of the two Minnesota questionnaires and distributed to 245 male and female senior citizens of the Minneapolis (St. Paul metropolitan area), ranging in age from 55 to over 84; 228 returned questionnaires were usable. When reliability and validity measures were applied to the two questionnaires, and a simple correlation was established between satisfaction and correspondence of needs and reinforcers, no support for the two hypotheses was found when responses were analyzed. Results indicated that seniors participated in 95 of the 98 activities listed but that 12 activities were most popular (church-going, cleaning, cooking or baking, driving or motoring, hiking or walking, listening to the radio, reading books or poetry, reading newspapers or magazines, shopping, talking on the telephone, visiting friends, and watching TV). Subjects reported greater satisfaction in previous work activities than in their present retirement activities, and considered ideal activities those that provided more opportunity for achievement and altruism and less emphasis on pleasant conditions. There was a statistically significant correlation between activity satisfaction and life satisfaction. Appendixes present the activity questionnaire, characteristics of the sample, percentage of time spent in certain activities, and modified cluster scores. (NJ).
40. Driving after stroke [editorial]. *Lancet* ; 1986 Oct 18; 2(8512): 901-2.
41. Driving and Parkinson's disease [editorial]. *Lancet* ; 1990 Sep 29; 336(8718): 781.
42. Dunbar, J. A.; Penttila, A.; Pikkarainen, J. (University Department of Forensic Medicine, Royal Infirmary, Dundee). Drinking and driving: choosing the legal limits. *Br-Med-J [Clin Res]* . (Review); 1987 Dec 5; 295(6611): 1458-60.
43. Egberink, H. Oude; Lourens, P. F.; Van, Der Molen, H. H. (State U, Traffic Research Ctr, Groningen, Netherlands). Driving strategies among younger and older drivers when encountering children. Special Issue: Youth and traffic accident risk. *Accident Analysis and Prevention*; 1986 Aug Vol 18(4) 315-324; 1986; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Examined how 24 young drivers (aged 18-24 yrs) and 24 older drivers (aged 30-56 yrs) stated they behaved and how they actually behaved in traffic situations in which children were involved. A questionnaire assessed Ss' knowledge of their own behavior in driving situations involving children and their expectations about typical child behavior. Ss' actual behavior in the situations was assessed through video recordings of their behavior in driving a 1-hr standard track through residential areas. From the questionnaire it appeared that younger Ss reported more frequently dangerous behavior than older Ss. The recordings showed that younger Ss also behaved more dangerously during child encounters. This result could not be explained by differences in speed but could by the fact that younger Ss detected the children less frequently than older Ss. (20 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
44. Eisenhandler, S. A. (Department of Sociology, University of Connecticut, Waterbury). The asphalt identikit: old age and the driver's license. *Int-J-Aging-Hum-Dev* . (Review); 1990; 30(1): 1-14.
45. Eisenhandler, Susan A. Asphalt identikit: old age and the driver's license. Note: *International Journal of Aging and Human Development*. 1990. Vol. 30, No. 1. p. 1-14. (14p.). Posits that possession of a driver's license, and consequently the prerogative of driving, equips elderly people with an "asphalt identikit" that allows them to maintain a non-age-related and nonstigmatized identity. Interview material from 50 adults aged 60-92 is used to illustrate the substantive issues of identity that underlie the practical activity of driving. Keeping a license and continuing to drive may be the outcome of defining public transportation as undignified and of an unwillingness to depend on others to schedule daily and weekly

activities. Many elderly acknowledged that physical deficits impeded their skill behind the wheel, and they imposed their own limits on driving but kept their driver's license for symbolic reasons. Ironically, while the symbolic tie between driving and being part of a larger, active world is instrumental in keeping identity intact, at the same time it presents some danger to the individual and others. On the whole, people seem reluctant to address safety concerns directly. Social and cultural reasons for the symbolic importance of automobiles are considered. (WD).

46. Emmerich, E. [Statistical data for 1971-1982 on motor vehicle numbers, traffic discipline, road traffic accidents, license suspensions, license prohibitions and multiple traffic offenders with regard to drunkenness at the wheel]. *Blutalkohol* ; 1984 Jan; 21(1): 3-13.
47. Evans, D. W.; Ginsburg, A. P. Contrast sensitivity predicts age-related differences in highway-sign discriminability. *Hum-Factors* ; 1985 Dec; 27(6): 637-42.
48. Evans, K. (Department of Medical and Surgical Neurology, Walton Hospital, Liverpool, U.K). Uncorrected refractive error among a hospital population. *Ophthalmic-Physiol-Opt* ; 1987; 7(3): 245-7.
49. Evans, L. (Operating Sciences Department, General Motors Research Laboratories, Warren, MI 48090). Older driver involvement in fatal and severe traffic crashes. *J-Gerontol* ; 1988 Nov; 43(6): S186-93.
50. Evans, Leonard (General Motors Research Labs, Operating Sciences Dept, Warren, MI, US). Older driver involvement in fatal and severe traffic crashes. *Journals of Gerontology*; 1988 Nov Vol 43(6) S186-193; 1988; CODEN: JOGEA3; ISSN: 00221400. Note: Human. Based on national data, maintains that some driving risks increase at older ages to levels above their minimum values but that increases are small compared with correlative substantial reductions in distances driven. Reductions in mobility may be a more dominant correlate of aging than reductions in driving safety. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
51. Evans, Leonard. Older driver involvement in fatal and severe traffic crashes. Note: *Journals of Gerontology*. Nov 1988. Vol. 43, No. 6. p. S186-S193. (8p.). Examined the extent of older driver involvement in fatal and severe motor vehicle accidents, using data collected from national sources. The dependence on age and sex of 14 variables related to risk of severe and fatal crashes was investigated, including driver fatalities, involvement in severe crashes, threat to other road users, driver fatalities as a fraction of all fatalities, the role of motor vehicle fatalities as a cause of death, and effects on longevity. For a few measures, 65-year-old drivers were more at risk than 40-year-old drivers, although not more at risk than 20-year-old drivers. In no case did 65-year-old drivers pose a greater threat to pedestrians than 40-year-old drivers. The magnitude of the decline in distance driven at older ages was far greater than any increase in driver risk, suggesting that reductions in mobility are more important in old age than reductions in driving safety. Rates of driver involvement in crashes were consistently higher for males than for females at all ages. (LS).
52. Farrell, S. (National Institute on Alcohol Abuse and Alcoholism, Alcohol, Drug Abuse, and Mental Health Administration, Rockville, MD 20857). Policy alternatives for alcohol-impaired driving. *Health-Educ-Q* . (Review); 1989 Fall; 16(3): 413-27.
53. Ferrari, Joseph R.; Carter, Andrea L. (Mohawk Valley Community Coll, Utica, NY, US). Compliance by young and older drivers to the New York mandatory seat belt law: Does wisdom come with age? *Psychological Reports*; 1987 Dec Vol 61(3) 697-698; 1987; CODEN: PYRTAZ; ISSN: 00332941. Note: Human. 66 college students and 55 elderly adults in New York state, which has a mandatory seat belt law, reported higher rates of seat belt use for long (71%) compared with short (52%) distances. However, general observations of these age groups indicated lower compliance rates than reported by the Ss. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
54. Ferrari, Joseph R.; Carter, Andrea L. Compliance by young and older drivers to the New York mandatory seat belt law: Does wisdom come with age? Note: *Psychological Reports*. Dec 1987. Vol. 61, No. 3. p. 697-698. (2p.). Actual and self-reported seat belt use by college students and senior citizens was investigated in upstate New York 1 year after implementation of New York's seat belt law. Over a 3-week period, daily observations were made on 350 to 400 students in a college parking lot and 120 to 170 older drivers in the parking lot of a local mall. In addition, a brief survey was completed by 66 students and 55 seniors. Both older and younger drivers had low rates of compliance with the law (36.2 percent of students and 37.4 percent of seniors were observed using shoulder harnesses). Nevertheless, both students and seniors claimed that they usually wore seat belts when driving and when riding as a

passenger. Both age groups reported they used seat belts more often for long than short distances; self-reported use was similar for day and night time travel and for different local destinations. The inconsistency between observed and self-reported compliance is discussed. (LS).

55. Finesilver, J. S. The senior driver in the United States: a final report on licensing, driving record, training and insurability, including compendium of significant findings. Note: University of Denver, Denver, CO. Mar 02, 1970. (65p.). AVAILABILITY: SCAN Microfiche No. CCF 000211. The two objectives of this study of drivers 65 years of age and older were to collect and organize statistical information relating to the accident involvement of the older driver compared to drivers of all ages throughout the United States, and to provide a statistical background for the comparison of the older driver in different geographical and population settings. Accident statistics for 30 States and the District of Columbia revealed that senior drivers averaged 37 percent fewer accidents than they would if their proportion of accidents were in exact ratio to their proportion of the driving population. Senior drivers were involved in only 4.8 percent of all accidents, although they represent 7.4 percent of the total driving population. They averaged lowest of all age groups in frequency of injury-producing accidents, and 7 percent fewer fatal accidents than their proportionate share of the driving population. Sections of the report identify scope of studies, timeliness of the project, influence and results of the project, correlations with other studies, the pressing need for increased safety for older pedestrians, significant findings, projections, and need for further investigations and programming. A chapter of conclusions precedes tables on national distribution of drivers and projections of the 65-plus population in the United States, and a compendium of significant findings in research studies and reports. (NJ).
56. Finesilver, S. G. Compendium of studies on the senior driver in the United States including highlights and significant findings: a part of the final report. Note: University of Denver, College of Law, Denver, CO. Mar 1970. (269p.). AVAILABILITY: SCAN Microfiche No. CCF 000296. A compendium of 11 studies and reports on various facets of senior drivers is presented. The studies and reports focus on the old driver and his or her licensing and accident involvement in 30 States and the District of Columbia, a survey of insurance company officials regarding the insurability of senior drivers, insurance premium reductions for senior drivers in 1970, anticancellation insurance statutes and their impact on senior driver, legal aspects of licensing, medical and health standards, improving the safe mobility of older persons, the driving ability of the elderly (reflected in a survey of traffic judges, safety professionals, and licensing officials), the driving record of older Americans, and the effect of the aging process on commercial drivers and pilots. Significant findings of the studies are included. (JG).
57. Finesilver, S. G. The older driver: a statistical evaluation of licensing and accident involvement in 30 states and the District of Columbia. Note: University of Denver, College of Law, Law Center, Denver, CO. Jan 1969. (40p.). AVAILABILITY: SCAN Microfiche No. CCF 000143. Accident statistics were collected and analyzed for 30 states and the District of Columbia to determine the degree of involvement in accidents experienced by drivers 65 years and older. The results show that the older driver has less than a proportionate share of all accidents, fatal accidents, and injury accidents. In the categories of all accidents and injury accidents, the older driver has the lowest median accident involvement index of any age group. If the older driver has a driving problem, it would be with respect to fatal accidents, since the older drivers are involved in these accidents nearly in proportion to their percentage of the population. The scope of the study indicates that the trend is of national rather than local significance. Similar results are shown for States of varying size and geographic location. An overview of the selected States is presented. The appendixes include tables showing the number of licensed drivers and accident involvement indexes for the 30 States. (JG).
58. Finesilver, S. G. A study of the various anti-cancellation insurance statutes with emphasis on their effects upon senior drivers. Note: University of Denver, College of Law, Denver, CO. Sep 1969. (41p.). AVAILABILITY: SCAN Microfiche No. CCF 000300. A review of insurance anticancellation statutes in various States was made, with emphasis placed on the older driver. Results of surveys taken in Kentucky, Wisconsin, Washington, Maryland, and California on cancellation and nonrenewal of auto insurance policy practices are presented. Action which has been taken by various State legislatures in regulating cancellation policies fell in one of three categories; broad general guidelines issued by the State insurance department; statutes which prohibit cancellation on specific grounds; and statutes which prohibit cancellation of policies on any grounds unless specifically excepted. The exceptions most frequently permitted by the various States are listed and discussed. A survey of insurance company officials examined their attitudes toward State legislation on insurance renewability and cancellation practices. The majority of officials believed that the legislation was not necessary or justifiable. Correspondence with

State officials concludes that statutes preventing cancellation of insurance on the basis of age has been generally effective. The appendix contains suggested provisions for anticancellation laws and a summary of statutes. (JG).

59. Finesilver, S. G. A summary of activities involving safety education for senior drivers. Note: University of Denver, College of Law, Denver, CO. Sep 01, 1968. (67p.). AVAILABILITY: SCAN Microfiche No. CCF 000297. Various meetings, conferences, and training sessions involving safety education for senior drivers are summarized. The activities were the result of endeavors by the project director to create interest on the subject among law enforcement officials, safety officials, licensing and testing administrators, and senior citizen organizations. The appendix contains illustrative materials reflecting the project director's activities in various States throughout the country. (JG).
60. Finesilver, S. G. A survey of the driving abilities of senior age professional drivers: progress report. Note: University of Denver, College of Law, Denver, CO. Sep 01, 1968. (30p.). AVAILABILITY: SCAN Microfiche No. CCF 000301. A survey of over 10,000 senior professional drivers is presented. When accident records were compared, senior professional drivers proved superior to younger drivers. Similarly, driving company officials reported that senior drivers ranked higher on overall driving skills. None the less, more than 50 percent of the companies had mandatory retirement policies. Reasons for the superior driving record of the elderly are numerous. Older drivers are less aggressive and tend to compensate for their deficiencies. The older driver usually has greater loyalty to the company and thus is more concerned with his driving. Compared to previous studies, this study appears to document an increase in the number of older drivers professionally employed. Techniques for imparting the superior driving skills of the older professional driver to the older driver in the general public should relay upon instilling a sense of responsibility in the driver. Safety bulletins and the survey form on older drivers are appended. (JRA).
61. Finn, P.; Bragg, B. W. (Abt Associates Inc., Cambridge, MA 02138). Perception of the risk of an accident by young and older drivers. *Accid-Anal-Prev* ; 1986 Aug; 18(4): 289-98.
62. Finn, Peter; Bragg, Barry W. (Abt Assoc, Cambridge, MA). Perception of the risk of an accident by young and older drivers. Special Issue: Youth and traffic accident risk. *Accident Analysis and Prevention*; 1986 Aug Vol 18(4) 289-298; 1986; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Examined whether misperception of risk could explain the high rates of traffic accidents among youths by comparing the perceptions of driving risk of 45 young male drivers (aged 18-24 yrs) with those of 48 older male drivers (aged 38-50 yrs). Three methods of estimating the risk of accident involvement were used: general questions about accident involvement, ratings of the riskiness of 10 driving situations illustrated in photographs, and ratings of the riskiness of 15 videotaped driving situations. Young Ss perceived their own chances of an accident to be significantly lower than those of both their peers and older male Ss, while older male Ss saw their chances of accident involvement as being comparable to those of their male peers and less than those of young male drivers. Findings support the thesis that young male drivers are overrepresented in traffic accidents at least in part because they fail to perceive specific driving situations as being as risky as older drivers perceive them. (18 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
63. Fisher, J. H. Compatibility of roadway signs with visual and information processing capacities of aged drivers. Note: Wayne State University, Detroit, MI. 1978. (250p.). NOTES: In partial fulfillment of the requirements for the degree of Doctor of Philosophy; Major: Psychology. AVAILABILITY: University Microfilms International, 300 N. Zeeb Rd, Ann Arbor, MI 48106; Order No. 7908910. A review is made of previous research relating to the sensory/cognitive performance of aged persons, followed by a comparison of the sign reading performance of young and aged drivers. Comparisons were made of actual street driving performances to determine whether current route guidance signs are adequate sources of information in meeting the needs of aged drivers. A secondary objective was to relate the performance decrements of aged drivers to deficits in basic psychological functions. The field study measured variables in three categories: biographical data; laboratory measures; and driver road performance measures. Two groups of subjects were used: an aged group of 30 males (age 65 to 83 years) and a young group of 10 males (aged 19 to 35 years). All testing was done at night. Analysis of biographical variables showed major differences in the driving habits of the two groups: the aged group reported estimated mean annual mileage one-third that of the young group, with a mean accident rate about three times higher than that computed for the young group. In laboratory testing, the aged group performed poorly in comparison to the control group on all vision tests, and information processing rate for the young group was significantly greater than for the aged group. Performance decrements in the aged were found to be even

greater during the road testing. Evidence from the testing indicates that inadequate design standards are now being used for roadway guide sign production. Standards based on the assumption of 20/40 vision are not applicable for nighttime viewing by aged drivers. Test measures used, tables predicting the results, and a bibliography are included. (JG).

64. Fockler, S. K.; Cooper, P. J. (Traffic Safety Planning and Research, Insurance Corporation of British Columbia, North Vancouver, Canada). Situational characteristics of safety belt use. *Accid-Anal-Prev* ; 1990 Apr; 22(2): 109-18.
65. Fox, Margery D. (Fairfax Hosp, Occupational Therapy Dept, Falls Church, VA, US). Elderly drivers' perceptions of their driving abilities compared to their functional visual perception skills and their actual driving performance. Special Issue: Assessing the driving ability of the elderly: A preliminary investigation. *Physical and Occupational Therapy in Geriatrics*; 1988 Vol 7(1-2) 13-49; 1988; ISSN: 02703181. Note: Human. Explored the relationship between perceived ability and actual visual perception skills (peripheral vision, depth perception, color sensitivity, visual acuity, and figure-ground discrimination), perceived ability and driving performance, and actual visual perception skills and driving performance in a study of 115 male veteran outpatients (aged 65-95 yrs). All 115 Ss completed a questionnaire and testing of visual perception, cognitive, and motor skills. 32 completed the in-car evaluation. Results indicate that clinically tested visual perception skills and actual in-car driving performance can be predictive based on left and right peripheral vision, and brown/green color sensitivity. Ss tended to overrate their driving abilities. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
66. Fraser, D. Lung cancer risk and diesel exhaust exposure. *Public-Health-Rev* . (Review); 1986; 14(2): 139-71.
67. Friedland, R. P.; Koss, E.; Kumar, A.; Gaine, S.; Metzler, D.; Haxby, J. V.; Moore, A. (Laboratory of Neurosciences, National Institute on Aging, Bethesda, MD 20892). Motor vehicle crashes in dementia of the Alzheimer type. *Ann-Neurol* ; 1988 Dec; 24(6): 782-6.
68. Frier, B. M.; Wilson, I. M. Driving after stroke [letter]. *Lancet* ; 1986 Nov 29; 2(8518): 1280.
69. Gjerde, H.; Mrland, J. Concentrations of carbohydrate-deficient transferrin in dialysed plasma from drunken drivers. *Alcohol-Alcohol* ; 1987; 22(3): 271-6.
70. Gjerde, H.; Mrland, J. (National Institute of Forensic Toxicology, Oslo, Norway). A two year prospective study of rearrests for drunken driving. *Scand-J-Soc-Med* ; 1988; 16(2): 111-3.
71. Gjerde, H.; Smith, Kielland A.; Normann, P. T.; Morland, J. (National Institute of Forensic Toxicology, Oslo, Norway). Driving under the influence of toluene. *Forensic-Sci-Int* ; 1990 Jan; 44(1): 77-83.
72. Goding, G. S.; Dobie, R. A. (Department of Otolaryngology-Head and Neck Surgery, University of Washington, Seattle 98195). Gaze nystagmus and blood alcohol. *Laryngoscope* ; 1986 Jul; 96(7): 713-7.
73. Godthelp, Hans (TNO Inst for Perception, Soesterberg, Netherlands). Vehicle control during curve driving. *Human Factors*; 1986 Apr Vol 28(2) 211-221; 1986; CODEN: HUFAA6; ISSN: 00187208. Note: Human. Applied the time-to-line crossing (TLC) description of vehicle control, which was developed by the present author and colleagues (see PA, Vol 72:8241) to quantify the potential role of error-neglecting strategies in driving, in order to describe steering through a curve. When entering a curve, 6 male drivers (aged 25-34 yrs) made an anticipatory steering action based on the perceived road curvature and the internal estimate of the vehicle characteristics. This process was analyzed in a field study in which Ss entered curves of different curvatures, with different speeds and with or without temporary withdrawal of visual feedback. It is concluded that the TLC analysis appears particularly suited to describe the quality of the anticipatory steering action and may serve as a general description of curve driving. (12 ref) (PsycLIT Database Copyright 1986 American Psychological Assn, all rights reserved).
74. Godthelp, Hans; Milgram, Paul; Blaauw, Gerard J. (TNO Inst for Perception, Soesterberg, Netherlands). The development of a time related measure to describe driving strategy. *Human Factors*; 1984 Jun Vol 26(3) 257-268; 1984; CODEN: HUFAA6; ISSN: 00187208. Note: Human. Describes the potential role of a fixed control strategy in automobile driving, using a preview prediction model. On the basis of this model the time-to-line-crossing (TLC) concept was developed, representing the time necessary for the vehicle to reach either edge of the driving lane. An experiment on straight road driving was conducted with 6 male drivers (aged 24-29 yrs) to analyze whether TLC would be helpful to understand a driver's

strategy in an occlusion task. Results indicate a close correspondence between TLC and Ss' self-chosen occlusion times. In addition to conventional measures such as lateral position data, TLC seems a valuable description of driving performance. (23 ref) (PsycLIT Database Copyright 1985 American Psychological Assn, all rights reserved).

75. Graca, J. L. (Geriatric Division, Denver Veterans Administration Medical Center, Colorado). Driving and aging. *Clin-Geriatr-Med* ; 1986 Aug; 2(3): 577-89.
76. Gresham, S. M.; Evans, K. L. Project helping wheels: final report. Note: North Carolina State University, Center for Urban Affairs and Community Services, Raleigh, NC. Jun 30, 1973. (85p.). AVAILABILITY: SCAN Microfiche No. CCF 000744. Project Helping Wheels was funded by the Administration on Aging in July 1971 and developed by the Center for Urban Affairs and Community Services of Wake County, North Carolina, to determine the reliability, economic practicability, and acceptability of a volunteer driving transportation program of elderly peers and to develop a community-based system of inexpensive reliable transportation for the elderly with no other means of transportation. Older adult organizations were contacted for potential participation in the project. Reimbursement of older volunteers using personal automobile to transport peers was found to be a reliable, acceptable means of transportation. Volunteers provided the greatest service in rural, low-income neighborhoods where there were few cars and no public transportation. The establishment of an inexpensive transportation system for the elderly involved working with existing agencies and transportation companies. Identification cards were developed and distributed to the elderly. In cooperation with the local bus franchise, reduced bus fares could be obtained by use of the cards. Reduced rate ambulance service was also developed. Appendixes, figures and tables, and a bibliography are attached. (JG).
77. Groeger, J. A.; Brown, I. D. (MRC Applied Psychology Unit, Cambridge, England). Assessing one's own and others' driving ability: Influences of sex, age, and experience. *Accident Analysis and Prevention*; 1989 Apr Vol 21(2) 155-168; 1989; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Investigated age and experience related to driving ability and the process of risk assessment and decision in older and younger drivers. 27 male and 27 female drivers evenly grouped according to age (18 with mean age 24.5 yrs, 18 with mean age 39.6 yrs, and 18 with mean age 57.7 yrs) were given 2 questionnaires in which they placed (1) themselves on a percentile-type scale with respect to a target group and (2) a mark on a line of given length (100 mm) in a way that reflected their perceptions of themselves or others for a particular dimension. Results suggest that there was no tendency for Ss to overestimate their ability; males and females described their performance similarly; and age differences disappeared when driving experience was controlled. Young males reported greater recklessness and comparative lack of smoothness in driving. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
78. Groeger, J. A.; Brown, I. D. (MRC Applied Psychology Unit, Cambridge, United Kingdom). Assessing one's own and others' driving ability: influences of sex, age, and experience. *Accid-Anal-Prev* ; 1989 Apr; 21(2): 155-68.
79. Groeger, J. A.; Brown, I. D. Assessing one's own and others' driving ability: influences of sex, age, and experience. Note: *Accident Analysis and Prevention*. Apr 1989. Vol. 21, No. 2. p. 155-168. (14p.).
80. Gulian, E.; Matthews, G.; Glendon, A. I.; Davies, D. R.; Et, Al (Aston U, Aston Business School, Birmingham, England). Dimensions of driver stress. *Ergonomics*; 1989 Jun Vol 32(6) 585-602; 1989; CODEN: ERGOAX; ISSN: 00140139. Note: Human. Developed a driving behavior inventory (DBI) to study dimensions of driver stress. The DBI was administered to 2 independent samples of drivers who commuted daily to work and/or for whom driving was part of their job. Study 1 involved 97 Ss (aged 23-62 yrs) and Study 2 involved 112 Ss (aged 27-59 yrs). In both studies, driver stress was defined by 5 factors which accounted for over 40% of the variance: driving aggression, dislike of driving, tension and frustration connected with successful or unsuccessful overtaking, irritation when overtaken, and heightened alertness and concentration. Multiple regression analyses pointed toward variables extraneous to driving as predictors of driver stress, among which life stresses appear to play a predominant role. (French, German & Japanese abstracts) (PsycLIT Database Copyright 1990 American Psychological Assn, all rights reserved).
81. Gunderson, Mary. Which elderly drivers should stay on the road? Note: *Senior Patient*. Jul-Aug 1989. Vol. 1, No. 4. p. 63-68. (6p.). Suggests that some factors contributing to the high rate of motor vehicle accidents involving elderly drivers may not only be predictable, but also manageable. Many elderly people are shorter than average, and these small drivers are operating cars designed for medium-sized

people, making it difficult to see road markings potentially dangerous situations. Medications are another consideration in driving performance, especially since the elderly are more likely to be taking multiple drugs. Blood alcohol concentration in a smaller body has a greater effect than the same amount of alcohol in a larger body. Only eight states have laws requiring doctors to report certain medical conditions that may affect driving. In 32 states, insurance companies are required to give a premium discount to each older driver who completes a driver training course. Proponents of the courses claim they help drivers to decide if they are still fit to drive. Other solutions are discussed, such as certain driving restrictions and the use of gadgets to aid the elderly driver. The role of the physician in assessing elderly individuals' ability to drive safely is considered. (JM).

82. Gurnack, Anne M.; Werbie, Daniel L. (U Wisconsin-Parkside, Behavioral Science Div, Kenosha). Characteristics of youths arrested for drunk driving in two Wisconsin counties 1981-1984. *Psychological Reports*; 1985 Dec Vol 57(3, Pt 2) 1271-1276; 1985; CODEN: PYRTAZ; ISSN: 00332941. Note: Human. Examined 3,941 records of individuals convicted of driving while intoxicated in 2 counties in Wisconsin during 3 time periods over 3 yrs. Information pertaining to socioeconomic status (SES) characteristics as well as assessment finds were gathered from the records. Over 90% of the Ss were White, with the remaining 10% either Black or Hispanic. Nearly 40% of the Ss were under the age of 25 yrs, another 40% were between the ages of 26 and 44 yrs, and the remaining 20% were over the age of 45 yrs. Thus, the population was very young, making intervention through rehabilitation a prime consideration. Younger (under 25 yrs) drivers were less likely to be repeat offenders, less likely to be sent to treatment than the traffic safety alternative, less likely to be assessed as alcohol dependent, and more likely to be out of compliance with the law. They also tended more often to be arrested with lower blood alcohol concentrations. (16 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
83. Halpern, Diane F. Age differences in response time to verbal and symbolic traffic signs. Note: *Experimental Aging Research*. Winter 1984. Vol. 10, No. 4. p. 201-204. (4p.). Tested the hypothesis that the elderly would react more quickly to verbal traffic signs than to symbolic ones. Study participants were 10 men and 10 women in young (age 19-29) and old (age 65-77) age groups. Sixteen traffic signs (eight pairs of verbal messages with matching symbolic messages) were presented after an experimenter read a traffic message aloud, and participants were asked to indicate whether or not the sign message was the same as the one just read. Half of the signs were yellow diamond-shaped warning signs and half were white rectangular regulatory signs. As anticipated, the reaction times of young participants were less than those of old participants. Young participants had virtually identical reaction times for symbolic and verbal messages, but older participants responded much more quickly to verbal messages. Reaction times for warning signs were less than for regulatory ones. Discusses implications for traffic safety. (LS).
84. Haraldsson, P. O.; Carenfelt, C.; Laurell, H.; Tornros, J. (Department of Otorhinolaryngology, Karolinska Hospital, Stockholm, Sweden). Driving vigilance simulator test. *Acta-Otolaryngol* (Stockh) ; 1990 Jul-Aug; 110(1-2): 136-40.
85. Harms, H.; Dietz, K. (Univ.-Augenklinik Tubingen). [Causes of inadequate vision in drivers and their significance in traffic]. *Klin-Monatsbl-Augenheilkd* ; 1987 Jan; 190(1): 3-7.
86. Hedberg, G. E. (Work Physiology Unit, National Institute of Occupational Health, Umea, Sweden). The period prevalence of musculoskeletal complaints among Swedish professional drivers. *Scand-J-Soc-Med* ; 1988; 16(1): 5-13.
87. Herrmann, W. M.; Baumgartner, P. Combined pharmac EEG and pharmacopsychological study to estimate CNS effects of ketanserin in hypertensive patients. *Neuropsychobiology*; 1986 Vol 16(1) 47-56; 1986; CODEN: NPBVAL; ISSN: 0302282X. Note: Human. Investigated central nervous system (CNS) effects of ketanserin in hypertensive patients. A multidimensional research strategy was employed to investigate CNS effects on functional and performance measures, using 23 Ss treated chronically, 20 Ss treated acutely, and 37 Ss treated with placebo. Ss were aged 20-70 yrs. Results show that the type and incidence of CNS-related adverse drug reactions were so negligible that a clinically relevant impairment by adverse reactions was unlikely. (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).
88. Herzog, J.; Wiley, N.; Kettner, G. A study of the effects of rising energy prices on the low and moderate income elderly final summary report. Note: *Applied Management Sciences Federal Energy Administration*, Washington, DC. 1975. (150p.). AVAILABILITY: U.S. Government Printing Office,

- Washington, DC 20402; SCAN Microfiche No. CCF 001068. Intensive, short-term research was conducted of the effects of increased energy prices in 1973-74 on the quality of life, income and expenditure patterns, housing costs, and transportation utilization of the low and moderate income elderly. The impact on the institutionalized elderly and the nature of Federal and local agency programs with respect to the energy crisis and its impact on the elderly were also examined. The study methodology entailed review and analysis of existing or secondary data, some of which were not yet available for general public use. Major findings show that: (1) the elderly poor consume less energy than any other age-income group, income has more effect on energy consumption than does age per se; (2) poor households consume less gasoline, somewhat less electricity, and about the same amount of natural gas as do wealthier households; (3) elderly couples on low budgets spend significantly more, proportionately, on energy than couples on intermediate or high budgets; (4) the consumer price index (CPI) increase for fuel and utilities from 1973 to 1974 was more than double the overall increase; (5) energy price inflation and its impact on the elderly were greatest in New England and the Middle Atlantic States; and (6) the rapid rise in energy prices has caused a severe economic strain on the elderly and has undoubtedly affected other necessities, such as food, housing, and transportation. Recommendations are made in seven areas: special CPI for the elderly; automatic CPI increases in income transfer payments; taxation of energy sources; adjustments of utility rate structures; housing improvements; income support programs; and development of mass transit. (CI).
89. Hindmarch, I.; Subhan, Z.; Stoker, M. J. (U Leeds, Human Psychopharmacology Unit, England). Comparison of the effects of zimeldine, amitriptyline and placebo on brake reaction time. *IRCS Medical Science Psychology and Psychiatry*; 1983 May-Jun Vol 11(5-6) 532-533; 1983; ISSN: 0309152X. Note: Human. Examined the effects of 2 antidepressants, zimeldine (200 mg) and amitriptyline (50 mg), and placebo on the braking reaction time and psychomotor performance of 9 females (aged 30-45 yrs). Results indicate that amitriptyline significantly slowed brake reaction times and also impaired performance on the tracking task, while zimeldine did not affect performance. (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
 90. Hingson, R.; Howland, J.; Heeren, T.; Levenson, S. Effects of legal penalty changes and laws to increase drunken driving convictions on fatal traffic crashes. *Bull-N-Y-Acad-Med*. (Review); 1988 Sep-Oct; 64(7): 662-77.
 91. Hofner, Klaus J. (Kuratoriums fur Verkehrssicherheit, Verkehrspsychologischen Inst, Vienna, Austria). Ursachen von Verkehrsverstossen. / Reasons for traffic offenses. *Arbeiten aus dem Verkehrspsychologischen Institut*; 1982 Vol 19(6) 47-56; 1982. Note: Human. Observation, interviews, and spontaneous inquiries were used to determine characteristics of drivers who did and who did not obey traffic regulations. Typical law-abiding drivers were conscious of safety, below 30 or above 60 yrs of age, employed, drove "middle-class" cars, and had less-than-average driving experience. Typical offenders were more liable to take risks, were unaccepting of authority, had an emotional tie to their car, were aged 45-50 yrs, were executives or self-employed, and drove powerful cars. (English abstract) (8 ref) (PsycLIT Database Copyright 1984 American Psychological Assn, all rights reserved).
 92. Homel, Ross (Macquarie U, School of Behavioural Sciences, North Ryde, Australia). Young men in the arms of the law: An Australian perspective on policing and punishing the drinking driver. *Accident Analysis and Prevention*; 1983 Dec Vol 15(6) 499-512; 1983; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Argues that young men, particularly those of an unskilled occupational status, are subject to more intensive surveillance by the police and more severe punishments for drinking and driving than other groups of road users. Evidence for this proposition is presented, drawing upon roadside survey, conviction, sentencing and police data on the ways in which drivers come to notice for a screening breath test. It is argued that the power granted to police and magistrates to exercise discretion in the performance of their duties has a pervasive influence in the production of the conviction and sentencing statistics, although road user characteristics (such as the times and frequency of driving) are of primary importance. It is hypothesized that police and magistrates tend to see young (unskilled) male drink-drivers as a greater threat to public safety than other classes of drinking drivers, and therefore these offenders are not as readily redefined as "folk criminals" and accorded lenient treatment. Evidence suggests that the value of this tough approach to young men may be limited. (49 ref) (PsycLIT Database Copyright 1984 American Psychological Assn, all rights reserved).
 93. Hughes, P. K.; Cole, B. L. (U Melbourne, Victorian Coll of Optometry, Australia). What attracts attention when driving? *Ergonomics*; 1986 Mar Vol 29(3) 377-391; 1986; CODEN: ERGOAX; ISSN: 00140139. Note: Human. 25 observers (aged 18-26 yrs) reported what attracted their attention while driving along a

21.9 km route through a suburban district. A 2nd group of 25 observers (aged 21-47 yrs) made similar reports in the laboratory while watching a film of the same route. The results from the laboratory trial closely parallel those from the field, indicating that laboratory studies using a movie simulation provided a satisfactory means of studying the distribution of attention using a concurrent verbal report technique. The absence of a driving task had no substantial effect on attentive behavior, suggesting that the visual information presented by the movie film was sufficient to generate attentive processes characteristic of driving. Results show that advertising attracted a good proportion of attention; but in those sections of the route where there was little advertising, attention was directed to an even greater extent to other objects not related to driving. 30-50% of attention was given to such objects, perhaps reflecting the spare capacity of the observers, which indicates that restriction of advertising would not result in more attention being given to driving-related objects. Approximately 15-20% of attention was given to traffic control devices, which is not sufficient to ensure that all or even most traffic control devices are noticed. Consideration is given to what action could be taken to increase the chance of traffic control devices attracting attention. (French, German & Japanese abstracts) (27 ref) (PsycLIT Database Copyright 1986 American Psychological Assn, all rights reserved).

94. Hutcherson, Dana G. Self monitoring of driving for the elderly: Evidence for use of a driving diary. Special Issue: Assessing the driving ability of the elderly: A preliminary investigation. *Physical and Occupational Therapy in Geriatrics*; 1988 Vol 7(1-2) 171-201; 1988; ISSN: 02703181. Note: Human. Explored a method of screening elderly individuals for deficits that may affect driving performances and to determine if more time consuming performance-based evaluation is necessary. A self-administered driving questionnaire and daily driving diary were completed by 49 Ss (aged 65-90 yrs); actual driving performances of 24 Ss were observed and compared with data from the instruments. Characteristics, habits, and skills of the population were described and compared between instruments. Correlations between self-report and observation and the finding that Ss were fairly compliant (71% of the diaries were 90% or more complete) indicate that these screening methods merit further refinement and testing. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
95. Imbeau, Daniel; Wierwille, Walter W.; Wolf, Laurie D.; Chun, Gail A. (U Quebec, Trois-Rivieres, Canada). Effects of instrument panel luminance and chromaticity on reading performance and preference in simulated driving. *Human Factors*; 1989 Apr Vol 31(2) 147-160; 1989; CODEN: HUFAA6; ISSN: 00187208. Note: Human. 24 men and women in 19-30, 31-50, and 51-73 yr old age groups read aloud words presented on 2 displays emulating written legends on automobile instrument panels while driving a simulated vehicle in nighttime conditions. The words were presented in 8 different chromaticities, 2 brightness levels, 4 character sizes, and 2 levels of word complexity. Color of illumination per se had a reliable effects on subjective preference. Word complexity significantly increased glance and response times. Brightness had an effect on performance only for the 2 smaller character sizes. Character size had marked effects on performance and subjective preferences. The 2 smaller character sizes yielded significant performance decrements for older drivers. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
96. International gerontology congress review. Note: *Journal of the Association of Retired Persons International*. Summer 1969. Vol. 5, No. 3. AVAILABILITY: SCAN Microfiche No. CCF 000210. This issue of the *Journal of the Association of Retired Persons International* was prepared as a special preview issue for the 8th International Congress of Gerontology, held in Washington, D.C. Congress article topics include the history of the Association, a Congress preview, speakers and sessions, participant characteristics and backgrounds, an editorial suggesting that spiritual issues be considered. General interest article topics include income levels among the aged, approaches to senility in England, safety of older drivers, happiness among the aged in foreign nations, gerontology news and developments, a calendar of events, definition of the gerontology field, and a report on the 1969 Biennial Conference of the National Council on the Aging. (RW).
97. Irwin, Linda (Roanoke Memorial Hosp, Dept of Occupational Therapy, VA, US). Elderly drivers' perceptions of their driving abilities compared to their cognitive skills and driving performance. Special Issue: Assessing the driving ability of the elderly: A preliminary investigation. *Physical and Occupational Therapy in Geriatrics*; 1988 Vol 7(1-2) 83-100; 1988; ISSN: 02703181. Note: Human. Compared 115 male veteran drivers' (aged 65+ yrs) perceptions of their driving ability with clinically tested cognitive skills needed for driving and their actual driving performance. Ss completed a questionnaire and in-car evaluation and were tested for skills in the following areas: mental status memory, selective attention, following written directions, sign recognition, and judgment. Chi-square analysis of data revealed no

- significant difference between (1) how drivers perceived their ability and their tested cognitive skills, (2) how drivers perceived their ability and their actual driving performance, and (3) individuals' tested cognitive skills and their actual driving performance. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
98. Ismailov, ShU; Frolova, L. V.; Liverko, I. V. [Clinico-epidemiologic aspects of chronic bronchitis among workers in the automobile transportation business]. *Probl-Tuberk* ; 1987; (6): 9-11.
 99. Job, R. F. (Department of Psychology, University of Sydney, NSW, Australia). The application of learning theory to driving confidence: the effect of age and the impact of random breath testing. *Accid-Anal-Prev* ; 1990 Apr; 22(2): 97-107.
 100. Joksch, H. C. (Mid-America Research Institute, Hartford, Connecticut 06106). Review of the major risk factors. *J-Stud-Alcohol-Suppl.* 10; 1985 Jul: 47-53.
 101. Jonah, Brian A. (Transport Canada, Road Safety Directorate, Ottawa). Accident risk and risk taking behaviour among young drivers. Special Issue: Youth and traffic accident risk. *Accident Analysis and Prevention*; 1986 Aug Vol 18(4) 255-271; 1986; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Reviews evidence relevant to the hypotheses that young drivers (aged 16-25 yrs) are at greater risk of being involved in a casualty accident than older drivers and that this greater risk is primarily a function of their propensity to take risks while driving. The 1st hypothesis is supported by epidemiological research even when controlling for differences in the quantity and quality of road travel and driving experience. The 2nd hypothesis is supported by observational and self-report surveys of driving behavior. Some of the research and theory on risk perception and risk utility, possible mediators of risk taking, are also reviewed. (94 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
 102. Jonah, Brian A.; Dawson, Nancy E. (Transport Canada, Road Safety Directorate, Ottawa, ON, Canada). Youth and risk: Age differences in risky driving, risk perception, and risk utility. *Alcohol, Drugs and Driving*; 1987 Jul-Dec Vol 3(3-4) 13-29; 1987; ISSN: 08917086. Note: Human. Describes differences between younger and older drivers on a number of measures of risky driving taken during a national household survey (N = 2,207) conducted in Canada. Young drivers (aged 16-24 yrs) were more likely to engage in risky driving habits and were more likely to have been involved in accidents and violations. Young drivers perceived fewer driving risks and placed less emphasis on safety. (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).
 103. Jones, A. W.; Lund, M.; Andersson, E. (Department of Alcohol Toxicology, National Laboratory of Forensic Toxicology, University Hospital, Linköping, Sweden). Drinking drivers in Sweden who consume denatured alcohol preparations: an analytical-toxicological study. *J-Anal-Toxicol* ; 1989 Jul-Aug; 13(4): 199-203.
 104. Kaplan, O. J. San Diego Senior Citizen's needs in transportation, recreation, and housing. Note: The Urban Observatory of San Diego, San Diego, CA. Jun 1973. (96p.). AVAILABILITY: NTIS, 5285 Port Royal Rd, Springfield, VA 22161; SCAN Microfiche No. CCF 001078. A preliminary attempt to identify the unmet needs for transportation, recreation, and housing of persons 65 years or older in San Diego, California, is based on a survey of 500 elderly residents in 1973, interviews with knowledgeable persons in San Diego and throughout the country, and a review of pertinent literature. Recommendations for transportation include: expanding programs to enable older people to retain their driver's licenses and to operate their automobiles safely; making a monthly bus pass available for \$7.50; making a study of the aged who have no access to automobiles, cannot use buses, and cannot afford taxi service; establishing programs for those not being adequately served by existing forms of transportation; publicizing the Model Cities minibus program, and denying construction permits to senior citizen housing projects not within several blocks of a bus line. Recommendations for recreation include establishing multipurpose centers for recreation, counseling, and other services, and expanding staffs serving the city's senior citizens. Housing recommendations emphasize that the city of San Diego should plan and develop a senior citizen housing complex over several city blocks in the downtown area. Appendixes present the senior citizens survey, the survey methodology, and survey cross-tabulations. (NJ).
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- common center of gravity (stabilometry)]. *Fiziol-Zh* ; 1989 Sep-Oct; 35(5): 82-4.
107. Keltner, J. L.; Johnson, C. A. (Department of Ophthalmology, University of California at Davis 95616). Visual function, driving safety, and the elderly. *Ophthalmology* ; 1987 Sep; 94(9): 1180-8.
 108. Kirkham, Richard W.; Landauer, Ali A. (U Western Australia, Nedlands). Sex differences in the distribution of traffic law enforcement. *Accident Analysis and Prevention*; 1985 Jun Vol 17(3) 211-215; 1985; CODEN: AAPVB5; ISSN: 00014575. Note: Human. All 9,765 instances of formal traffic law enforcement (TLE) during a 2-wk period in Western Australia were categorized by the type of offense and by the age and sex of the offender to investigate sex differences in the distribution of TLE. A number of apparent anomalies in the distribution of law enforcement were discovered. In particular, men under 25 yrs of age were overrepresented in the enforcement figures and women underrepresented, even after allowing for exposure. (9 ref) (PsycLIT Database Copyright 1985 American Psychological Assn, all rights reserved).
 109. Kito, Tsuneo; Haraguchi, Masahiro; Funatsu, Takayuki; Sato, Motoharu; Et, Al (Kyushu U, Faculty of Literature, Fukuoka, Japan). Measurements of gaze movements while driving. *Perceptual and Motor Skills*; 1989 Feb Vol 68(1) 19-25; 1989; CODEN: PMOSAZ; ISSN: 00315125. Note: Human. Investigated the gaze movements (GMTs) of 5 professional truck drivers (aged 25-51 yrs) driving through an intersection. GMTs of drivers in large vehicles were compared to those of drivers in small vehicles. When approaching an intersection, both groups of drivers made repeated saccadic GMTs (SGMTs). After entering the intersection, Ss directed SGMTs ahead in the direction of the turn. The number of GMTs was significantly greater in Ss with large vehicles. The distribution of GMTs when driving a large vehicle showed a peak at the point 50-60Deg. to the right and left of the median plane of the driver. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
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 114. Leaman, Alan; Fitch, Martin (Liverpool Royal Hosp, Casualty Dept, England). Impulsiveness and Venturesomeness in young motorcyclists. *Personality and Individual Differences*; 1987 Vol 8(6) 945-946; 1987; ISSN: 01918869. Note: Human. Assessed 72 male motorcyclists (aged 17-38 yrs) for risk taking personality characteristics using the Venturesomeness scale of the Impulsiveness Questionnaire developed by S. B. Eysenck (1978). Results indicate similar levels of Venturesomeness between Ss and their peers. (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).
 115. Legh, Smith J.; Wade, D. T.; Hewer, R. L. (Department of Neurology, Frenchay Hospital, Bristol). Driving after a stroke. *J-R-Soc-Med* ; 1986 Apr; 79(4): 200-3.
 116. Licko, Vojtech; Thompson, Travis; Barnett, Gene (U California, Cardiovascular Research Inst, San Francisco). Asynchronies of diphenhydramine plasma performance relationships. *Pharmacology, Biochemistry and Behavior*; 1986 Aug Vol 25(2) 365-370; 1986; CODEN: PBBHAU; ISSN: 00913057. Note: Human. The relation between performance on driving-related tasks and plasma levels of diphenhydramine (DPH) was studied in 8 males (aged 22-36 yrs) over 24 hrs following oral administration. DPH plasma concentrations rose to peak levels in 1.5-2.5 hrs, declining to a nearly constant level by 12-24 hrs. For all behavioral measures, the shape of performance curves over time was similar to that of plasma, reaching maximum decrements in 1-4 hrs. The relation between plasma levels and performance was asynchronous varying with behavioral measure and dose. Results suggest that if DPH is administered in the therapeutic dosage range at the intervals typically recommended for cold symptoms and allergies, some aspects of human performance may be impaired. (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).

117. Little, G. L.; Robinson, K. D. Relationship of DUI recidivism to moral reasoning, sensation seeking, and MacAndrew alcoholism scores. *Psychol-Rep* ; 1989 Dec; 65(3 Pt 2): 1171-4.
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119. Lucas, Blaustein, Mary J.; Filipp, Laura; Dungan, Cheryl; Tune, Larry (Johns Hopkins Hosp, Dementia Research Clinic, Baltimore, MD, US). Driving in patients with dementia. *Journal of the American Geriatrics Society*; 1988 Dec Vol 36(12) 1087-1091; 1988; CODEN: JAGSAF; ISSN: 00028614. Note: Human. Administered a 20-item driving habits questionnaire to 53 patients in a dementia research (outpatient) clinic. Ss were diagnosed with Alzheimer's disease, multi-infarct dementia, or a combination of both disorders. 30% of the Ss had had at least 1 accident since the onset of symptoms of dementia. An additional 11% were reported by caregivers to have caused accidents. Legal ramifications of these data are discussed. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
120. Lucas, Blaustein M. J.; Filipp, L.; Dungan, C.; Tune, L. (Dementia Research Clinic, Johns Hopkins Hospital, Baltimore, Maryland 21205). Driving in patients with dementia. *J-Am-Geriatr-Soc* ; 1988 Dec; 36(12): 1087-91.
121. Lucas, Blaustein Mary Jane; Filipp, Laura; Dungan, Cheryl; Tune, Larry. Driving in patients with dementia. Note: *American Geriatrics Society. Journal*. Dec 1988. Vol. 36, No. 12. p. 1087-1091. (5p.). Investigates the scope and severity of driving problems among persons with dementia. A 20-item screening questionnaire was completed by caregivers or relatives of 72 persons referred to the Dementia Research (outpatient) Clinic of the Johns Hopkins Hospital in Baltimore, Md. All the patients met clinical criteria for dementia, but 19 were excluded because they had never driven. Among the remaining 53 (mean age 71.8), 30 percent had had at least one accident since the onset of dementia symptoms. An additional 11 percent were reported by caregivers to have "caused" accidents. At the time of the study, 30 percent continued to drive, and 80 percent of those continued to drive alone. Forty-four percent regularly got lost while driving, and 75 percent consistently drove below speed limits. However, 60 percent of these drivers were considered safe drivers by their caregivers. Those who were still driving had higher Mini-Mental State Examination scores, but no tests distinguished between those who had had accidents and those who had not. The results suggest that driving by individuals with incapacitating dementing illness may be an unrecognized, potentially serious problem. A copy of the driving survey used is appended. (CM).
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124. Macdonald, Scott; Pederson, Linda L. (U Western Ontario, Addiction Research Foundation, London, Canada). Occurrence and patterns of driving behaviour for alcoholics in treatment. *Drug and Alcohol Dependence*; 1988 Oct Vol 22(1-2) 15-25; 1988; CODEN: DADEDV; ISSN: 03768716. Note: Human. Surveyed 258 male Canadian alcoholics (aged 19-65 yrs) in treatment for alcoholism on Ss' driving behavior and examined Ss' official driver records. Ss drank and drove an average of 8.6 days per mo at the legal level of impairment. 88.3% of Ss had driven while impaired. Ss were grouped as having been arrested 0 times, 1 time, or multiple times in the previous 10 yrs for driving while intoxicated (DWI). Ss with multiple DWI arrests drove while impaired more frequently, under a greater variety of situations, with more risky styles of driving, and had significantly more total collisions than Ss with 0 arrests. Results show that the number of DWI arrests was generally unrelated to worse driving when sober. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
125. MacDonald, W.; Owen, J. W. (Oxford Orthopaedic Engineering Centre, Headington, England). The effect of total hip replacement on driving reactions. *J-Bone-Joint-Surg [Br]* ; 1988 Mar; 70(2): 202-5.
126. Mathey, Franz J. (Rheinische Friedrich-Wilhelms-U Bonn, Psychologisches Inst, West Germany). Verkehrsbezogene Mobilität alterer Menschen. / Traffic related mobility of elderly people. *Zeitschrift für Gerontologie*; 1983 Nov-Dec Vol 16(6) 284-289; 1983; ISSN: 0044281X. Note: Human. In connection with successful aging and a high quality of life for elderly people, improvement of traffic-related mobility

is an important aim of gerontological efforts. On the other hand, the speed, variability, and complexity of modern traffic situations in large towns often lead to stress and anxiety among the elderly. Many older pedestrians and drivers therefore prefer to reduce their own active traffic participation. However, the traffic accident rate is increased for elderly pedestrians and drivers above 60 yrs of age. The older person's risky behavior is often caused or influenced by physiological or sensorimotor handicaps. Many of these handicaps can be avoided or retarded by compensation dynamics or by specific training. Some effective ways of influencing and correcting dangerous behavior tendencies among elderly people are discussed. (23 ref) (PsycLIT Database Copyright 1984 American Psychological Assn, all rights reserved).

127. Matthews, M. L.; Moran, A. R. (Department of Psychology, University of Guelph, Ontario, Canada). Age differences in male drivers' perception of accident risk: the role of perceived driving ability. *Accid-Anal-Prev* ; 1986 Aug; 18(4): 299-313.
128. Matthews, Michael L.; Moran, Andrew R. (U Guelph, Canada). Age differences in male drivers' perception of accident risk: The role of perceived driving ability. Special Issue: Youth and traffic accident risk. *Accident Analysis and Prevention*; 1986 Aug Vol 18(4) 299-313; 1986; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Compared 23 young male drivers (aged 18-25 yrs) and 23 older male drivers (aged 35-50 yrs) in their perceptions of driving risk and confidence in driving ability. Ss responded to a questionnaire on accident risk and driving ability and rated risk of videotaped sequences depicting various elements of driving behavior. Although young Ss' estimates of accident involvement in the next year were higher than those of older Ss, young Ss gave lower ratings of accident risk for specific driving situations that demanded quick reflexes or substantial vehicle-handling skills. Young Ss rated their own risk of an accident and driving abilities as being the same as for older Ss. However, they saw their peers as being significantly higher at risk and having poorer abilities than themselves. Young Ss were more confident in their driving abilities than the older Ss. Young Ss showed a notable dissociation between perceived and actual ability and tended to view themselves as being immune from the effects of higher levels of risk, which they were prepared to ascribe to their peers but not to themselves. Results suggest that perceived risk and self-perceived driving abilities are interrelated. (25 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
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132. Meier, Steven E.; Brigham, Thomas A.; Handel, Gregory (North Idaho Coll). Effects of feedback on legally intoxicated drivers. *Journal of Studies on Alcohol*; 1984 Nov Vol 45(6) 528-533; 1984; CODEN: JSALDP; ISSN: 0096882X. Note: Human. Examined the effects of an intervention providing drinkers with immediate feedback on their levels of intoxication. It was hypothesized that feedback would reduce the probability of driving for intoxicated individuals. 72 college-aged patrons (aged 20.9 yrs) leaving a drinking establishment were given feedback about their blood alcohol level (BAL): 24 were administered a Breathalyzer and were then read a statement on the consequences of driving with their BAL, 27 were shown a large chart and had to determine their own BAL from their weight and number of drinks consumed, and 21 were given no feedback. The 2 feedback groups were later collapsed. Ss were also followed unobtrusively to determine whether they drove away from the premises. Findings reveal that 24 of the feedback Ss (47%) were legally intoxicated, but, contrary to predictions, 83% still drove after learning that they were legally intoxicated. It is suggested that Ss' prior history with drinking and driving reduced the impact of the information about intoxication level. When self-reports of consumption were compared with Breathalyzer BALs, a correlation of .82 was obtained. (13 ref) (PsycLIT Database Copyright 1985 American Psychological Assn, all rights reserved).
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136. Mortimer, Rudolf G.; Fell, James C. (U Illinois, Champaign, US). Older drivers: Their night fatal crash involvement and risk. 32nd Annual Meeting of the Association for the Advancement of Automotive Medicine (1988, Seattle, Washington). *Accident Analysis and Prevention*; 1989 Jun Vol 21(3) 273-282; 1989; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Used data from the 1983 Fatal Accident Reporting System and the Nationwide Personal Transportation Study to describe major problems in night driving that involved older drivers (aged 65+ yrs) in fatal crashes and to assess their risk. The rate of involvement in fatal crashes in darkness of older drivers was much less than for drivers, aged <25 yrs, but greater overall than for drivers, aged 25-64 yrs. The rate for older females was much less than for older males. The performance of older males indicates a substantial increase in risk of fatal crash involvement in darkness. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
137. Muggler, Bickel J.; Maag, F. [Loss of consciousness of unclear origin at the wheel]. *Ther-Umsch* ; 1985 Sep; 42(9): 624-30.
138. Muto, William H.; Wierwille, Walter W. (Xerox Corp, Office Products Div, Dallas, TX). The effect of repeated emergency response trials on performance during extended duration simulated driving. *Human Factors*; 1982 Dec Vol 24(6) 693-698; 1982; CODEN: HUF6A6; ISSN: 00187208. Note: Human. Studied the effects of 30, 60, and 150 min of continuous driving on 12 Ss' (aged 18-31 yrs) RTs to repeated response trials in a simulated emergency: the sudden deceleration of a lead vehicle in a simulated car-following scenario. Mean RTs of early trials tended to be slower than both those of later and baseline trials. Data imply that repeated response trials can modify decrements normally associated with fatigue mechanisms and that studies using repeated response trials during driving may not yield valid indications of fatigue-induced performance decrements. (12 ref) (PsycLIT Database Copyright 1983 American Psychological Assn, all rights reserved).
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143. Noordzij, P. C.; Meester, A. C.; Verschuur, W. L. (Leiden U, Faculty of Social Sciences, Netherlands). Night time driving: The use of seat belts and alcohol. Special Issue: Risky decision making in transport operations. *Ergonomics*; 1988 Apr Vol 31(4) 663-668; 1988; CODEN: ERGOAX; ISSN: 00140139. Note: Human. Confirmed reported findings that young drivers and drinking drivers were less likely to wear seat-belts at night. Results of a night-time survey of 1,246 drivers in the Netherlands show the lowest rate of belt use, 21%, being for young drivers with blood alcohol levels in excess of the legal limit (.50%). Those drivers who were most likely to become involved in a crash were least likely to protect themselves from injury. (French, German & Japanese abstracts) (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).
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Jan; 100(1): 21-7.

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148. Opsata, Margaret. Older drivers and safety: the tough choices. Note: *Fifty Plus*. Feb 1988. Vol. 28, No. 2. p. 32-36. (5p.). Examines some of the issues that arise when an elderly driver becomes a safety hazard to self and others. Although elderly drivers have a lower overall accident rate than other drivers, they may have higher rates when miles driven are taken into consideration. In addition, care accidents are often more devastating to older drivers. Although many older people stop driving voluntarily, others continue to drive despite significant impairments. Theoretically, anyone can notify the motor vehicle department that an older driver is a public hazard, and motor vehicle departments should be able to spot unqualified drivers when their licenses come up for renewal, but in practice few older drivers lose their licenses in these ways. Only 13 states have regulations to monitor the performance and safety of older drivers. Persons concerned about their own driving abilities or the abilities of an older friend or relative can look into defensive driving courses, use self-assessment booklets, review the possible side effects of medications, use outside authority figures who offer an impartial judgment, obtain alternative identification cards, provide alternative transportation, and lobby for stricter driver exams and enforcement. (LS).
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153. Panek, P. E.; Wagner, E. E. Hand Test personality variables related to automotive moving violations in female drivers. *J-Pers-Assess* ; 1986 Summer; 50(2): 208-11.
154. Panek, Paul E.; Rearden, John J. (Eastern Illinois U, US). Age and gender effects on accident types for rural drivers. *Journal of Applied Gerontology*; 1987 Sep Vol 6(3) 332-346; 1987; ISSN: 07334648. Note: Human. Classified types of accidents among rural drivers and determined if these accidents differed by age and gender, using newspaper accounts of police accident reports. Results indicate that men had significantly more following and skidding accidents. Women had significantly more intruding-approach accidents. Results also indicate (1) an increasing linear trend between age and laterally moving vehicle and attention-deficit accidents; (2) the incidence of intruding-approach accidents was high in all age groups; and (3) following and skidding accidents generally demonstrated a decreasing linear trend with age. (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).
155. Panek, Paul E.; Wagner, Edwin E. (Eastern Illinois U, Charleston). Hand Test personality variables related to automotive moving violations in female drivers. *Journal of Personality Assessment*; 1986 Sum Vol 50(2) 208-211; 1986; CODEN: JNPABX; ISSN: 00223891. Note: Human. Administered the Hand Test and a self-report driving questionnaire to 170 women (aged 17-72 yrs) to determine if specific personality traits would be significantly related to automotive moving violations. Results show that although personality traits derived from the Hand Test were associated with aggressive and directive behavior (direction, acting-out score) and number of moving violations, the relationships differed as a function of age. (10 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
156. Papacostas, C. S.; Synodinos, Nicolaos E. (U Hawaii-Manoa, Honolulu, US). Dimensions of driving

- behaviour and driver characteristics. *Applied Psychology An International Review*; 1988 Feb Vol 37(1) 3-13; 1988; ISSN: 0035340X. Note: Human. Among 216 university students of European, Chinese, Japanese, or other ethnic background, 4 dimensions of self-reported driving behavior were measured by questionnaire. Age, gender, and ethnicity were related to an usurpation of right-of-way dimension; gender and driving frequency to freeway urgency (preference for highway driving); ethnicity and preferred mode of travel to externally focused frustration; and gender to a destination-activity orientation. Externally focused frustration was consistently related to the Type A behavior pattern as measured by the Jenkins Activity Survey across age, gender, and ethnicity. (French abstract) (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).
157. Parsons, M. (Department of Neurology, General Infirmary at Leeds). Fits and other causes of loss of consciousness while driving. *Q-J-Med* ; 1986 Mar; 58(227): 295-303.
 158. Pastalan, L. A. Older driver refresher course: instructor handbook. Note: The University of Michigan - Wayne State University, Institute of Gerontology, Ann Arbor, MI 48109. 1976. (107p.). NOTES: Field testing supported by Michigan Office of Highway Safety Planning, and U.S. National Highway Traffic Safety Administration. Provided here is all the information a professional driver training instructor needs to teach the Older Driver Refresher Course. The course was developed by the Institute of Gerontology and is tailored specifically to the needs and characteristics of experienced older drivers. Part one of this handbook contains information on older adults as drivers and as students. Physical, sensory, perceptual, and cognitive age-related changes and their effects on driving behavior are summarized. Techniques for teaching older students are discussed. Part two describes preparations an instructor must complete before teaching the course--selecting a location, preparing the room, organizing audiovisual presentations, planning optional individual in-car instruction, and obtaining handout materials. Part three presents lesson plans for the five course sessions. Each session is comprised of two 1-hour lessons. Topics covered include signs, signals, and pavement markings; other types of road users; intersections; on the open road; perceptual skills; adverse conditions, equipment, and equipment failure; local problem areas; and license renewal and restricted driving. Self-assessment exercises are appended, and a bibliography is provided. (CI).
 159. Perry, Anthony R. (U Cincinnati, OH, US). Type A behavior pattern and motor vehicle drivers' behavior. *Perceptual and Motor Skills*; 1986 Oct Vol 63(2, Pt 2) 875-878; 1986; CODEN: PMOSAZ; ISSN: 00315125. Note: Human. Examined whether impatience and a chronic sense of time urgency were associated with the driving performance of Type A (coronary-prone) individuals. 38 women and 32 men (aged 18-57 yrs) completed the Jenkins Activity Survey and a questionnaire concerning their driving. Ss exhibiting more Type A behavior tended to be more impatient, reported being involved in more accidents, and received more tickets for driving violations than Ss scoring lower on the Type A scale. (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).
 160. Physical disability in 1986 and beyond. A report of the Royal College of Physicians. *J-R-Coll-Physicians-Lond* . (Review); 1986 Jul; 20(3): 160-94.
 161. Pierce, J. P.; Yong, C. S.; Dwyer, T.; Chamberlain, A. A survey of health promotion priorities in the community. *Community-Health-Stud* ; 1985; 9(3): 263-9.
 162. Pitariu, Horia. The Holtzman Inkblot Technique: A tentative study with professional drivers. XXIII International Congress of Psychology (1984, Acapulco, Mexico). *Revue Roumaine des Sciences Sociales Serie de Psychologie*; 1985 Jan-Jun Vol 29(1) 75-81; 1985; ISSN: 00353892. Note: Human. Administered the Holtzman Inkblot Technique (HIT) to 110 long-distance professional drivers (aged 28-54 yrs) who normally work under high-stress conditions. Personality variables commonly used in evaluating and predicting cognitive functioning, affective functioning, and self-identity were examined. Performances obtained with the HIT were correlated with professional performance. It was found that 9 HIT variables had predictive value for professional performance. Results indicate that the HIT can be used as a tool for predicting professional performance as well as for investigating human personality variables. (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
 163. Ponds, R. W.; Brouwer, W. H.; van, Wolffelaar P. C. (Department of Neuropsychology and Psychobiology, State University Limburg, Maastricht, The Netherlands). Age differences in divided attention in a simulated driving task. *J-Gerontol* ; 1988 Nov; 43(6): P151-6.
 164. Ponds, Rudolf W.; Brouwer, Wiebo H.; Van, Wolffelaar, Peter C. (U Limburg, Maastricht, Netherlands). Age differences in divided attention in a simulated driving task. *Journals of Gerontology*; 1988 Nov Vol

- 43(6) P151-156; 1988; CODEN: JOGEA3; ISSN: 00221400. Note: Human. Tested the hypothesis that aging impairs ability to divide attention, using 17 young adults (21-37 yrs), 17 middle-aged Ss (40-58 yrs), and 41 old Ss (61-80 yrs). A dual task experiment involved 2 continuous performance tasks: compensatory tracking modeled after the everyday activity of car driving and a self-paced visual choice reaction time (RT) task requiring analysis of a visual display presented so that no eye movements were required when the 2 tasks were performed simultaneously. Results indicate that elderly Ss showed decreased ability to divide attention when compared with young and middle-aged Ss, who did not differ in ability to divide attention. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
165. Preusser, David F. (Dunlap & Assoc, Norwalk, CT, US). Delaying teenage licensure. International Symposium: The social psychology of risky driving (1988, Santa Monica, California). Alcohol, Drugs and Driving; 1988 Jul-Dec Vol 4(3-4) 283-295; 1988; ISSN: 08917086. Note: Human. Summarizes a 7 state survey of transportation needs among 52,304 public high school students (aged 14-18 yrs) with and without driver's licenses. Results show that while most Ss wanted to become licensed as soon as they could, the rate of licensure between states was extremely variable. Ss from states where teenagers could obtain licenses at an earlier age reported more driving, risky driving, and crashes and violations compared with Ss in states with a later licensing age. Delayed licensure and limited-privilege licenses for 15-17-yr-olds are seen as effective approaches for limiting teen driving exposure, risky driving, and crash involvements. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
166. Project Helping Wheels. Note: North Carolina State University, Center for Urban Affairs and Community Services, Raleigh, NC. n.d. (16p.). AVAILABILITY: SCAN Microfiche No. CCF 000743. An Administration on Aging funded demonstration program, Helping Wheels, was designed to explore the use of older drivers in providing rides for their peers on a voluntary basis. The project initially explored the legal status of using senior citizens in chauffeuring roles. To determine the number of people who would volunteer to share rides, a Transportation Needs Survey Card was issued. Helping Wheels also worked in cooperation with such related community efforts as a friendly visitors program. Program participants were identified by the Senior Transportation in Raleigh (STIR) card. Project costs were calculated as between \$8,000 and \$10,000, with 50 drivers serving 1,000 riders over a distance of 100,000 miles. Illustrations, copies of the driver application card, the transportation needs survey card, the year-to-date record card, and data on general operating expenses are provided for community organizations and State government agencies to learn about the Helping Wheels program. (JRA).
167. Promisel, D. M.; Blomberg, R. D.; Nacht, M. L.; Silver, S. School bus safety-operator age in relation to school bus accidents: final report. Note: Dunlap and Associates, Inc., Darien, CT. Dec 1969. (139p.). AVAILABILITY: Clearinghouse for Federal Scientific and Technical Information, Springfield, VA, 22151; SCAN Microfiche No. CCF 001285. To determine if age is a significant factor in the assessment of school bus operator performance, a study was initiated to establish school bus accident reporting criteria, to analyze accident records as a function of age, and to identify factors that affect driver performance in relation to age. A literature search was performed and preliminary interviews were conducted to establish data collection requirements and the context for analysis. A data sampling plan was devised that resulted in the collection of student transportation data from 53 school districts in 9 States. Computerized techniques were employed to analyze 4,003 driver cases; data were based on accident and driver records for the 1967-1968 school year. Although age was not an entirely definitive predictor of accident rates, it was related to accidents in a complex manner. There were different relationships between age and accident rates for male and female drivers. Based on the findings, it is recommended that driver age limits be formulated in relation to all driver characteristics and not age alone, and that uniform, national school bus driver age limits be discouraged. Appendixes list information requirements definitions and school districts. Supporting data and a bibliography are included. (DP).
168. Rachford, Douglas; Furth, H. G. (US Army Research Inst for the Behavioral Sciences, Alexandria, VA). Understanding of friendship and social rules in deaf and hearing adolescents. Journal of Applied Developmental Psychology; 1986 Oct-Nov Vol 7(4) 391-402; 1986; ISSN: 01933973. Note: Human. 60 deaf and 60 hearing children (aged 9-18 yrs) were interviewed regarding friendship and social rules (a game rule, a school rule, driving law), using an interpreter with the deaf Ss. Summary scores for each of the 4 areas yielded age and hearing differences. The major findings were (1) the developmental pattern of responses was similar for deaf and hearing children; and (2) deaf children lagged behind hearing children in their social understanding, most in game rules, least in friendship. The results are related to a constructivist developmental perspective and to previous research (e.g., J. E. Youniss, 1980) on

socialization of deaf children. (16 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).

169. Ragland, D. R.; Winkleby, M. A.; Schwalbe, J.; Holman, B. L.; Morse, L.; Syme, S. L.; Fisher, J. M. Prevalence of hypertension in bus drivers. *AAOHN-J*; 1989 Feb; 37(2): 71-8.
170. Rajecki, Ron. Go beyond points A and B: the rewards of terrific transportation. Note: *Contemporary Long Term Care*. Jul 1990. Vol. 13, No. 7. p. 34+. (3p.).
171. Ramamurti, P. V.; Jamuna, D.; Ramamurti, Sujatha (Sri Venkateswara U, Tirupati, India). A study of coronary prone behaviour among a sample of executives and non executives. *Indian Journal of Clinical Psychology*; 1984 Mar Vol 11(1) 75-77; 1984; ISSN: 03032582. Note: Human. Investigated whether 30 male executives evidenced more coronary heart disease-prone behavior than 30 male clerks (all aged 35-55 yrs), using the Jenkins Activity Survey. Executives were found to have significantly higher scores on 4 factors (Type A behavior, speed-and-impatience, job-involvement, and hard-driving-and-competitive behavior), suggesting higher levels of coronary-prone behavior among the executives. (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).
172. Ranney, Thomas A.; Gawron, Valerie J. (Liberty Mutual Research Ctr, Hopkinton, MA). The effects of pavement edgelines on performance in a driving simulator under sober and alcohol dosed conditions. *Human Factors*; 1986 Oct Vol 28(5) 511-525; 1986; CODEN: HUF6A6; ISSN: 00187208. Note: Human. 12 male drivers (aged 21-55 yrs) drove a simulator at 3 levels of blood alcohol concentrations (0.00%, 0.07%, 0.12%). Alcohol impaired overall simulator performance and performance in the approach and negotiation of curves. Roadway edgelines were associated with faster curve entry speeds and reduced amount of road used in curve negotiation, both interpreted as positive effects. Additional benefits associated with wide edgelines were minimal. (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
173. Reish, R.; Surti, V. H. A feasibility study of free bus service for a street corridor of Denver. Note: University of Colorado, Center for Urban Transportation Studies, Denver, CO. Sep 1972. (39p.). AVAILABILITY: NTIS, 5285 Port Royal Rd, Springfield, VA 22161; SCAN Microfiche No. CCF 001135. Automobile users in one part of Denver, Colorado, were surveyed to ascertain the viability and benefits of free bus transit service. It was hypothesized that free fare transit would increase bus ridership and decrease automobile transport to the extent that total transportation costs would be less with free transit. This hypothesis was based upon 5 days a week operation from 6 a.m. to 9 p.m. The survey instrument was distributed to both motorists and passengers at three major intersections at different times of day. Of 1,195 questionnaires handed out, 521 usable answers were analyzed. The survey hypothesis was supported in that total transportation costs were less under the free system. The margin of advantage, however, was relatively small. It is suggested that free bus service be investigated in more depth as a feasible answer to increasing traffic and difficulties in urban areas. Supporting data and references are provided. (DP).
174. Retchin, S. M.; Cox, J.; Fox, M.; Irwin, L. (Department of Internal Medicine, Medical College of Virginia, Virginia Commonwealth University, Richmond 23298). Performance-based measurements among elderly drivers and nondrivers. *J-Am-Geriatr-Soc*; 1988 Sep; 36(9): 813-9.
175. Retchin, Sheldon M.; Cox, Jennifer; Fox, Margery; Irwin, Linda (Virginia Commonwealth U, Medical Coll of Virginia, Richmond, US). Performance based measurements among elderly drivers and nondrivers. *Journal of the American Geriatrics Society*; 1988 Sep Vol 36(9) 813-819; 1988; CODEN: JAGSAF; ISSN: 00028614. Note: Human. 143 aged male veterans (mean age 70 yrs) were recruited from an outpatient clinic. 77 Ss were frequent drivers, 41 infrequent drivers, and 25 drove rarely or not at all. 116 Ss (84%) completed a comprehensive performance-based assessment. There were no significant differences between the 3 groups in age, formal cognitive testing, or prevalence of stroke history. However, there were significant differences in grip strength, reaction time, static visual activity, dynamic visual acuity, and peripheral vision. Using stepwise ordinal logistic regression, dynamic visual acuity, nondominant hand grip strength, and total horizontal peripheral visual field were significantly associated with driving frequency, and together explained approximately 45% of the variance. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
176. Retchin, Sheldon M.; Cox, Jennifer; Fox, Margery; Irwin, Linda. Performance-based measurements among elderly drivers and nondrivers. Note: *American Geriatrics Society. Journal*. Sep 1988. Vol. 36, No. 9. p. 813-819. (7p.). Examined the association of psychomotor, visual, and cognitive impairment

with self-reported driving frequency. A total of 116 elderly male outpatients from McGuire Veterans Administration Hospital in Richmond, Va., completed a questionnaire and a full clinical assessment. Respondents included 61 frequent drivers, 38 occasional drivers, and 17 nondrivers. Several senescent psychomotor and visual changes were significantly related to driving frequency, including static and dynamic visual acuity, hand grip strength, peripheral vision, and reaction time. Dynamic visual acuity, nondominant hand strength, and total horizontal peripheral visual field together explained 45 percent of the variance in driving frequency. Cognitive impairment was not associated with self-reported driving status. It is concluded that psychomotor and visual impairments that affect driving frequency are subtle and may not be detected by conventional means. (LS).

177. Reuben, D. B.; Silliman, R. A.; Traines, M. (Rhode Island Hospital, Division of General Internal Medicine, Providence 02902). The aging driver. *Medicine, policy, and ethics. J-Am-Geriatr-Soc.* (Review); 1988 Dec; 36(12): 1135-42.
178. Reuben, David B.; Silliman, Rebecca A.; Traines, Mark (Rhode Island Hosp, Div of General Internal Medicine, Providence, US). The aging driver: Medicine, policy, and ethics. *Journal of the American Geriatrics Society*; 1988 Dec Vol 36(12) 1135-1142; 1988; CODEN: JAGSAF; ISSN: 00028614. Note: Human. Discusses physiologic changes and common diseases of older persons that may affect driving ability, the current laws governing the aging driver, and the medical and ethical responsibility of the physician in driving decisions. It is suggested that when a physician is in doubt about a patient's ability to drive an automobile, a driving test should be recommended. (PsycLIT Database Copyright 1989 American Psychological Assn, all rights reserved).
179. Reuben, David B.; Silliman, Rebecca A.; Traines, Mark. Aging driver: medicine, policy, and ethics. Note: American Geriatrics Society. *Journal*. Dec 1988. Vol. 36, No. 2. p. 1135-1142. (8p.). Reviews physical changes with aging that can affect driving ability, summarizes current laws governing aging drivers, and discusses the ethical responsibility of physicians in making decisions about patients' driving ability. Older persons may suffer impairments in vision and delayed reaction times, as well as other sensory losses. Some diseases common in the elderly, such as cardiovascular disease, diabetes, and neurological diseases, can also impair driving ability. Medications may also affect driving ability. State laws for obtaining and renewing a driver's license vary considerably. All states have established medical advisory boards or committees to assist licensing agencies, however, and almost all states require vision tests when obtaining and renewing a license. Seven states have specific restrictions pertaining to elderly drivers. The physician's moral responsibility is to determine a patient's medical competence to drive and to then consider the balance between the risks and benefits of advising against driving. Consideration must be given to both the patient's autonomy and the responsibility to society. Priority should be given to developing criteria for distinguishing older persons who are capable of driving from those who are not. Future actions by government, the insurance industry, and the automobile industry are likely to affect older persons' decisions to drive or not. (CM).
180. Richou, H.; Rizzo, N. (I.N.M.R., Le Mesnil-St-Denis). [A survey of 700 cases of blood alcohol when driving. Medicolegal considerations and legal aspects]. *Ann-Med-Psychol (Paris)* ; 1989 Dec; 147(10): 1019-36.
181. Rioux, Steven C.; Wapner, Seymour (Clark U). Commitment to use of automobile seat belts: An experimental analysis. *Journal of Environmental Psychology*; 1986 Sep Vol 6(3) 189-204; 1986; ISSN: 02724944. Note: Human. Examined seat belt use in 30 university students, faculty, and staff (aged 16-50 yrs) with respect to individual differences in (1) degree of use; (2) cognitive, affective, and valiative aspects of the experience of seat belt use; and (3) factors precipitating seat belt use. Interviews were conducted with 10 nonusers, 10 variable-users, and 10 committed users. Results indicate that (a) committed users maintained use through imagining accidents, perception of accidents as dependent on external circumstances, and desire to be a good role model for children; (b) nonusers distanced themselves from an accident and/or injury by perceiving themselves as in control to avoid accidents and by psychologically minimizing the risks of personal injury; (c) variable-users had some of each of the characteristics of the other groups. (33 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
182. Risch, H. A.; Burch, J. D.; Miller, A. B.; Hill, G. B.; Steele, R.; Howe, G. R. (NCIC Epidemiology Unit, University of Toronto, Ontario, Canada). Occupational factors and the incidence of cancer of the bladder in Canada. *Br-J-Ind-Med* ; 1988 Jun; 45(6): 361-7.

183. Risser, Ralf (Austrian Road Safety Board, Vienna Inst for Traffic Psychology). Behavior in traffic conflict situations. *Accident Analysis and Prevention*; 1985 Apr Vol 17(2) 179-197; 1985; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Studied the behavior of drivers in traffic conflict (TC) situations to determine behaviors that raise the probability of accidents and investigated the relationship of TCs to accidents. 201 Ss were observed during a 1-hr standardized driving test, and 156 of these Ss were interviewed concerning their accident record for the past 5 yrs and their driving experience. Selected results show that more TCs were recorded on sites where accidents occurred more frequently and that driving errors correlated with Ss' accident records and TCs during the driving test. Ss performing awkward behaviors, such as hesitant or risky lane changes and cutting curves or corners, were often involved in TCs. Findings also reveal 4 types of drivers: Group 1 drivers, typically aged 18-24 yrs, committed many errors related to TCs and to their accident history. Group 2 drivers, generally aged 25-34 yrs, had few TCs but many accidents. Group 3 drivers had many TCs and few accidents, were mostly younger than 25 yrs old, and had little driving experience. Group 4 drivers were ideal drivers; they had few accidents and few TCs, were generally older than 35 yrs old, and had over 100,000 km in driving experience. (22 ref) (PsycLIT Database Copyright 1985 American Psychological Assn, all rights reserved).
184. Rockwell, T. H.; Wick, R. L. Jr; Balasubramanian, K. N. Effects of noxious gases on driver performance. Note: Ohio State University, Columbus, OH. Oct 1974. (173p.). AVAILABILITY: NTIS, 5285 Port Royal Rd, Springfield, VA 22161; SCAN Microfiche No. CCF 000915. An investigation was conducted of the nighttime driving performance of five healthy young drivers and five healthy aged drivers under the influence of CO (12 percent carboxyhemoglobin (COHb) level). The age range of the young subjects was 21 to 30 and that of the aged subjects was 60 to 65. The subjects acted as their own controls. Driving tasks included freeway driving, sign reading, car following, curve negotiation on rural roads, and novel occlusion tasks. The performance measures studied were related to drivers' visual behavior, spare visual capacity, velocity mean and variability, headway mean and variability, and peak lateral acceleration in curves. CO significantly affected the visual search behavior of both the young and the aged subjects but in a different way. Under CO, there was a decreased visual activity for the young subjects. The aged subjects, under CO, concentrated their search patterns on the road elements much closer to their vehicle. Significant differences in the driving behavior between the young and the aged were observed, and it was also noted that the effects of age and CO were not additive. The results supported the hypothesis with respect to young subjects; i.e., at night there were significant changes in their visual search pattern under CO resulting in their decreased visual activity. The older subjects were more active under CO but with different visual search patterns compared to the young. (EZ).
185. Roine, R. P.; Eriksson, C. J.; Ylikahri, R.; Penttila, A.; Salaspuro, M. (Research Unit of Alcohol Diseases, Helsinki University Central Hospital, Finland). Methanol as a marker of alcohol abuse. *Alcoholism (NY)*; 1989 Apr; 13(2): 172-5.
186. Romelsjo, A. Decline in alcohol-related problems in Sweden greatest among young people. *Br-J-Addict*; 1987 Oct; 82(10): 1111-24.
187. Rothe, John Peter; Cooper, P. J.; De, Vries B. Safety of elderly drivers: yesterday's young in today's traffic. Note: Transaction Publishers, New Brunswick, Canada. 1990. (435p.).
188. Rothke, Steven (Rehabilitation Inst of Chicago, Psychology Service, IL, US). The relationship between neuropsychological test scores and performance on a driving evaluation. *International Journal of Clinical Neuropsychology*; 1989 Vol 11(3) 134-136; 1989; ISSN: 01973681. Note: Human. Examined the potential contribution of neuropsychological assessment to the question of an individual's ability to operate a motor vehicle safely. Data were analyzed for 18 brain-damaged or brain-disordered patients (aged 25-69 yrs) who were administered a driver's examination (DE) and neuropsychological test battery. 10 Ss who passed the DE performed better on the delayed verbal recall section of the Wechsler Memory Scale and required less time to complete the Tactual Performance Test with the dominant hand alone and across the 3 trials of the test. Tests involving psychomotor planning/problem solving also strongly correlated with the pass/fail driving criterion. (PsycLIT Database Copyright 1990 American Psychological Assn, all rights reserved).
189. Ruhle, R.; Wolff, H. (Institut fur Verkehrsmedizin, Medizinischer Dienst des Verkehrswesens der DDR). [Psychological aspects of traffic fitness of aging car drivers]. *Z-Gesamte-Hyg*; 1990 Jul; 36(7): 346-50.
190. Ryan, Barbara E.; Segars, Lance B. (County of San Diego Dept of Health Services, Alcohol Program,

- CA). The first offender: What is to be done? The San Diego County experience under new law. Abstracts and Reviews in Alcohol and Driving; 1984 Apr-Jun Vol 5(2) 13-20; 1984. Note: Human. Describes the development of a county driver-improvement/alcohol-education program mandated under California law for 1st time driving-under-the-influence (DUI) offenders and evaluates the experience of 168 trainees (50.2% under aged 30 yrs and 83.3% male). Assessments of behaviors and problems of the majority of Ss show that providers should include discussion of varying drinking styles and strategies for modifying drinking behavior that are not limited to abstinence. It is suggested that even in the absence of any definitive evidence on program effectiveness, local agencies should design services based on a working knowledge of the DUI system in their locality. (8 ref) (PsycLIT Database Copyright 1985 American Psychological Assn, all rights reserved).
191. Ryden, John C. Elderly Driver Retraining and Certification Program. Note: Ryden Driving Institute, Annapolis Road, Suite 100, Lanham, Maryland, 20706. 06/01/85 to 11/01/85. This project will establish specifications for a driver education program for older adults with the intent of enabling older drivers to be certified for a longer period of time. Current recertification programs for older drivers will be evaluated. Training programs that are available for older drivers will also be reviewed.
 192. Ryden, John C.; Gilligan, Stephen H. Continued safe driving program for experienced drivers: dissemination and commercialization plan; 6 Vols. Note: Ryden Driving Institute, Lanham, MD. Oct 30, 1987. (261p.). Outlines the development, dissemination, and commercialization of a continued safe driving program for older drivers. Summarizes the objectives and accomplishments of the first two phases of the project, including assessing the feasibility of developing a new driver education course for older drivers, outlining the specifications for such a course, developing the actual course materials, and testing the course in different settings. Describes a marketing plan to target aging organizations, other driving schools, organizations which sponsor existing older driver education courses, and senior drivers. Identifies materials important for disseminating information about the course, such as press releases, summary descriptions of the course and teaching materials, selected findings from the feasibility study, and course documents. Also identifies the most important activities for marketing the course, including course offerings, speeches and presentations, and training and certifying instructors. Includes copies of the five course documents: a manual for experienced drivers, a class workbook, classroom and in-auto manuals for instructors, and a test booklet. (LS).
 193. Sarvela, P. D.; Pape, D. J.; Odulana, J.; Bajracharya, S. M. (Dept. of Health Education, College of Education, Southern Illinois University, Carbondale 62901). Drinking, drug use, and driving among rural midwestern youth. J-Sch-Health ; 1990 May; 60(5): 215-9.
 194. Saunders, R. A.; Wheeler, T. J. Age factor in powered two-wheeled road traffic accidents? J-R-Soc-Health ; 1987 Dec; 107(6): 227, 230.
 195. Schlag, B. (Universitat Essen-Gesamthochschule). [Elderly automobile drivers--a problem with a future?]. Z-Gerontol ; 1986 Nov-Dec; 19(6): 410-8.
 196. Senior citizens transportation study. Note: ITT Research Institute. n.d. (38p.). NOTES: For the Chicago metropolitan area. AVAILABILITY: SCAN Microfiche No. CCF 000354. Survey materials designed to compile a statistical profile of the transportation habits of the senior citizens in the Chicago metropolitan area are contained in this document. Sponsored by the Department of Human Resources, the survey includes two questionnaires designed to elicit demographic and personal transportation data. Forms for the interviewer to record the number and type of trip made by each respondent during the course of a specified week are included, as well as record trip forms to be filled out by the respondents for a second specified week. Procedural instructions to the survey interviewers, who were either members of a senior citizens' club or building managers of senior citizen housing developments, are provided for each questionnaire. (CI).
 197. Shore, E. R.; McCoy, M. L.; Toonen, L. A.; Kuntz, E. J. (Department of Psychology, Wichita State University, Kansas 67208-1595). Arrests of women for driving under the influence. J-Stud-Alcohol ; 1988 Jan; 49(1): 7-10.
 198. Shouksmith, George (Massey U, Palmerston North, New Zealand). Some differences in attitudes between good and poor professional drivers. Perceptual and Motor Skills; 1989 Apr Vol 68(2) 626; 1989; CODEN: PMOSAZ; ISSN: 00315125. Note: Human. In a sample of 21 bus drivers (aged 21-30 yrs) who were rated as either "good" or "poor" drivers by their supervisors, good drivers expressed more positive attitudes toward their jobs and toward regulatory rules in the UK highway code. (PsycLIT Database

Copyright 1989 American Psychological Assn, all rights reserved).

199. Silverman, D. T.; Hoover, R. N.; Mason, T. J.; Swanson, G. M. (Epidemiology and Biostatistics Program, National Cancer Institute, Bethesda, Maryland 20892). Motor exhaust-related occupations and bladder cancer. *Cancer-Res* ; 1986 Apr; 46(4 Pt 2): 2113-6.
200. Simms, B. (Banstead Place Mobility Centre, Surrey, Great Britain). The assessment of the disabled for driving: a preliminary report. *Int-Rehabil-Med* ; 1985; 7(4): 187-92.
201. Sivak, M.; Soler, J.; Trankle, U. (University of Michigan, Transportation Research Institute, Ann Arbor 48109-2150). Cross-cultural differences in driver self-assessment. *Accid-Anal-Prev* ; 1989 Aug; 21(4): 371-5.
202. Sivak, Michael; Soler, Jose; Trankle, Ulrich (U Michigan Transportation Research Inst, Ann Arbor, US). Cross cultural differences in driver risk taking. *Accident Analysis and Prevention*; 1989 Aug Vol 21(4) 363-369; 1989; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Investigated differences in simulated driver risk-taking behavior among 180 US, Spanish, and West German Ss. The task consisted of performing a simulated intersection crossing on a video display. Ss were shown an intersection with moving traffic on a horizontal road, and they were asked to attempt (under time pressure) a fixed number of crossings with a car moving vertically. The 60 Ss in all 3 countries included younger (aged 19-21 yrs), middle-aged (aged 35-45 yrs), and older (aged 65-75 yrs) persons of both sexes. Results suggest that there are differences among countries in the target risk-level of performance. However, the present findings imply that within each country all Ss (regardless of age and sex) tended to have the same target risk-level. (PsycLIT Database Copyright 1990 American Psychological Assn, all rights reserved).
203. Skinner, Robert E.; Godwin, Stephen R.; Quint, Malcolm; Kassabian, Naomi; (Ed;). *Transportation in an aging society: improving mobility and safety for older persons: Volume 1, committee report and recommendations; Volume 2, technical papers.* Note: National Research Council, Transportation Research Board, Washington, DC. 1988. (528p.). SERIES TITLE: Transportation Research Board Special Report; No. 218. MEETING DATA: Includes papers from an international colloquium "Improving Mobility and Safety of Older Persons," held October 1987. Explores the needs and problems of older adults in relation to the roadway transportation system as drivers, passengers, and pedestrians. Provides background information on demographic trends, traffic safety, and aging and driving performance. Presents the recommendations of an expert panel on improving the roadway environment, vehicle safety, driver licensing and screening, and alternatives to the automobile, and on organizing future research efforts. Includes chapter references and appendixes containing data on estimated travel by age groups, a commentary on technology development, and a summary of research activities and expenditures by the federal government and private foundations. The second volume contains a series of 12 technical papers that address the importance of mobility, the travel behavior of older persons, intersection design and operation, sign legibility, roadway markings, vehicle design, headlights, consumer information, driver licensing, vision screening, and driver retraining. (LS).
204. Skipper, Julie H.; Wierwille, Walter W. (Eastman Kodak, Rochester, NY). Drowsy driver detection using discriminant analysis. *Human Factors*; 1986 Oct Vol 28(5) 527-540; 1986; CODEN: HUFAA6; ISSN: 00187208. Note: Human. Investigated 14 driving variables (e.g., response time) for their potential use in predicting driver drowsiness and eyelid closure. A computer-controlled automobile simulator simulated a nighttime highway driving scenario for 20 drivers (aged 18-50 yrs) in both a rested and a partially sleep-deprived condition. Ss' responses to torque or displacement stimuli and their driving characteristics were recorded. Linear discriminant analyses classified alert and drowsy observations with relatively low false-alarm and miss rates. (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
205. Smart, R. G. (Addiction Research Foundation, Toronto, Ontario, Canada). Changes in alcohol problems as a result of changing alcohol consumption: a natural experiment. *Drug-Alcohol-Depend* ; 1987 Jan; 19(1): 91-7.
206. Smith, Bruce W.; Hiltner, John. Who are the elderly users of public transportation? A case study in Toledo, Ohio. Note: *Journal of Applied Gerontology*. Dec 1988. Vol. 7, No. 4. p. 504-513. (10p.). Analyzed differences between users and nonusers of public and agency transportation in Toledo, Ohio. A total of 150 men and women aged 60 and older were interviewed in 1982 to obtain information on basic socioeconomic and demographic characteristics, resources and capabilities in five general areas of well-being, and need for and use of 19 different services during the past 6 months. Respondents were also

- asked whether they usually traveled by public transportation, agency vehicle, with family or friends, or by personal driving. Public or agency transportation was used by only 27.4 percent of respondents, but most respondents were satisfied with their access to transportation. Of the eight socioeconomic variables examined, only not driving and living alone were significantly related to the probability of public transportation ridership. Neither health, age, income, education, marital status, nor sex was significantly related to public transit usage when the other variables were held constant. (LS).
207. Smith, P. F.; Remington, P. L. (Division of Nutrition, Centers for Disease Control, Atlanta, GA). The epidemiology of drinking and driving: results from the Behavioral Risk Factor Surveillance System, 1986. Behavioral Risk Factor Surveillance Group. *Health-Educ-Q* ; 1989 Fall; 16(3): 345-58.
 208. Snow, R. W.; Landrum, J. W. (Mississippi Alcohol Safety Education Program, Mississippi State University, Mississippi State 39762). Drinking locations and frequency of drunkenness among Mississippi DUI offenders. *Am-J-Drug-Alcohol-Abuse* ; 1986; 12(4): 389-402.
 209. Snow, R. W.; Wells, Parker E. (Mississippi Alcohol Safety Education Program, Mississippi State University, Mississippi State 39762). Drinking reasons, alcohol consumption levels, and drinking locations among drunken drivers. *Int-J-Addict* ; 1986 Jun; 21(6): 671-89.
 210. Snow, Ronald W.; Cunningham, Orville R. (Mississippi State U, Social Science Research Ctr, Mississippi Alcohol Safety Education Program). Age, machismo, and the drinking locations of drunken drivers: A research note. *Deviant Behavior*; 1985 Vol 6(1) 57-66; 1985; CODEN: DEBEDF; ISSN: 01639625. Note: Human. A questionnaire study examined the frequency with which 1,319 predominantly male drivers of various ages, who were convicted for driving under the influence of alcohol, drank in 7 locations (own home, bar or lounge, friend's home, party, car, restaurant, parking lot); compared the drinking locations of younger and older Ss; and tested the hypothesis that the desire among young males to demonstrate their masculinity (machismo) would have a major impact on both drinking locations and motor-vehicle-crash death rates. Younger Ss tended to drink in a variety of away-from-home locations; after 25 yrs of age, the frequency of drinking in all types of places except S's own home decreased, and the home emerged as the most important drinking location for older Ss. Findings suggest that automobiles and parking lots may be drinking settings that are particularly conducive to the macho drinking behaviors of young males. (8 ref) (PsycLIT Database Copyright 1986 American Psychological Assn, all rights reserved).
 211. Snow, Ronald W.; Wells, Parker, Elisabeth (Mississippi State U, Mississippi Alcohol Safety Education Program, Mississippi State). Drinking reasons, alcohol consumption levels, and drinking locations among drunken drivers. *International Journal of the Addictions*; 1986 Vol 21(6) 671-689; 1986; CODEN: INJABN; ISSN: 0020773X. Note: Human. Data collected from a driving under the influence offender sample (aged 15-80 yrs) showed that 4 drinking factors were regressed on alcohol consumption variables and frequency of drinking in 7 types of locations. Drinking for pleasure and opposite/sex drunkenness reasons are associated with both quantity consumed per occasion and away-from-home locations such as automobiles, bars, and parties, suggesting high traffic accident risk. Escapism reasons are related to quantity consumed per occasion but are only weakly associated with specific locations; sociability reasons are associated with drinking in friends' homes but are not related to high consumption levels. It is concluded that the diversity within the drunk-driving population with regard to reasons, consumption levels, and location can be used to match specific intervention strategies to a particular group of offenders. (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
 212. Stein, Anthony C.; Allen, R. Wade; Cook, Marcia L. (Systems Technology Inc, Hawthorne, CA). The interaction of alcohol and fatigue on driver simulator performance. 29th Annual Conference of the American Association for Automotive Medicine (1985, Washington, DC). *Proceedings of the American Association for Automotive Medicine*; 1985 No 29 91-104; 1985. Note: Human. Examined the interactive effects of alcohol and fatigue on driving simulator performance of 12 male drivers (aged 21-55 yrs) over a 2-hr period. A within-Ss design was used to evaluate the effectiveness of the selected countermeasures on driving behavior at different blood alcohol levels (0.00, 0.75, and 0.12%) and attentional demand states (high and low). Arousal was inversely correlated with fatigue. Under the influence of alcohol, the driver's reaction time (RT) and RT variability decreased as attentional demand increased. The opposite, however, was true in the placebo condition. No explanation was found for this discrepancy. (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
 213. Stein, H. S.; Jones, I. S. (Insurance Institute for Highway Safety, Washington, DC 20037). Crash

- involvement of large trucks by configuration: a case-control study. *Am-J-Public-Health* ; 1988 May; 78(5): 491-8.
214. Sterns, Harvey L.; Barrett, Gerald V.; Alexander, Ralph A.; Valasek, Diana L.; McIlvried, John L. Group driver training program to help older adults maintain safe and efficient driving skills: final report. Note: University of Akron, Department of Psychology and Institute for Life-Span Development and Gerontology, Akron, OH. Oct 1984. (112p.). Presents the final report of a 4-year project to develop and test a program for training older adults (aged 55-75) on selective attention, perceptual style, and reaction time tasks in order to improve driving skills and reduce accident involvement. Describes the development of the diagnostic battery and the interrelationship of the diagnostic battery measures to actual driving behavior of the sample during the last 2 years of the project. Presents results of a 2-year longitudinal study of participants from the project's first year, which found evidence of long-term effects from individual training on selected battery measures. Describes research done in the third and fourth year of the project, which adapted the training program to group administration and subsequently found that it was not effective. Concludes that, while the results indicate the effectiveness of older adult driver training programs, more complex apparatus and provisions for individual monitoring are necessary for driver training in a group situation. Includes a bibliography and appends a driving behavior questionnaire. (JG).
 215. Steward, J. M.; Cole, B. L. (Department of Optometry, University of Melbourne, Parkville, Australia). What do color vision defectives say about everyday tasks? *Optom-Vis-Sci* ; 1989 May; 66(5): 288-95.
 216. Stokx, Leo C.; Gaillard, Anthony W. (TNO Inst for Perception, Soesterberg, Netherlands). Task and driving performance of patients with a severe concussion of the brain. *Journal of Clinical and Experimental Neuropsychology*; 1986 Aug Vol 8(4) 421-436; 1986. Note: Human. Conducted 5 experiments with 13 patients (aged 20-30 yrs) who had sustained a severe concussion of the brain more than 2 yrs previously and approximately 28 age-matched controls in choice reaction time (RT) tasks in the laboratory to investigate brain concussion patients' impaired reactive capacity. The focus of investigation was whether specific stages in the chain of the information process were affected by the injury. In addition, driving skills were measured in an instrumented car to determine whether RT performance was predictive of car driving. Results indicate that, in general, concussion patients were much slower than control Ss, both in the RT and in the driving tasks. Results obtained in the RT tasks provide no conclusive evidence, however, that severe concussion of the brain affects particular stages in information processing. It is concluded that RT tasks appear to have predictive value for determining the ability to drive a car. (13 ref) (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
 217. Streeter, L. A.; Vitello, D. A profile of drivers' map-reading abilities. *Hum-Factors* ; 1986 Apr; 28(2): 223-39.
 218. Streeter, Lynn A.; Vitello, Diane (Bell Communications Research, Morristown, NJ). A profile of drivers' map reading abilities. *Human Factors*; 1986 Apr Vol 28(2) 223-239; 1986; CODEN: HUF6A6; ISSN: 00187208. Note: Human. Examined navigational preferences, habits, experiences, abilities, and route-selection strategies in 2 experiments. Exp I, using 33 females (aged 18-66 yrs), showed that self-reports of navigational proficiency were correlated with objective measures of spatial ability and that low-spatial-ability Ss relied on landmarks and preferred verbal to spatial directions. In Exp II, 20 Ss (aged 25-60 yrs) were classified as expert, experienced, or novice regarding their familiarity with an area, and their route selections were compared with routes generated by standard graph-search procedures. A shortest-path, breadth-first route characterized half of the expert Ss' routes, whereas none of the graph-search procedures matched the experienced and the novice Ss' routes. A good predictor of whether people chose a particular road was whether the sum of A + B + C (where A equals the straight-line distance from the start to the road, B equals the distance traveled on the road, and C equals the straight-line distance from the departure point on the road to the destination) did not exceed the straight-line distance between start and destination by more than approximately 20%. Suggestions for improved navigational aids are presented. (15 ref) (PsycLIT Database Copyright 1986 American Psychological Assn, all rights reserved).
 219. Strybel, Thomas Z.; Nassi, Richard (U Arizona, Tucson). Daylight conspicuity of reversible lane signal systems. *Human Factors*; 1986 Feb Vol 28(1) 83-89; 1986; CODEN: HUF6A6; ISSN: 00187208. Note: Human. Compared the conspicuity of 2 traffic light systems for improving the use of peak-hour reversible and dual-use 2-way left-turn lanes. The systems considered were the conventional lane-use control signals and a new system of revolving beacons. Six drivers (aged 18+ yrs) were asked to identify various characteristics of signals at 2 distances (91 and 244 m) and 3 viewing angles (0, 0.09, and 0.17 rad), which approximated a motorist's view from different positions on a 5-lane street. Findings show that at 0 rad,

detection and recognition of both signal-light systems was quite good. However, at more extreme viewing angles, the revolving beacon system was detected and recognized more often. It is concluded that the revolving beacon system would be more conspicuous to a driver attempting to enter the reversible lane. (PsycLIT Database Copyright 1986 American Psychological Assn, all rights reserved).

220. Sturr, J. F.; Kline, G. E.; Taub, H. A. (Department of Psychology, Syracuse University, NY 13244-2340). Performance of young and older drivers on a static acuity test under photopic and mesopic luminance conditions. *Hum-Factors* ; 1990 Feb; 32(1): 1-8.
221. Summary of findings and recommendations: workshop on highway safety and mobility of older drivers and pedestrians, Jun 11-12, 1985, Washington Plaza Hotel, Washington, D.C. Note: Highway Users Federation, 1776 Massachusetts Avenue, NW, Washington, DC 20036. 1985. (27p.). NOTES: Sponsored by Highway Users Federation and Automotive Safety Foundation; in cooperation with American Association for Automotive Medicine and eight other organizations. Summarizes findings and recommendations of a workshop on the highway mobility and safety of older drivers and pedestrians. Defines the purpose of the workshop and lists agencies and organizations involved in research on and discussion of issues concerning older drivers. Presents demographic and accident data on older drivers and pedestrians. Reviews medical conditions and concerns pertinent to older drivers and pedestrians, including visual impairments and needs, medical assessments, the use of state medical advisory boards to address the situation, and legislative issues. Outlines highway safety technologies and countermeasures to accommodate and overcome problems experienced by the older driver and pedestrian, and discusses the role of delineation and the visibility of signing. Offers the perspectives of a state highway department official and a local traffic engineer. Includes summaries of the work-shop presentations and of participants' reactions. (LS).
222. Taylor, J. F. (Department of Transport, London, U.K). Vision and driving. *Ophthalmic-Physiol-Opt* ; 1987; 7(2): 187-9.
223. Temple, Lori L. Perceptual and cognitive factors affecting driving ability of young and old drivers. Note: Department of Psychology, University of Nevada, Las Vegas, NV. 1989. (82p.). Attempted to determine which, if any, of a wide variety of perceptual and cognitive abilities would predict driving ability for younger and older adults. A total of 50 younger adults aged 18-59 (mean age 30.04) and 49 older adults aged 60-78 (mean age 67.02) completed perceptual tasks, peripheral vision measures, cognitive tasks, health measures, demographic measures, and subjective and objective measures of driving. Results showed that younger adults performed more efficiently on the perceptual and cognitive tasks than older adults; they responded faster, made fewer errors, and were less disrupted by competing stimuli. Younger adults did better on some, but not all, of the measures of driving requiring speeded responses. The perceptual and cognitive tasks that predicted driving performance were different for different age groups. A variety of perceptual, cognitive, and demographic measures predicted driving performance for the younger adults. Driving ability for older adults was predicted primarily by performance on perceptual tasks and cognitive tasks involving complex operations. Both years licensed and miles driven per year predicted driving ability, particularly for the younger drivers. Findings are discussed in terms of ways in which older drivers can improve their driving ability. References are included. (WD).
224. Thevenon, A.; Grimbert, P.; Dudenko, P.; Heuline, A.; Delcambre, B. (Clinique Rhumatologique, Hopital de la Charite, Lille). [Rheumatoid polyarthritis and automobile driving]. *Rev-Rhum-Mal-Osteoartic* ; 1989 Jan; 56(1): 101-3.
225. Thompson, S. J.; Fraser, E. J.; Howarth, C. I. (U Nottingham, England). Driver behaviour in the presence of child and adult pedestrians. *Ergonomics*; 1985 Oct Vol 28(10) 1469-1474; 1985; CODEN: ERGOAX; ISSN: 00140139. Note: Human. To investigate driver behavior in the presence of child and adult pedestrians, vehicle speeds were measured outside 5 British junior schools, and their distance from the curb was recorded. Mean speed of all observed vehicles was 28.4 miles/hr with 36% traveling faster than the legal maximum of 30 miles/hr. The presence of children by the roadside had no effect on either the speed or position in the road of unobstructed passing vehicles. However, a mean speed reduction of 1 mph was observed when large groups of pedestrians (i.e., 10 or more) were present. Findings suggest that vehicle drivers are inadequately prepared for the unpredictable behavior of child pedestrians. The implications of this lack of care are discussed in relation to road-user education. (French, German & Japanese abstracts) (9 ref) (PsycLIT Database Copyright 1986 American Psychological Assn, all rights reserved).

226. Trankle, U.; Gelau, C.; Metker, T. (Psychologisches Institut II, University of Munster, Federal Republic of Germany). Risk perception and age-specific accidents of young drivers. *Accid-Anal-Prev* ; 1990 Apr; 22(2): 119-25.
227. Transcript of the proceedings of the Conference on Transportation and the Aging. Note: ACE-Federal Reporters, Washington, DC 9700526, May 25-26, 1970. 1970. (208p.). AVAILABILITY: SCAN Microfiche No. CCF 000571. MEETING DATA: Interdisciplinary Research Utilization Workshop, May 25-26, 1970, Washington, DC. This report contains the proceedings of 1970 workshop on transportation needs of and programs for the elderly. Topics of interest include medical and physiological changes with age and their impact on transportation, psychosocial characteristics of the elderly person, the number of elderly automobile drivers and their presentations, consideration is given to the aging process, family relationships and housing patterns, the higher number of elderly persons in the general population due to an increasing life expectancy, economic needs and consumption patterns of the elderly, mobility as it relates to various activities (employment, shopping, traveling, health services, entertainment, and participation in social activities), and barriers to travel. Subjects also covered in the proceedings concern ways of meeting transportation needs, public transportation, the impact of an automobile-oriented world on older people, the importance of public transportation supply and demand, urban versus suburban driving habits, the impact of demographic characteristics on transportation utilization, and perceptions of the elderly regarding transportation alternatives. Concluding topics of the workshop focus on transportation demonstration projects, special transportation needs of the elderly, public transit ridership patterns, and transportation program evaluation. (DP).
228. Transportation and the elderly & handicapped: a literature capsule. Note: U.S. Department of Transportation, Technology Sharing Program Office, Washington, DC. Jan 1977. (86p.). AVAILABILITY: NTIS, 5285 Port Royal Rd, Springfield, VA 22161, Order No. SHR 2083. The literature selected for identification and annotation in this report on transportation and the elderly and handicapped has been organized according to needs, programs, planning, and policy. The discussion highlights research and planning in transportation for the elderly and handicapped. The overview includes a general introductory text on transportation, along with a comprehensive state-of-the-art study of transportation and older Americans. The majority of selections categorized under needs focus on considerations in the provision of transportation service and on transportation needs of the elderly and handicapped as drivers and pedestrians. Transportation programs serving the elderly and handicapped are described in program selections. The predominant transportation program for the elderly and handicapped is area-wide special transportation service. The concentration in planning selections is primarily on the design of transportation services for the elderly and handicapped. Subjects include management, demand, system costs, and accessibility design criteria. Included in the policy section are works which examine legislative, regulatory, and institutional aspects of transportation for the elderly and handicapped. (EZ).
229. Transportation and the older person. Note: Langley Porter Neuropsychiatric Institute. n.d. (12p.). AVAILABILITY: SCAN Microfiche No. CCF 000367. Transportation problems increase for most urban residents as cities grow, and particularly for the elderly. Older individuals are greatly affected by the increasing complexity of transportation system and by the accelerating pressure for speed. Certain age-related physiological, psychological, and social changes interact with transportation changes to increase the risk and discomfort for the elderly. There are multiple reasons for the accentuated effect on the aged of modern transportation systems. The reasons lie within patterns developed over a lifetime, within sensory-perceptual-motor changes which take place with age, and within the society which devalues the aged. Public transportation facilities and pedestrian accommodations are particularly important to both male and female elderly, because of limitations on the use of the automobile. Finances, licensing, self-confidence, and possibly the concern of their children reduce automobile driving with advancing age. Transportation innovations could actually favor the elderly individual. Either innovations or modifications of existing types of transportation need to be based on information regarding where people need and want to go and the characteristics of transportation which make it easy or difficult to get there. In discussing the role of transportation, attention is directed to meeting needs and using the talents of retired persons and community services. (EZ).
230. Van, Der Flier, H.; Schoonman, W. (Dutch Railways, Dept of Industrial Psychology, Utrecht, Netherlands). Railway signals passed at danger: Situational and personal factors underlying stop signal abuse. *Applied Ergonomics*; 1988 Jun Vol 19(2) 135-141; 1988; CODEN: AERGBW; ISSN: 00036870. Note: Human. Studied the role of situational and personal factors in registered cases in which railroad engineers have gone through stop signals in The Netherlands. The most frequently mentioned hazard was

that of the signal being situated behind a bend. The direct cause of a case often seemed to be that a signal was overlooked or not anticipated. Personal factors (age, time on duty, length of service or track and rolling-stock experience) did not seem to be important variables. However, it was proven that previous incidents, worse performance with multiple choice reaction tests, and less job satisfaction were predictive of a future case. (PsycLIT Database Copyright 1988 American Psychological Assn, all rights reserved).

231. Voas, R. B.; Williams, A. F. (National Public Services Research Institute, Alexandria, Virginia 22314). Age differences of arrested and crash-involved drinking drivers. *J-Stud-Alcohol* ; 1986 May; 47(3): 244-8.
232. Voas, Robert B.; Williams, Allan F. (National Public Services Research Inst, Alexandria, VA). Age differences of arrested and crash involved drinking drivers. *Journal of Studies on Alcohol*; 1986 May Vol 47(3) 244-248; 1986; CODEN: JSALDP; ISSN: 0096882X. Note: Human. Reviewed research to determine the extent to which drivers arrested for driving while intoxicated (DWI) and crash-involved drivers impaired by alcohol are similar in age. Data indicate that younger drivers (<30 yrs of age) are underrepresented in the DWI arrest population relative to their presence in the alcohol-related crash population. (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
233. Wagenaar, A. C.; Webster, D. W. Preventing injuries to children through compulsory automobile safety seat use [published erratum appears in *Pediatrics* 1987 Jun;79 (6):863]. *Pediatrics* ; 1986 Oct; 78(4): 662-72.
234. Wagenaar, A. C.; Wiviott, M. B. Effects of mandating seatbelt use: a series of surveys on compliance in Michigan. *Public-Health-Rep* ; 1986 Sep-Oct; 101(5): 505-13.
235. Waller, J. A. (Department of Medicine, University of Vermont, Burlington 05405). Driving patterns before and after hospitalization for heart disease. *Accid-Anal-Prev* ; 1987 Apr; 19(2): 105-14.
236. Waller, J. A.; Goo, J. T. Accident and violation patterns of drivers with chronic medical conditions. Note: Bureau of Chronic Diseases: California Dept. of Public Health; and Lawrence Radiation Laboratory, University of California at Berkeley. n.d. (35p.). AVAILABILITY: NTIS, 5285 Port Royal Rd, Springfield, VA 22161; SCAN Microfiche No. CCF 001227. Types of traffic accidents and violations were compared for 1,704 drivers with chronic medical conditions known to the California Department of Motor Vehicles and 921 drivers not known to have medical conditions. Information about each accident was obtained from written police accident reports, accident summary cards, and personal interviews between drivers and Department of Motor Vehicles personnel. For each medical group, accidents were analyzed by time of occurrence, number of vehicles involved, speed of vehicles, directional components, number of persons injured, and types of errors or violations contributing to the accident. Data were analyzed by chi-square tests. All medical groups--diabetes, epilepsy, cardiovascular disease, alcoholism, mental illness, and drug use--had a greater number of accidents in which they were felt to be completely or partly at fault; all had an excess of accidents in which they were weaving, ran off the road, or were on the wrong side of the road when not attempting to pass, suggesting little or no steering control. Accidents of drivers with less severe conditions were notable for the frequency with which inattention was given as a reason. Among older (60 or above) drivers, larger proportions of accidents and violations resulted from failure to observe stop signals, violation of right of way, or improper turns, suggesting that increasing age entails decreasing ability to perceive the traffic environment, to make proper judgments about traffic flow, or to convert perceptions into appropriate actions. Tables of statistical data are appended. (NJ).
237. Waller, P. F.; Reinfurt, D. W. The who and when of accident risk: can driver license programs provide countermeasures? Note: University of North Carolina, Highway Safety Research Center, Chapel Hill, NC. Jun 1973. (67p.). NOTES: Reprint. AVAILABILITY: SCAN Microfiche No. CCF 000877. A measure of exposure, namely drivers interviewed by the North Carolina State Highway Commission in conjunction with their origin and destination surveys, was compared with a measure of accident involvement -- drivers in accidents during the same season of the year and in the same geographical location in which the exposure interviews were conducted. During the latter part of June 1971, the North Carolina State Highway Commission conducted an origin and destination survey in the area of Marion, North Carolina. The North Carolina Department of Motor Vehicles provided accident information for 1971. Exposure and accident trips included only passenger cars during weekdays. For both male and female drivers, age trends for accident risk were comparable. Generally, young drivers up to age 25 were overrepresented in accidents compared to their presence in the population at risk. Males age 25 through 54 and females age 25 through 44 were underrepresented in accidents. Risk increased after these ages, and there was a marked evaluation in risk after age 65. Between midnight and six in the morning was the highest risk time of day.

Most age and sex groups showed an evaluation in risk during this period, but the most marked evaluations were among the female and elderly drivers. (EZ).

238. Walsh, J. Michael (National Inst on Drug Abuse, Clinical & Behavioral Pharmacology Research Program, Rockville, MD). Pharmacological sensitivities. International Symposium: Alcohol, drugs, and driving (1985, Los Angeles, California). Alcohol, Drugs and Driving Abstracts and Reviews; 1985 Jan-Jun Vol 1(1-2) 111-113; 1985. Note: Human. Summarizes symposium findings with regard to variables (e.g., age, weight, tolerance) affecting individual sensitivities to drugs. It is noted that the number of variables that affect drug actions are increased by the aging process and that the issue of driver experience was discussed extensively. Recommendations are made for research in the areas of behavioral genetics, the effects of drugs on aggressiveness and risk-taking behavior, and the interactions between age, experience, drugs, and driving. (PsycLIT Database Copyright 1987 American Psychological Assn, all rights reserved).
239. Ward, C. M.; Stewart, A. W.; Cutfield, R. G. (North Shore Hospital, Auckland). Hypoglycaemia in insulin dependent diabetic patients attending an outpatients' clinic. *N-Z-Med-J* ; 1990 Jul 25; 103(894): 339-41.
240. Wechsler, Henry; Rohman, Mary; Kotch, Jamie B.; Idelson, Roberta K. (Medical Foundation, Boston, MA). Alcohol and other drug use and automobile safety: A survey of Boston area teen agers. *Journal of School Health*; 1984 May Vol 54(5) 201-203; 1984; CODEN: JSHEA2; ISSN: 00224391. Note: Human. Administered a questionnaire to 623 10th-graders who were aged 16+ yrs to assess those who might be most at risk for operating a motor vehicle under the influence of alcohol (AL) or marihuana (MH). Measures of the usual quantity and frequency of AL use were combined into a drinking typology that classified Ss into 6 categories ranging from abstainers to heavy drinkers. A substantial proportion of Ss combined drug and/or AL use with driving. Between 43 and 50% had been a passenger with a driver who was under the influence of AL or MH at least once since the beginning of the school year. Many Ss did not appear to be aware of the dangers involved in driving under the influence of AL or MH, and about 1 in 4 believed they could use AL and other drugs responsibly. Both Ss' behaviors and beliefs regarding drinking, drug use, and driving were significantly related to the extent of their involvement with AL and other drugs. Those characteristics most descriptive of Ss who drove under the influence of AL were (1) heavier AL use; (2) driving under the influence of MH; (3) riding as a passenger with a driver who was drinking; and (4) use of drugs other than MH, particularly cocaine and amphetamines. Implications for drug and AL education and traffic safety programs are discussed. (6 ref) (PsycLIT Database Copyright 1984 American Psychological Assn, all rights reserved).
241. Wells, Parker, Elisabeth; Miles, Shelly; Spencer, Barbara (Morris & McDaniel Management Consultants, Jackson, MS). Stress experiences and drinking histories of elderly drunken driving offenses. *Journal of Studies on Alcohol*; 1983 May Vol 44(3) 429-437; 1983; CODEN: JSALDP; ISSN: 0096882X. Note: Human. As part of a larger study on the effectiveness of several treatment modalities in reducing the incidence of rearrest for driving while intoxicated (DWI) in Mississippi, 92 male drivers over age 60 yrs who had been arrested for DWI were interviewed, along with a control sample of 68 male nonoffenders over age 60 who were at risk (they were both drivers and drinkers). The mean age for both groups was 65 yrs; 48% were Black and 52% were White. A measure of psychosocial stress history was developed from existing scales of stressful events and from such data as the treatment files of problem drinkers and elderly DWI offenders. 52 questions were used, based primarily on the Mortimer-Filkins Interview Schedule. Findings show relationships between 1st-time drunken-driving offenses and stressful life events and between the continuation of problem drinking and lower levels of social support. Comparative data for DWI offenders who had at least 1 DWI arrest before age 55 and those with no DWI arrests before age 55 are presented. Loss of significant others and retirement were the major stressful life events, but such events cannot be construed as the cause of DWI because elderly 1st offenders reported more drinking problems than nonoffenders. Implications for treatment modalities are discussed. (11 ref) (PsycLIT Database Copyright 1984 American Psychological Assn, all rights reserved).
242. Wilbers, Joachim (Rheinische Friedrich-Wilhelms-U Bonn Psychologisches Inst, Abteilung Entwicklungspsychologie, West Germany). Altere Menschen im Strassenverkehr Zukunftsaspekte. / Elderly people in traffic. *Zeitschrift fur Gerontologie*; 1984 Nov-Dec Vol 17(6) 336-339; 1984; ISSN: 0044281X. Note: Human. Conducted 2 surveys about traffic and public transportation in West Germany in 1976 and 1982. Results reveal 4 factors that are meaningful for gerontological research: Possession of a Driving License, Ownership of a Car, Availability of a Car in the Household, and Preferred Transportation. Data for different age groups are included. These 4 factors are indicators of mobility. Far more Ss in younger age groups had a driving license and ownership and availability of a car than people in older age groups. A comparison of 1976 and 1982 data showed that only a few older people had stopped

using a car. It is predicted that elderly German people of the future will possess a driving license and drive a car in far greater numbers than is the current trend. Consequences for traffic planning and psychological research about accidents, services for the elderly, and intergenerational relations are noted. (7 ref) (PsycLIT Database Copyright 1985 American Psychological Assn, all rights reserved).

243. Williams, A. F. (Insurance Institute for Highway Safety, Washington, D.C.). Fatal motor vehicle crashes involving teenagers. *Pediatrician* ; 1983-85; 12(1): 37-40.
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247. Wilson, W. T.; Wilson, P. (Cranfield Inst of Technology, Bedford, England). Typology of rated driving and the relationship between self and other driver ratings. *Accident Analysis and Prevention*; 1984 Oct-Dec Vol 16(5-6) 351-370; 1984; CODEN: AAPVB5; ISSN: 00014575. Note: Human. Two raters assessed the driving of 15 female and 15 male drivers (aged 20-62 yrs) over a 61-km mixed urban, rural, and motorway route on 87 variables. In addition, drivers were asked to assess their own driving on the 87 variables. Good correlations were reported between raters, although differences were noted between self and observer ratings. Drivers tended to assess their own driving to be worse than it was rated by the observers. Factor analysis and subsequent examination of the factors resulted in the development of a 3-level typology of driving. The 3 levels comprised simple vehicle manipulation, vehicle manipulation in relation to the road, and aspects of driving concerned with interaction with other road users--the social components of driving. The social components level accounted for over half the observed variance among drivers. Terms used to describe the social component factors included uncautious, inattentive, intolerant, competitive, and inconsiderate. It is concluded that the factors showed reasonable replicability across the 2 raters and appear to provide a reasonable basis upon which to extend the development of a typology of the social aspects of driving. (10 ref) (PsycLIT Database Copyright 1985 American Psychological Assn, all rights reserved).
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