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### APPENDIX E-AGENDA

# PSYCHIATRIC DISORDERS AND COMMERCIAL DRIVERS EXPERT PANEL INTERFACE CONFERENCE

October 1 and 2, 1990

MONDAY OCTOBER 1, 1990

8:00 a.m.- 8:30 a.m. Registration/Coffee Reception

8:30 a.m.-10:15 p.m. Plenary Session

- \* Introduction: Elaine Viner-Medical Driver Qualification Specialist Office of Motor Carrier Standards
- Welcoming Remarks: James E. Scapellato-Director, Office of Motor Carrier Standards
- Film Presentation: "Fit for the Road"
- Question and Answer Period
- Introduction of the Task Force Chairpersons and the Canadian Representative
- Introduction of the Medical Community by the Chairperson

10:15 a.m.-10:30 a.m. BREAK

10:30 a.m.-12:30 p.m. Resume Plenary Session

- Introduction of the Motor Carrier Representatives by the Chairperson
- Presentations by Individual Task Forces of the Overviews of their Work

12:30 p.m.-1:30 p.m. LUNCH

1:30 p.m.-3:15 p.m. Task Force Sessions

- Task Force Chairperson Remarks
- Presentation of Issues
- . Discussion
- . Revision of Task Force Papers

3:15 p.m.- 3:30 p.m. BREAK

3:30 p.m.- 6:00 p.m. Resume Task Force Sessions

# **Evening** Prepare Consensus Report

• Meeting between recorders (one from Prospect Associates and one from each task force) and Task Force Chairman to refine the draft summary paper, or the task forces can continue to meet, if desired, into the evening. Copies of the work-to-date will be available at 8:00 a.m. on the second day for review before the task force sessions resume.

# TUESDAY OCTOBER 2, 1990

8:00 a.m.430 a.m. Coffee Reception

8:30 a.m.-10:00 a.m. Task Force Sessions

 Discuss final draft of consensus papers within each task forcerevisions should be noted.

10:00 a.m.-10:30 a.m. BREAK

10:30 a.m.-12:00 noun Plenary Session (Executive Summary)

- Presentations by Task Force Chairmen
- Discussion

12:00 noon Adjourn

12:00 noon-l:00 p.m. LUNCH

1:00 p.m.-3:00 p.m. Steering Committee Meeting

#### REFERENCES

- American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised, American Psychiatric Association, Washington, DC,, 1987, p. 335.
- **2. Federal Aviation Regulations,** Medical Standards and Certification, Department of Transportation, Washington, DC, 1974, p. 67.
- 3. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised, American Psychiauic Association, Washington, DC, 1987, p. xxii.
- 4. Tsuang M.T., M. Boor, J.A. Fleming, "Psychiatric Aspects of Traffic Accident," Am J **Psychiatry** 142:5, May 1985, pp. 538-546.
- 5. Beilock, R., **1989 Motor Carrier Safety** Survey, Regular Common Carrier Conference, Alexandria, VA, 1989, pp. 10-11.
- U.S. Department of Transportation, Federal Highway Administration, *Conference on* Neurological *Disorders and Commercial Drivers*, Pub. No. FHWA-MC-88-042, Office of Motor Carriers, Washington, DC, July 1988, p. 62.
- 7. Ibid., p. 11. See also appendix B.
- 8. Ibid., p. 62.
- 9. U.S. Department of Transportation, Federal Highway Administration, *Conference on Pumonary/Repiratory Disorders and Commercial Drivers*, Office of Motor Carriers, Washington, DC, December 1990, p. 12.
- 10. Friedland, R.P., E. Koss, A. Kuman, S. Gaine, D. Metzler J.V. Haxby, and A. Moore, "Motor Vehicle Crashes in Dementia of *the Alzheimer* Type," *Ann Neurology, 36*, 1988, pp. 782-786.
- Lucas-Blaustein, M.J., C.L. Fiiipp, C. Dungan, and L. Tune, 'Driving in Patients With Dementia," J Am *Geriatr Soc*, *36*, 1988, pp. 1087-1091.
- 12. Moskowitz, H., M. Burns, A. Williams, "Skills Performance at Low Blood Alcohol *Levels," J Stud. Alc, 46*, 1986, pp. 482-485.
- 13. Moskowitx, H., and M. Burns, "The Effects of Alcohol and Valium, Singly and in Combination Upon Driving Related Performance," *Procs of the 21st Conference of the American Association of Automotive Medicine, 1977.*

- Lmnoila, M., C.W. Erwin, A. Brendle, D. Simpson, "Psychomotor Effects of Diazepam in Anxious Patients and Healthy Volunteers," *J Clin Phychopharmacol.*, 3, 1983, pp. 88-96.
- 15. Deptula, D., and N. Pomara, "Effects of Antidepressants on Human Performance: a Review," *J Clin Psychopharmacol*, 10, 1990, pp. 105-111.
- **16.** Bech, P., "Mental Illness and Simulated Driving," *Pharmacopsychiatria*, **8**, 1975, pp. 143-150.
- 17. Magliozzi, J.R., D. Mungas, J.N. Laubly, and D. Blunden, "Effect of Haloperidol on a Symbol Digit Substitution Task in Normal Adult Males," *Neuropsychopharmacology*, *2*, 1989, pp. 29-37.
- 18. Noyes, R., "Motor Vehicle Accidents Related to Psychiatric Impairment," **Psychosomatics**, **26**, 1985, pp. 569-580.
- 19. Tomer, R., and P. Flor-Henry, "Neuroleptics Reverse Attention Asymmetries in Schizophrenic Patients," *Biol Psychiatry*, *25*, *1989*, pp. 852-860.
- 20. Hindmarch, I., "The Psychopharmacological Approach: Effects of Psychotropic Drugs on Car Handling," Int *Clin Psysholpharmacol*, 3 (suppl 1), 1988, pp. 73-79.
- 21. Nicholoson, A.N., "The Significance of Impaired Performance," Int *Clin Psychopharmacol*, 3 (suppl 1), 1988, pp. 117-127.
- Classen, W., and G. Laux, "Comparison of Sensorimotor and Cognitive Performance of Acute Schizophrenic Inpatients Treated With Remoxipride or Haloperidol," Neuropsychobiology, 21, 1989, pp. 131-140.
- 23. Reischies, F.M., R.D. Stieglitz, I. Mielewczyk, and A. Bogel, "Impaired Performance in a Saccadic Tracking Task in Schizophrenic Patients," Eur *Arch Psychiatry Neurol Sci*, 239, 1989, pp. 58-61.
- 24. Gerhard, U., and I. Hobi, "Cognitive-Psychomotor Function With Relationship to Firmess for Driving of Psychiatric Patients Treated With Neuroleptics and Antidepressants," *Neuropsychobiology* 12, 1984, pp. 39-47.
- 25. Cohen, R.M., W.E. Semple, M. Gross, et al., "The Effect of Neuroleptics on Dysfunction in a Prefrontal Substrate of Sustained Attention in Schizophrenia," Life Sci, 43, 1988, pp. 1141-1150.
- Carr, V. and J. Wade, "The Effects of Antipsychotic Drugs and Symptomatology on Perceptual Asymmetry in Schizophrenia" *J Neurol* Neurosurg *Psychiatry* 51, 1988, pp. 1531-1537.

- 27. Betts, T, "The Value of Low Speed, Off-Road Driving Tasks," *Int Clin Psychoparmacol*, 3 (suppl 1), 1988, pp. 87-98.
- 28. Classen, W., and G. Laux, "Sensorimotor and Cognitive Performance of Schizophrenic Inpatients Treated With Haloperidol, Fluphenithixol or Clozapine," *Pharmacopsychiatria*, 21, 1988, pp. 295-297.
- 29. Hyman, F.C., W.E. Collins, H.L. Taylor, et al., "Instrument Flight Performance Under the Influence of Certain Combinations of Antiemetic Drugs," Aviat Space Environ Med, 59, 1988, pp. 533-539.
- 30. Potter, W.Z., "Psychotropic Medications and Work Performance," J Occup *Med, 32,* 1990, pp. 355-361.
- 31. Medalia, A., J. Gold, and A. Merriam, "The Effects of Neuroleptics on Neuropsychological Test Results of Schizophrenics," *Arch Clin Neuropsychol 3,* 1988, pp. 249-271.
- 32. Saarialho-Kere, U., "Psychomotor, Respiratory and Neuroendocrinolocical Effects of Nalbuphine and Haloperidol, Alone and in Combination, in Healthy Subjects," Br J *Clin Phannacol*, *26*, 1988, pp. 79-87.
- 33. Mendelson, W.B., *Human Sleep Research and Clinical Care*, Plenum Press, New York, 1987, pp. 221-245.
- 34. Rossi, A., P. Stratta, R. Nistico, et al., "Visuospatial Impairment in Depression: a Controlled ECT Study," *Acta Psychiatr Scand*, 81, 1990, pp. 245-249.
- 35. Calev, A., E. Ben-Tzvi, B. Shapira, et al., "Distinct Memory Impairments Following Electroconvulsive Therapy and Imipramine," *Psychol Med*, 19, 1989, pp. 11 l-1 19.
- 36. Goldstein, S.G., S.B. Filskov, L.A. Weaver, and J.O. Ives, "Neuropsychological Effects of Electroconvulsive Therapy," J *Clin Psychol*, **33**, 1977, pp. 789-806
- 37. Harvey, J.A., "Behavioral Pharmacology of Central Nervous System Stimulants," Neuropharmacology , 26, 1987, pp. 887-892.
- 38. Newhouse, P.A., G. Belenky, M. Thomas, et al., "The Effects of D-Amphetamine on Arousal, Cognitive and Mood After Prolonged Sleep-Deprivation," *Neuropsychopharmacology*, *2*, 1989, pp. 153-164.
- 39. Schmedtje, J.F., CM. Oman, R. Letz, and E.L. Baker, "Effects of Scopolamine and Dextroamphetamme on Human Performance," *Aviar Space Environ Med*, *59*, 1988, pp. 407-410.

- 40. Hovda, D.A., R.L. Sutton, D.M. Feeney, "Amphetamine-Induced Recovery of Visual Cliff Performance After Bilateral Visual Cliff Ablation in Cats: Measurements of Depth Perception Thresholds," *Behav Neurosci*, 103, 1989, pp. 574-584.
- 41. M'Harzi M., F. Wig, J.C. Costa, and J. Delacour, "D-Amphetamine Enhances Memory Performance in Rats with Damage to the Fimbria," *Physiol Behav, 42, 1988*, pp. 575-579.
- 42. Weiner, N., "Norepinephrine, Epinephrine and the Sympathomimetic Amines," in A.G. Giian, L.S. Goodman, and A. Giian (eds.), The Pharmacological Basis of Therapeutics, Macmillan, New York, 1980, pp. 138-175.
- 43. Hock, F.J., "Drug Influences on Learning and Memory in Aged Animals and Humans," *Neuropsychobiology*, **17**, 1987, pp. 145-160.
- 44. Sahgal, A., "Vasopmssin and Amphetamine, but Not Desglycinamide Vasopressin, Impair Positively Reinforced Visual Attention Performance *in* Rats," *Behav Brain Res*, 29, 1988, pp. 35-42.
- 45. Wool, R.S., D.A. Weldon, B.A. Shaywitz, et al., "Amphetamine Reverses Learning Deficits in 6-Hydroxydopamine-Treated Rat Pups," *Devel Psychobiol*, *20*, 1987, pp. 219-232.
- 46. Cole, B.J., and T.W. Robbins, "Amphetamine Impairs the Discriminative Performance of Rats With Dorsal Noradrenergic Bundle Lesions on a 5-Choice Serial Reaction Time Task," **Psychopharmacology**, **91**, 1989, pp. 458-466.
- 47. Ridley, R.M., H.F. Baker, G.D. Frith, et al., "Stereotyped Responding on a Two-Choice Guessing Task by Marmosets and Humans Treated With Amphetamine," *Psychopharmacology*, *95*, 1988, pp. 560-564.
- 48. Ljungberg, T., and M. Enquist, "Disruptive Effects of Low Doses of D-Amphetamine on the Ability of Rats to Organize Behavior Into Functional Sequences," *Psychopharmacology*, 93, 1987, pp. 146-151.
- 49. Robinson, TE., P.A. Jurson, J.A. Bennett, and K. Bentgen, "Persistent Sensitization of Dopamine Neumtransmission in Ventral Striamm (Nucleus Accumbens) Produced by Prior Experience With *(+)*--Amphetamine," *Bruin Res, 462,* 1988, pp. 211-222.
- 50. Ferrara, S.D., "Alcohol, Drugs and Traffic Safety" **Br J Addict, 82,** 1987, pp. 871-883.
- 51. Bost, R.O., "3,4 Methylenedioxymethamphetamine (MDMDA) and Other Amphetamine Derivatives" j Forensic Sci, 33, 1988, pp. 576-587.

- 52. Giiam, R.A., N. Wiiams, K. Wiedmann, et al., "Concentration Effect Relationships With Carbamazepine and Its Epoxide on Psychomotor and Cognitive Function in Epileptic Patients," *J Neurol Neurosurg Psychiatry*, 51, 1988, pp. 929-933.
- 53. Aman, M.G., J.S. Werry, J.W. Paxton, et al., "Effects of Carbamazepine on Psychomotor Performance in Children as a Function of Drug Concentration, Seizure Type, and Tie of Medication," *Epilepsia*, 31, 1990, pp. 51-60.
- 54. Meyer, F.P., and J. Walther, "zur Beeinflussung der Psychophysischen Leistungsfahigkeit des Menschen Durch Amiepileptika," *Psychiatric Neurol Med Psychol*, 39, 1987, pp. 1-16.
- 55. Joffe, R.T., C. MacDonald, and S.P. Kutcher, "Lack of Differential Cognitive Effects of Lithium and Carbamazepine in Bipolar Affective Disorder," Clin **Psychopharmacol, 8,** 1988, pp. 425-428.
- 56. Macphee, G.J.A., J.R. Mitchell, L. Wiseman, et al., "Effect of Sodium Valproate on Carbamazepine Disposition and Psychomotor Profile in Man," Br J Clin **Pharmacol, 25,** 1988, pp. 59-66.
- 57. Gallassi, R., A. Morreale, S. Lorusso, et al., "Cognitive Effects of Valproate," *Epilepsy Res, 5,* 1990, pp. 160-164.
- 58. Fink, M., Convulsive Therapy: Theory and Practice, Raven, New York, 1979.
- 59. Dubovsky, S.L., "Using Elecuoconvulsive Therapy for Patients With Neurological Disease" *Hosp Community Psychiatry*, *37*, 1986, pp. 819-825.
- 60. Linington, A., and B. Harris, "Fifty Years of Electroconvulsive Therapy," Br J **Psychiatry**
- 61. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised, American Psychiatric Association, Washington, DC, 1987.
- 62. Schlensky, R. "Psychiatric Standards in Driver Licensing" **JAMA**, 235(18), 1976, pp. 1993-1994.
- 63. Tiian, W.A., and G.E. Hobbs, "The Accident-Prone Automobile Driver: a Study of Psychiatric and Social Background," *Am J Psychiatry*, 106, 1949, pp. 321-331.
- 64. Selzer, M.L., C.E. Payne, F.E. Westervelt, and J. Quinn, "Automobile Accidents as an Expression of Psychopathology in an Alcoholic Population," Q J Stud *Alcohol, 28*, 1967, pp. 505-516.

- Selzer, M.L., J.E. Rogers, and S. Kern, "Fatal Accidents: the Role of Psychopathology, Social Stress, and Acute Disturbance," *Am J Psychiatry*, 124, 1968, pp. 1028-1036.
- **66.** Brown, S.L., et **al. Alcohol Safety Study: Drivers Who** Die, U.S. Department of Commerce, PB 182 900, 1968.
- 67. Conger, J.J., H.S. Gaskill, D.D. Glad, L. Hassel, R.V. Rainey and W.L. Sawrey, "Psychological and Psychophysiological Factors in Motor Vehicle Accidents" JAMA, 169, 1959, pp. 1581-1587.
- 68. Conger, J.J., H.S. Gaskill, D.D. Glad, R.V. Rainey, W.L. Sawrey, E.S. Turrell, "Personal and Interpersonal Factors in Motor Vehicle Accidents," *Am J Psychiatry*, 113, 1957, pp. 1069-1074.
- 69. Tabachnick, N., R.E. Litman, M. Osman, W.L. Jones, J. Cohn, A. Casper and J. Moffat, "Comparative Psychiatric Study of Accidental and Suicidal Death," Arch Gen Psychiatry, 14, 1966, pp. 60-68.
- 70. Haner, C.F., "Use of Psychometric Instruments in the prediction of Accidents" Read at the 69th Annual Meeting of the American Psychological Association, New York, August 31-September 6, 1961.
- 71. McGuire, F.L., **Personality Factors in Highway Accidents: Human Factors,** 19(5), 1976, pp. 433-442.
- 72. McGire, F.L., "A Study of Methodological and Psychosocial Variables in Accident Research," *JSAS Catalog of Selected Documents* in *Psychology MSNO*, 195(a), 1972.
- 73. Macdonald, J.M., "Suicide and Homicide by Automobile," **Am J Psychiaoy**, 121, 1964, pp. 366-370.
- 74. Temoche, A., R.F. Pugh, and B. MacMahon, J Nerv Ment **Dis,** 138, 1964, pp. 124-130.
- 75. Schmidt, C.W., S. Perlin, W. Townes, R.S. Fisher and J.W. Shaffer, "Characteristics of Drivers Involved in Single-Car Accidents: a Comparative Study," *Arch Gen Psychiatry*, 27, 1972, pp. 800-803.
- 76. Shaw L., "The Practical Use of Projective Personality Tests as Accident Predictors," *Traffic Safety Res Rev, 9,* 1965, pp. 3472.
- 77. Haight, F.A., "Some Comparisons Between Traffic Deaths and Suicide," *Automobilismo*, 13, 1965, pp. 659-710.

- 78. Crancer, A., and D.L. Quiring, "Driving Records of Persons Hospitalized With Suicidal *Gestures," Behav Res Highway Safety,* 1, 1970, pp. 33-42.
- 79. Whitlock, F.A., and A. Broadhurst, "Attempted Suicide and the Experience of Violence," J Bio Soc Sci, 1968, pp. 353-368.
- 80. **Mark,** V.H., and F.R. Ervin, Violence **and rhe Brain,** Harper & Row, Hagerstown, MD, 1970.
- 81. Macdonald, J.M., **Bombers** and **Firesetters**, Charles C. Thomas, Springfield, IL, 1977
- 82. Felthous, A.R., and H. Gernard, "Enuresis, Firesetting, and Cruelty to Animals: the Significance of Two-Thirds of **This** Triad," **J Forensic** Sci, 24(6), 1979, pp. 240-246.
- 83. Felthous, A.R., "Childhood Antecedents of Aggressive Behaviors in Male Psychiatric Patients," **Bull Am Acad Psychiatry** Law, 8(1), 1980, pp. 104-110.
- Felthous, A.R., "Aggression Against Cats, Dogs, and People," **Psychiarry Hum Dev**, 10(3) 1980, pp. 169-177.
- 85. Felthous, A.R., "Childhood Cruelty to Cats, Dogs, and Other Animals. **Bull Am Acad Psychiatry Low,** 9(1), 1981, pp. 48-53.
- 86. Felthous, A.R., and S.R. Kellen, "Violence Against Animals and People: Is Aggression Against Living Creatures Generalized?" **Bull Am Acad Psychiarry**, 14(1), 1986, pp. 55-69.
- 87. Schmidt, C.W. Jr., S. Perlin, W. Townes, R.S. Fisher and J.W. Shaffer, "Characteristics of Drivers Involved in Single-Car Accidents-a Comparative Study," *Archives of General Psychology*, *27*, 1972, pp. 800-803.
- 88. Mcguire, F.L., "Personality Factors in Highway Accidents," *Human Factors*, 18, 1976, pp. 433-441.
- 89. Yates, W.R., F. Noyes, R. Petty, K. Brown, et al., "Factors Associated With Motor Vehicle Accidents Among Male Alcoholics," Journal *of* Studies on *Alcohol*, University of Iowa, College of Medicine, Iowa City, IA, 48(6), November 1987, pp. 586-590.
- 90. Kastrup, M., A. Dupont, M. Bille, and H. Lund, "Traffic Accidents Involving Psychiatric Patients: Characteristics of Accidents Involving Drivers Who Have Been Admitted to Danish Psychiatric Departments," *Acta Psychiatrica Scandinavica*, 58(1), Kobenhavn, 1978, pp. 30-39.
- 91. Noyes, R., **Psychomatics**, Vol. 26, No. 7, July 1985, p. 569.

- 92. Bauer, R.L., "Traffic Accidents and Minor Tranquilizers, a Review," **Public Health Reports, 99,** 1984, pp. 572-574.
- 93. Skegg, D.C.G., S.M. Richards, and R. Doll, Minor Tranquilizers and Road Accidents," **British Medical** Journal, 1, 1979, pp. 917-919.
- 94. Honkanen, R., L. Ertama, M. Linnoila, A. Alha, et al., "Role of Drugs in Traffic Accidents," *British Medical Journal*, 281, 1980, pp. 1309-1312.
- 95. Dureman, I., and B. Norman, "Clinical and Experimental Comparison of Diazepam, Chorazepate, and Placebo," *Psychopharmacologia*, 40(4), University of Uppsala, Sweden, 1975, pp. 279-284.
- 96. Jick, H., J.R. Hunter, B.J. Dinan, et al., "Sedating Drugs and Automobile Accidents Leading to Hospitalization." *American Journal of Public Health*, 71, 1981, pp. 1399-1400.
- 97. Moskowitz, H. and R. Peterson, *Marijuana and Driving: A Review,* Rockville, MD, American Council on Marijuana and Other Psychoactive Drugs, 1982.
- 98. Klonoff, H., "Marijuana and Driving in Real-Life Situations," Science, 186, 1974, pp. 317-324.
- 99. Kandel, D. B., "Marijuana Users in Young Adulthood," **Arch Gen Psych**, 41, 1984, pp. **200-209**.
- 100. Hingson, R., T. Heeren, T. Mangione, et al., "Teenage Driving After Using Marijuana or Drinking and Traffic Accident Involvement," J **Safety Res**, 13, 1982, pp. 33-37.
- 101. Lewis, D.D., and S.S. Shanok, "Medical Histories of Delinquent and Nondehnquent Children: an Epidemiological Study," *Am J Psychiatry*, 134, 1977, pp. 1020-1025.
- 102. Robbins, L.N., "Sturdy Childhood Predictors of Adult Antisocial Behavior: Replication From Longitudinal Studies," *Psychol Med, 8,* 1978, pp. 611-622.
- 103. Robbins, L.N., **Deviant Children Grown Up,** Williams & Wilkins, Baltimore+ MD, 1966
- 104. Kazdin, A.E., *Conduct Disorders in Childhood and Adolescence*, Newbury Park, CA, 1987, pp. 63-66.
- 105. Yeager, C.A., and D. Lewis, "Mortality in a Group of Formerly Incarcerated Juvenile Delinquents," *Am J Psychiatry*, 147, 1990, pp. 612-614.
- 106. Weiss, *G.*, and L.T. Hechtman, *Hyperactive Children* Grown *Up*, Guilford Press, New York, 1986.

- 107. Cantrell, D.P., "Hyperactivity and Antisocial Behavior Revisited: a Critical Review of **the** Literature," **in** D.O. Lewis (ed), **Vulnerabilities to Delinquency,** SP **Medical** & Scientific Books, New York, 1981, pp. 21-38.
- 108. Barkley, R.A., **A Review of Stimulant Drug Research with Hyperactive Children,** 1978.
- 109. Satterfield, J.H., C.M. Hoppe, and A.M. Schell, "A Prospective Study of Delinquency in 110 Adolescent Boys With Attention Deficit Disorder and 88 Normal Adolescent Boys," Am *J Psychiatry*, 139(6), June 1982, pp. 795-798.
- 110. Sattertield, J.H., B.T. Satterfield, and A.M. Schell, "Therapeutic Interventions to Prevent Delinquency in Hyperactive Boys" *J Acad Child Aolesc Psychiany*, *26*, 1987, pp. *56-64*.
- 111. Berg, I., and A. Jackson, "Teenage School Refusers Grown Up: a Followup Study of 168 Subjects, Ten Years on Average After Inpatient Treatment" *Br J Psychiatry*, 174, **1985**, pp. 366-370.
- 112. Burnstein, A., "Poststandardsuaumatic Stress Disorder in Victims of Motor Vehicle Accidents," *Hosp Comm Psychiatric*, 40, 1989, pp. 295-297.
- 113. Kuch, K., R.P. Swinson, and M. Kirby, "Post-Traumatic Stress Disorder After Car Accidents," *Can J Psychiatry*, *30*, *1985*, pp. 426427.
- 114. Munjack, D.J., "The Onset of Driving Phobias," J Behav Ther Exp Psychiatry, 15, 1984, pp. 305-308.
- 115. Crancer, A. Jr., and D.L. Quiring, "The Mentally Ill as Motor Vehicle Operators," Am J **Psychiatry**, **126**, **1969**, pp. 75-81.
- 116. Eelkema, R.C., J. Brosseau, R. Koshnick, and C. McGee, "A Statistical Study on the Relationship Between Mental Illness and Traffic Accidents-A Pilot Study," Am J Public Health, 60, 1970, pp. 459-469.
- 117. Holt, P.L., "Stressful Life Events Preceding Road Traffic Accidents," Injury, 13, 1982, pp. 111-115.
- 118. Selzer, ML., and A. Vinokur, "Life Events, Subjective Stress, and Traffic Accidents," **Am J Psychiany**, 131, 1974, pp. 903-906.
- **119.** McMurray, L., "Emotional Stress on Driving Performance: the Effect of Divorce," **Behav Res Highway Safety,** 1, 1970, pp. 100-114.
- 120. Isherwood, J., K.S. Adam, and A.R. Homblow, "Life Event Stress, Psychosocial Factors, Suicide Attempt and Auto-Accident Proclivity," J *Psychosom Res, 26, 1982*, pp. 371-383.

## BIBLIOGRAPHY'

Adams, J.R., "Personality Variables Associated With Traffic Accidents," **Behavior Research** and Highway Safety, 1, 1970, pp. 3-18.

Aman, M.G., J.S. Werry, J.W. Paxton, et al., "Effects of Carbamazepine on Psychomotor Performance in Children as a Function of Drug Concentration, Seizure Type, and Time of Medication," *Epilepsia*, 31, 1990, pp. 51-60.

American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised, American Psychiatric Association, Washington, DC, 1987.

Andreasen, N.C., "Negative Symptoms in Schizophrenia: Definition and Reliability," Arch **Gen Psych, 39,** 1982, pp. 784-788.

Andreasen, N.C., and D.W. Black, "Schizophrenia," *Introductory Textbook of Psychiatry*, American Psychiatric Press, Washington, DC, 1991.

Armstrong, J.L., and F.A. Whitlock, "Mental Illness and Road Traffic Accidents," **Australian and New Zealand Journal of Psychiatry, 14, 1980,** pp. 53-60

Barkley, R.A., A Review of Stimulant Drug Research with Hyperactive Children, 1978.

Bauer, R.L., "Traffic Accidents and Minor Tranquilizers, a Review," **Public Health Reports,** 99, 1984, pp. 572-574.

Bech, P., "Mental Illness and Simulated **Driving," Pkarmacopsyckiatria, 8,** 1975, pp. 143-150.

Beilock, R., **1989 Motor Carrier Safety** Survey, Regular Common Carrier Conference, Alexandria, VA, 1989, pp. 10-11.

Bellini, L., O. Gambini, F. Pallidino, and S. Scarone, "Neuropsychological Assessment of Functional Central Nervous System Disorders," *Acta Psyckiatr Scand*, **78, 1988**, pp. 242-246.

Benton, J.L., L. Mills, Jr., K. Hartman, and J.T. Crow, "Auto Driver Fitness: An Evaluation of Useful Criteria," *Journal of the American Medical* Association, 176, 1961, pp. 419-423.

Berg, I., and A. Jackson, "Teenage School Refusers Grown Up: a Followup Study of 168 Subjects, Ten Years on Average After Inpatient Treatment" *Br J Psychiatry*, 174, 1985, pp. 366-370.

Bernstein, G.A., "Anxiety Disorders" in **Psychiatric Disorders in Children and Adolescents,** B.D. **Garfunkel,** G.A. Carlson, and E.B. Weller, 1990, pp. 64-83.

Black, D.W., W.R. Yates, and N.C. Andreasen, "Schizophrenia, Schizophreniform Disorder, and Delusional (Paranoid) Disorders," *American Psychiatric Press Textbook of Psychiatry*, J.A. Talbon, S.C. Yudofsky, and R.F. Hales (eds.), American Psychiauic Press, Washington, DC, 1988, pp. 357-402.

Blackburn, J.R., and A.G. Phillips, "Blockade of Acquisition of One-Way Conditioned Avoidance Responding by Haloperidol and Metocloprsmide but Not by Thioridazine or Clozapine" **Psychopharmacology**, **98**, 1989, pp. 453-459.

Borland, R.G., and A.N. Nicholson, "Visual Motor Coordination and Dynamic Visual Activity," *British Journal of Clinical Pharmacology*, 18(1), 1984, pp. 69S-72S.

Bost, R.O., "3,4-Methlenedioxymethamphetamine (MDMDA) and Other Amphetamine Derivatives" *J Forensic Sci*, 33, 1988, pp. 576-587.

Brennan, J.J., and A.G. Ekdahl, "Are Psychotics Accident Prone?" **American Journal of Psychiatry**, 120, 1963, pp. 173-176.

British Medical Journal Special Correspondent, "Road Accidents: Are Drugs Other Than Alcohol A Hazard?" **British Medical** Journal, 2 1978, pp. 1415-1417.

Brown, S.L., et *al. Alcohol Safety Study: Drivers Who Die*, U.S. Department of Commerce, PB 182 900, 1968.

Burstein, A., "Posttraumatic Stress Disorder in Victims of Motor Vehicle Accidents," *Hosp* Comm *Psychiatric*, *40*, 1989, pp. 295-297.

Isherwood, J., K.S. Adam, and A.R. Homblow, "Life Event Stress, Psychosocial Factors, Suicide Attempt and Auto-Accident Proclivity," **J Psychosom Res, 26,** 1982, pp. 371-383.

Buttiglieri, M.W., and M. Guenette, "Driving Records of Neuropsychiatric Patients," *Journal* of *Applied Psychology*, 51(2), Veterans Administration Hospital, Sepulveda, CA, 1967, pp. 96-100.

Buttiglieri, M.W., and M. Guenene, "Temporal Relationship Between Automobile Accidents and Psychiatric Hospitalization," *Perceptual and Motor Skills, 24(3), Pt. 2,* Veterans Administration Hospital, Sepulveda, CA, 1967, 1327-1332.

Calev, A., F. Ben-Tzvi, B. Shapira, et al., "Distinct Memory Impairments Following Electroconvulsive Therapy and Impipramine," *Psychol Med.* 19, 1987, pp. 11 l-l 19.

Cantrell, D.P., "Hyperactivity and Antisocial Behavior Revisited: a Critical Review of the Literature," *in* D.O. *Lewis (ed), Vulnerabilities to Delinquency,* SP Medical & Scientific Books, New York, 1981, pp. 21-38.

Carr, V., and J. Wade, "The Effects of Antipsychotic Drugs and Symptomatology on Perceptual Asymmetry in Schizophrenia" J Neurol Neurosurg Psychiatry, 51, 1988, pp. 1531-1537.

Classen, W., and G. Laux, "Sensorimotor and Cognitive Performance of Schizophrenic Inpatients Treated With Haloperidol, Fluphenithixol or Cloapine," *Pharmacopsychiatria*, 21, 1988, pp. 295-297.

Classen, W., and G. Laux, "Comparison of Sensorimotor and Cognitive Performance of Acute Schizophrenic Inpatients Treated With Remoxipride or Haloperidol," **Neuropsychobiology**, 21, 1989, pp. 131-140.

Cohen, R.M., W.F. Semple, M. Gross, et al., "The Effect of Neuroleptics on Dysfunction in a Prefrontal Substrate of Sustained Attention in Schizophrenia," Life *Sci*, *43*, 1988, pp. 1141-1150.

Cole, B.J., and T.W. Robbins, "Amphetamine Impairs the Discriminative Performance of Rats With Dorsal Noradrenergic Bundle Lesions on a 5-Choice Serial Reaction Time Task," *Psychopharmacology*, 91, 1987, pp. 458-466.

Conger, J.J., H.S. Gaskill, D.D. Glad, L. Hassel, R.V. Rainey and W.L. Sawrey, "Psychological and Psychophysiological Factors in Motor Vehicle Accidents" *JAMA*, *169*, 1959, pp. 1581-1587.

Conger, J.J., H.S. Gaskill, D.D. Glad, R.V. Rainey, W.L. Sawrey, ES. Turrell, "Personal and Interpersonal Factors in Motor Vehicle Accidents," *Am J Psychiatry*, 113, 1957, pp. 1069-1074.

Cooper, SM., D. Jackson, J.M. Loudon, et al., "The Psychomotor Effects of Paroxetine Alone and in Combination With Haloperidol, Amylobarbitone Oxazepam or Alcohol," *Acta Psychiatr Scan*, 80 (suppl 350), pp. 53-55

Crancer, A. Jr., and D.L. Quiring, "The Mentally III as Motor Vehicle Operators," Am J **Psychiatry**, **126**, 1969, pp. 75-81 and 807-813.

Crancer, A., and D.L. Quiring, Driving Records of Persons Hospitalized With Suicidal *Gestures," Behav Res Highway Safety,* 1, 1970, pp. 33-42.

Deptula, D., and N. Pomara, "Effects of Antidepressants on Human Performance: a Review," *J Clin Psychopharmacol*, 10, 1990, pp. 105-111.

Doege, T.C., and A.L. Engelberg (eds), *Medical Conditions Affecting Drivers*, 40, American Medical Association, 1986, pp. 7-9 and 36-40.

Dubovsky, S.L., "Using Electroconvulsive Therapy for Patients With Neurological Disease" *Hosp Community Psychiatry*, *37*, 1986, pp. 819-825.

Dureman, I., and B. Norman, "Clinical and Experimental Comparison of Diazepam, Chorazepate, and Placebo," *Pschompharmacologia*, 40(4), University of Uppsala, Sweden, 1975, pp. 279-284.

Eelkema, R.C., J. Brosseau, R. Koshnick, and C. McGee, "A Statistical Study on the Relationship Between Mental Illness and Traffic Accidents-a Pilot Study," *Am J Public Health, 60,* 1970, pp. 459-169.

**Federal Aviation Regulations,** Medical Standards and Certification, Department of Transportation, Washington, DC, 1974, p. 67.

Felthous, A.R., and H. Gemard, "Enuresis, Firesetting, and Cruelty to Animals: the Significance of Two-Thirds of This Triad," J Forensic Sci, 24(6), 1979, pp. 240-246.

Felthous, A.R., "Childhood Antecedents of Aggressive Behaviors in Male Psychiatric Patients," **Bull Am Acad Psychiatry Law**, 8(1), 1980, pp. 104-110.

Felthous, A.R., and S.R. Kellert, "Violence Against Animals and People: Is Aggression Against Living Creatures Generalized?" **Bull Am Acad Psychiany**, 14(1), 1986, pp. 55-69.

Felthous, A.R., "Aggression Against Cats, Dogs, and People," **Psychiatry Hum Dev,** 10(3), 1980, pp. 169-177.

Felthous, A.R., "Childhood Cruelty to Cats, Dogs, and Other Animals. **Bull Am Acod Psychiatry Law**, 9(1), 1981, pp. 48-53.

Ferrara, S.D., "Simulators, Simulation and *Driving, "British Journal of Clinical* Pharmacology, 1984, pp. 101S-102S.

'Ferrara, S.D., "Alcohol, Drugs and Traffic Safety" Br J Addict, 82, 1987, pp. 871-883.

Fii, M., Convulsive Therapy: Theory and Practice, Raven, New York, 1979.

Friedland, R.P., E. Koss, A. Kuman, S. Gaine, D. Metzler J.V. Haxby, A. Moore, "Motor Vehicle Crashes in Dementia of the Alxheimer Type," *Ann Neurology, 36, 1988*, pp. 782-786.

'Gallassi, R., A. Morreale, S. Lorusso, et al., "Cognitive Effects of Valproate," *Epilepsy Res, 5*, 1990, pp. 160-164.

Gerhard, U., and I. Hobi, "Cognitive-Psychomotor Function With Relationship to Fitness for Driving of Psychiatric Patients Treated With Neuroleptics and Antidepressants," **Neuropsychobiology**, 12, 1984, pp. 39-47.

Gillham, R.A., N. Williams, and K. Wiedmann, et al., "Concentration Effect Relationships With Carbamazepine and Its Epoxide on Psychomotor and Cognitive Function in Epileptic Patients," *J Neurol Neurosurg Psychiatry*, 51, 1988, pp. 929-933.

Goldman, H., F.E. Gomer, and D.I. Templer, "Long-Term Effects of Electroconvulsive Therapy Upon Memory and Perceptual-Motor Performance," J *Clin Psychol*, *28*, 1972, pp. *32-34*.

Goldstein, S.G., S.B. Filskov, L.A. Weaver, and J.O. Ives, "Neuropsychological Effects of Electroconvulsive Therapy," J *Clin Psychol*, **33**, 1977, pp. 789-806.

Haight, F.A., "Some Comparisons Between Traffic Deaths and Suicide," *Automobilismo*, 13, 1965, pp. 659-710.

Haner, C.F., "Use of Psychometric Instruments in the Prediction of Accidents" Read at the 69th Annual Meeting of the American Psychological Association, New York, August 31-September 6, 1961.

Harvey, J.A., "Behavioral Pharmacology of Central Nervous System Stimulants," **Neuropharmacology, 26,** 1987, pp. 887-892.

Hindmarch, K., "The Psychopharmacological Approach: Effects of Psychotropic Drugs on *Car* Handling," *Int Clin Psychopharmacol*, 3 (suppl 1), 1988, pp. 73-79.

Hingson, R., T. Heeren, T. Mangione, et al., "Teenage Driving After Using Marijuana or Drinking and Traffic Accident Involvement," J **Safety Res,** 13, 1982, pp. 33-37.

Hock, F.J., Drug Influences on Learning and Memory in Aged Animals and Humans," *Neuropsychobiology*, 17, 1987, pp. 145-160.

Holt, P.L., "Stressful Life Events Preceding Road Traffic Accidents," Injury, 13, 1982, pp. 111-115.

Honkanen, R., L. Ertama, M. Linnoila, A. Alha, et al., "Role of Drugs in Traffic Accidents," *British Medical* Journal, 281, 1980, pp. 1309-1312.

Hovda, D.A., R.L. Sutton, D.M. Feeney, "Amphetamine-Induced Recovery of Visual Cliff Performance After Bilateral Visual Cliff Ablation in Cats: Measurements of Depth Perception Thresholds," **Behav Neurosci, 103,** 1989, pp. 574-584.

Hyman, F.C., W.E. Collins, H.L. Taylor, et al., "Instrument Flight Performance Under the Influence of Certain Combinations of Antiemetic Drugs," *Aviat Space Environ Med, 59, 1988*, pp. 533-539.

Jick, H., J.R. Hunter, B.J. Diian, et al., "Sedating Drugs and Automobile Accidents Leading to Hospitalization," *American Journal of Public Health*, 71, 1981, pp. 1399-1400.

Joffe, R.T., C. MacDonald, and S.P. Kutcher, "Lack of Differential Cognitive Effects of Lithium and Carbamazepine" in Bipolar Affective Disorder," *Clin Psychopharmacol*, **8**, 1988, **pp. 425-428**.

Kandel, D. B., "Marijuana Users in Young Adulthood," **Arch Gen Psych,** 41, 1984, pp. **200-209.** 

**Kasclin,** A.E., Conduct **Disorders in Childhood and Adolescence**, Newbury Park, CA, 1987, pp. 63-66.

Klonoff, H., "Marijuana and Driving in Real-Life Situations," Science, 186, 1974, pp. 317-324.

Kuch, K., R.P. Swinson, and M. Kirby, "Post-Traumatic Stress Disorder After Car Accidents," *Can J Psychiany*, *30*, 1985, pp. 426427.

Lewis, D.D., and S.S. Shanok, "Medical Histories of Delinquent and Nondelinquent Children: an Epidemiological Study," **Am J Psychiany**, 134, 1977, pp. 1020-1025.

Linington, A., and B. Harris, "Fifty Years of Electroconvulsive Therapy," Br J Psychiatry.

Linnoila, M., C.W. Erwin, A. Brendle, D. Simpson, "Psychomotor Effects of Diazepam in Anxious Patients and Healthy Volunteers," **J** Clin **Phychapharmacol.**, **3**, 1983, pp. 88-96.

Ljungberg, T., and M. Enquist, "Disruptive Effects of Low Doses of D-Amphetamine on the Ability of Rats to Organize Behavior Into Functional Sequences," *Psychopharmacology*, *93*, *1987*, pp. 146-151.

Lucas-Blaustein, M.J., C.L. Filipp, C. Dungan, and L. Tune, Driving in Patients With Dementia," J Am Geriatr Soc, 36, 1988, pp. 1087-1091.

M'Harzi, M., F. Willig, J.C. Costa, and J. Delacour, "D-Amphetamine Enhances Memory Performance in Rats with Damage to the Fimbria," *Physiol Behav, 42, 1988*, pp. 575-579.

Macdonald, J.M., **Bombers and Firesetters**, Charles C. Thomas, Springfield, IL, 1977

Macdonald, J.M., "Suicide and Homicide. by Automobile," **Am J Psychiany**, 121, 1964, pp. **366-370**.

Macphee, G.J.A., J.R. Mitchell, L. Wiseman, et al., "Effect of Sodium Valproate on Carbamazepine Disposition and Psychomotor Profile in Man," Br J Clin **Pharmocol, 25, 1988**, pp. 59-66.

Magliozzi, J.R., D. Mungas, J.N. Laubly, and D. Blunden, "Effect of Haloperidol on a Symbol Digit Substitution Task in Normal Adult Males," *Neurophchpharmacology*, **2,** 1989, pp. 29-37.

Manila, MJ. "Interactions of Benzodiazepines on Psychomotor Skills," *British Journal of Clinical Pharmacology*, 18(1), 1984, pp. 21S-26S.

Mark, V.H., and F.R. Ervin, Violence and the Brain, Harper & Row, Hagerstown, MD, 1970.

McFarland, R.A., "The Epidemiology of Motor Vehicle Accidents," *Journal of the American Medical Association*, 180, 1962, pp. 289-300.

McGuire, F.L., "A Study of Methodological and Psychosocial Variables in Accident Research," **JSAS Catalog of Selected Documents in Psychology MSNO**, 195(a), 1972.

McGuire, F.L., **Personality Factors in Highway Accidents: Human Factors,** 10(5), 1976, pp. **433-442.** 

McGuire, F.L., "Personality Factors in Highway Accidents," *Human Factors,* 18, 1976, pp. 433441.

mCmURRAY, L., "Emotional sIRESS on Driving Performance: the Effect of Divorce," **bEHAV rES Highway Safety, 1,** 1970, pp. 100-1 14.

Medalia, A., J. Gold, and A. Merriam, "The Effects of Neuroleptics on Neuropsychological Test Results of Schizophrenics," **Arch** Clin **Neuropsychol**, **3**, 1988, pp. 249-271.

Mendelson, W.B., "Human Sleep Research and Clinical Care," Plenum Press, New York, 1987, pp. 221-245.

Meyer, F.P., and J. Walther, "Zur Beeinflussung der Psycchophysischen Leistungsfahigkeit des Menschen Durch Antiepileptika," **Psychiatr** Neurol **Med Psychol, 39**, 1987, pp. 1-16.

Milter, M.M., M.A. Carskadon, C.A. Czeisler, W.C. Dement, D.F. Dinges, and R.C. Graiber, "Catastrophes, Sleep and Public Policy, Consensus Report," *Sleep,* Association of Professional Sleep Societies Committee on Catastrophes, Sleep, and Public Policy, 1 l(1) 1986, pp. 100-108.

Moskowitz., H., "Attention Tasks as Skill Performance Measures of Drug Effects," **British** Journal of Clinical Pharmacology, 18(1), 1984, pp. 51S-62S.

Moskowitz, H., and M. Burns, 'The Effects of Alcohol and Valium, Singly and in Combination Upon Driving Related Performance," Procs of the 21st Conference of the American Association of Automotive Medicine, 1977.

Moskowitz, H., M. Burns, A. Wiiams, "Skills Performance at Low Blood Alcohol Levels," J Stud. Alc, 46, 1986, pp. 482-485.

Moskowitz, H. and R. Peterson, *Marijuana and Driving: A Review*, Rockville, MD, American Council on Marijuana and Other Psychoactive Drugs, 1982.

Munjack, D.J., "The Onset of Driving Phobias," **J Behav Ther Expression**, 15, 1984, pp. 305-308.

Newhouse, P.A., Ci. Belenky, M. Thomas, et al., "The Effects of D-Amphetamine on Arousal, Cognition and Mood After Prolonged Sleep-Deprivation," *Neuropsychopharmacology, 2,* 1989, pp. 153-164.

Nicholoson, A.N., "The Significance of Impaired Performance," Int Clin **Psychopharmoacol**, (supply 1), 1988, pp. 117-127.

Noyes, R., **Psychomatics**, Vol. 26, No. 7, July 1985, p. 569.

Noyes, R. "Motor Vehicle Accidents Related to Psychiatric Impairment," *Psychosomarics, 26,* 1985, pp. 569-580.

O'Hanlon, F.J., Driving Performance Under the Influence of Drugs: Rationale for, and Application of, a **New** Test. British **Journal of Clinical Pharmacology,** 18(1), 1984, 121S-130S.

Potter, W.Z., "Psychotropic Medications and Work Performance," **J Occup Med, 32, 1990,** pp. 355-361.

Reischies, F.M., R.D. Stieglitz, I. Mielewczyk, and A. Bogel, "Impaired Performance in a **Saccadic** Tracking Task in Schizophrenic Patients," *Eur Arch Psychiatry Neurol Sci*, *239*, 1989, pp. 58-61.

Ridley, RM., H.F. Baker, G.D. Frith, et al., "Stereotyped Responding on a Two-Choice Guessing Task by Marmosets and Humans Treated With Amphetamine," Psychopharmacology, 95, 1988, pp. 560-564.

Robinson, T.F., P.A. Jurson, J.A. Bennett, and K. Bentgen, "Persistent Sensitization of Dopamine Neurotransmission in Ventral Striatum (Nucleus Accumbens) Produced by Prior Experience With (+)- -Amphetamine," Brain **Res, 462,** 1988, pp. 21 1-222.

Robbins, L.N., **Deviant Children** Grown **Up**, Williams & Wilkins, Baltimore, MD, 1966

Robbins, L.N., "Sturdy Childhwd Predictors of Adult Antisocial Behavior: Replication From Longitudinal Studies," *Psychol Med, 8, 1978,* pp. 61 1-622.

Roehrs, T., F. Kribbs, F. Zorick, and T. Roth, "Hypnotic Residual Effects of Benzodiazepines With Repeated Administration, *Sleep, 9(2),* 1986, 309-316.

Rossi, A., P. Stratta, R. Nistico, et al., "Visuospatial Impairment in Depression: a Controlled ECT Study," *Acta Psychiatr Scand*, 81, 1990, pp. 245-249.

Roth T., T. Roehrs, R. Wittig and F. Zorick, Benzodiazepines and Memory," British *Journal* of *Clinical Pharmacology*, 18(1), 1984, pp. 46S-50S.

Saarialho-Kere, U., "Psychomotor, Respiratory and Neurcendocrinological Effects of Nalbuphine and Haloperidol, Alone and in Combination, in Healthy Subjects," Br **J** Clin **Pharmacol, 26,** 1988, pp. 79-87.

Sahgal, A., "Vasopressin and Amphetamine, but Not Desglycinamide Vasopressin, Impair Positively Reinforced Visual Attention Performance in Rats," **Behav Brain Res, 29,** 1988, pp. 35-42.

Satterfield, J.H., CM. Hoppe, and A.M. Schell, "A Prospective Study of Delinquency in 110 Adolescent Boys With Attention Deficit Disorder and 88 Normal Adolescent Boys," Am **J Psychiatry**, 139(6), June 1982, pp. 795-798.

Satterfield, J.H., B.T. Sattertield, and A.M. Schell, "Therapeutic Interventions to Prevent Delinquency in Hyperactive Boys" *J Acad Child Adolesc Psychiany*, *26*, *1987*, pp. 56-64.

Savage, P.P.E., and V. Wilkinson, "Reaction Time in Psychiatric Patients: Pilot Study," New **Zealand Medical Journal** (Dunedin, New Zealand), 74,(4681), Oakely Hospital, Auckland, New Zealand, 1971, pp. 285-288.

Schlensky, R. "Psychiatric Standards in Driver Licensing" *JAMA*, 235(18), 1976, pp. 1993-1994.

Schmedtje, J.F., C.M. Oman, R. Letz, and E.L. Baker, "Effects of Scopolamine and Dextroarnphetamine on Human Performance," *Aviar Space Environ Med. 59*, 1988, pp. 407-410.

Schmidt, C.W., S. Perlin, W. Townes, R.S. Fisher and J.W. Shaffer, "Characteristics of Drivers Involved in Single-Car Accidents: a Comparative Study," *Arch Gen Psychiatry 27*, 1972, pp. 800-803.

Schmidt, C.W. Jr., S. Perlii, W. Townes, R.S. Fisher and J.W. Shaffer, "Characteristics of Drivers Involved in Single-Car Accidents-a Comparative Study," *Archives of General Psychology*, *27*, 1972, pp. 800-803.

Seidel, W., S. Cohen, N. Bliwise, T. Roth, and W. Dement, "Dose-Related Effects of Triazohun and Flurazepam on a Circadian Rhythm Insomnia," *Clin Pharmacol Ther, 40,* 1986, pp. 314-320.

Selzer, M.L., C.E. Payne, F.E. Westervelt, and J. Quinn, "Automobile Accidents as an Expression of Psychopathology in an Alcoholic Population," Q J Stud *Alcohol*, *28*, 1967, pp. *505-5 16*.

Selzer, M.L.. J.E. Rogers, and S. Kern, "Fatal Accidents: the Role of Psychopathology, Social Stress, and Acute Disturbance," *Am J Psychiatry*, 124, 1968, pp. 1028-1036.

Selzer, M.L., "Alcoholism, Mental Illness, and Stress in 96 Drivers Causing Fatal Accidents," Behav Sci, 14, 1969, pp. 1-10.

Selzer, M.L., and A. Vinokur, "Life Events, Subjective Stress, and Traffic Accidents," **Am J** Psychiatry, 131, 1974, pp. 903-906.

'Shaw L., "The Practical Use of Projective Personality Tests as Accident Predictors," **Traffic Safety Res Rev, 9, 1965,** pp. 3472.

Skegg, D.C.G., S.M. Richards, and R. Doll, "Minor Tranquilizers and Road Accidents," **British Medical Journal**, 1, 1979, pp. 917-919.

Tabachnick, N., R.E. Litman, M. Osman, W.L. Jones, J. Cohn, A. Casper and J. Moffat, "Comparative Psychiatric Study of Accidental and Suicidal Death," *Arch Gen Psychiatry*, 14, 1966, pp. 60-68.

Temoche, A., R.F. Pugh, and B. MacMahon, J Nerv *Ment Dis*, 138, 1964, pp. 124-130.

Tilhnan, W.A., and G.E. Hobbs, "The Accident-Prone Automobile Driver: a Study of Psychiatric and Social Background," **Am J Psychiatry**, 106, 1949, pp. 321-331.

Tomer, R., and P. Flor-Henry, "Neuroleptics Reverse Attention Asymmetries in Schizophrenic Patients," *Biol Psychiatry*, *25*, 1989, pp. 852-860.

Tsuang, M.T., M. Boor, and J.A. Fleming, "Psychiatric Aspects of Traffic Accidents," **Am J Psychiatry, 142, 1985,** pp. 538-546.

<sup>1</sup>U.S. Department of Transportation, Federal Highway Administration, *Conference on Neurological Disorders and Commercial Drivers*, Pub. No. FHWA-MC-88-042, Office of Motor Carriers, Washington, DC, July 1988, p. 62.

U.S. Department of Transportation, Federal Highway Administration, *Conference on Pulmonary/Respiratory Disorders and Commercial Drivers, Office* of Motor Carriers, Washington, DC, December 1990.

Wahler, J.A., "Chronic Medical Conditions in Traffic Safety Review of the California Experience," N Eng J *Med*, 273, 1965, pp. 1413-1420.

Weiner, N., "Norepinephrine, Epinephrine and the Sympathomimetic Amines," **The Pharmacological Basis of Therapeutics,** A.G. Gilman, L.S. Goodman, and A. Gilman (eds.). Macmillan, New York, 1980, pp. 138-175.

Weiss, *G.*. and L.T. Hechtman, *Hyperactive Children Grown Up*, Guilford Press, New York, 1986.

West, I., "Impaired Driver: Critical Review of Facts," *California Medicine*, 38, 1963, pp. 27 1-274.

Whishaw, 1.0.. G. Mittleman, and J.J. Evenden, "Training-Dependent Decay in Performance Produced by the Neuroleptic Cis(z)-Flupentizal on Spatial Navigation by Rats in a Swimming Pool," **Pharmacol Biochem Behav, 32, 1989,** pp. 211-228.

Whitlock, F.A., and A. Broadhurst, "Attempted Suicide and the Experience of Violence," J **Bio Soc Sci**, 1968, pp. 353-368.

Wool, R.S., D.A. Weldon, B.A. Shaywitz, et al., "Amphetamine Reverses Learning Deficits in 6-Hydroxydopamine-Treated Rat Pups," *Devel Psychobiol*, *20*, 1987, pp. 219-232.

Yates, W.R., F. Noyes, R. Petty, K. Brown, et al., "Factors Associated With Motor Vehicle Accidents Among Male Alcoholics," *Journal of Studies* on *Alcohol,* University of Iowa, College of Medicine, Iowa City, IA, 48(6), November 1987, pp. 586-590.

Kastrup, M., A. Dupont, M. Bille, and H. Lund, "Traffic Accidents Involving Psychiatric Patients: Characteristics of Accidents Involving Drivers Who Have Been Admitted to Danish Psychiatric Departments," *Acta Psychiatrica Scandinavica*, 58(1), Kobenhavn, 1978, pp. 30-39.

Yeager, C.A., and D. Lewis, "Mortality in a Group of Formerly Incarcerated Juvenile Delinquents," *Am J Psychiatry* 147, 1990, pp. 612-614.