(176) IKARD, F.F., GREEN, D.E., HORN, D. A scale to differentiate between types of smoking as related to the management of affect. International Journal of the Addictions 4(4): 649-659, December 1969.

(177) IKARD, F.F., TOMKINS, S. The experience of affect as a determinant of smoking behavior: A series of validity studies. Journal of Abnormal Psychology 81(2): 172-181, April 1973.

(178) ISACSSON, S.-O., JANZON, L. Results of a quit-smoking research project in a randomly selected population. Scandinavian Journal of Social Medicine 4(1): 25-29, 1976.

(179) JACOBS, M.A. The addictive personality: Prediction of success in a smoking withdrawal program. Psychosomatic Medicine 34(1): 30-38, January/February 1972.

(180) JACOBS, M.A., SPILKEN, A.Z., NORMAN, M.M., WOHLBERG, G.W., KNAPP, P.H. Interaction of personality and treatment conditions associated with success in a smoking control program. Psychosomatic Medicine 33(6): 545-556, November/December 1971.

(181) JANIS, I.L., HOFFMAN, D. Facilitating effects of daily contact between partners who make a decision to cut down on smoking. Journal of Personality and Social Psychology 17(1): 25-35, April 1970.

(182) JANIS, I.L., MANN, L. Effectiveness of emotional role-playing in modifying smoking habits and attitudes. Journal of Experimental Research in Personality 1(1): 84-90, June 1965.

(183) JARVIK, M.E. Biological factors underlying the smoking habit. In: Jarvik, M.E., Cullen, J.W., Gritz, E.R., Vogt, T.M., West, L.J. (Editors). Research on Smoking Behavior. NIDA Research Monograph 17. U.S. Department of Health, Education, and Welfare, Public Health Service, Alcohol, Drug Abuse and Mental Health Administration, National Institute on Drug Abuse, DHEW Publication No. (ADM) 78-581, December 1977, pp. 122-148.

(184) JARVIK, M.E. Further observations on nicotine as the reinforcing agent in smoking. In: Dunn, W.L., Jr. (Editor). Smoking Behavior: Motives and Incentives. Washington, D.C., V. H. Winston and Sons, 1973, pp. 33-49.

(185) JARVIK, M.E., GLICK, S.D., NAKAMURA, R.K. Inhibition of cigarette smoking by orally administered nicotine. Clinical Pharmacology and Therapeutics 11(4): 574-576, July/August 1970.

(186) JENKS, R., SCHWARTZ, J.L., DUBITZKY, M. Effect of the counselor's approach to changing smoking behavior. Journal of Clinical Psychology 16: 215-221, 1969.

(187) JOHNSON, E.K. The Treatment of Smoking as a Self-Defeating Behavior and Prediction of Behavior Change and Maintenance. Doctoral dissertation, Brigham Young University, 1975, 144 pp. Dissertation Abstracts International 36(7): 3610-B, January 1976. (University Microfilms No. 76-710).

(188) JOHNSON, S.S. The Effects of Self Control Techniques Upon Differing Types of Smoking Behavior. Doctoral dissertation, University of Colorado, 1968, 97 pp. University Microfilms, Inc., Ann Arbor, Michigan, 1972. (University Microfilms No. 69-4370).

(189) JOHNSTON, E., DONOGHUE, J.R. Hypnosis and smoking: A review of the literature. American Journal of Clinical Hypnosis 13(4): 265-272, April 1971.

(190) JONES, J.S. Cigarette abandonment: Its significance. British Journal of Diseases of the Chest 71(4): 285-288, October 1977.

(191) JORGENSEN, G.T. An Experimental Test of a Treatment Program to Modify Cigarette Smoking. Doctoral dissertation, Colorado State University, 1973, 118 pp. Dissertation Abstracts International 34(9): 4666-B, March 1974. (University Microfilms No. 74-5424).

(*192*) KAHN, A., RUTLEDGE, R.B., DAVIS, G.L., ALTES, J.A., GANTNER, G.E., THORNTON, C.A., WALLACE N.D. Carboxyhemoglobin sources in the metropolitan St. Louis population. Archives of Environmental Health 29: 127-135, September 1974.

(*193*) KANFER, F.H., KAROLY, P. Self-control: A behavioristic excursion into the lion's den. Behavior Therapy 3(3): 398-416, July 1972.

(*194*) KANZLER, M., JAFFE, J.H., ZEIDENBERG, P. Long- and short-term effectiveness of a large-scale proprietary smoking cessation program—a four-year follow-up of Smokenders participants. Journal of Clinical Psychology 32(3): 661-669, July 1976.

(*195*) KANZLER, M., ZEIDENBERG, P., JAFFE, J.H. Response of medical personnel to an on-site smoking cessation program. Journal of Clinical Psychology 32(3): 670-674, July 1976.

(*196*) KAPLAN, J.M. An Individualized Stimulus-Control Procedure in the Treatment of Cigarette Smoking. Doctoral dissertation, Florida State University, 1976, 52 pp. Dissertation Abstracts International 37(1): 463-B-464-B, July 1976. (University Microfilms No. 76-16,527).

(*197*) KATZ, R.C., HEIMAN, M., GORDON, S. Effects of two self-management approaches on cigarette smoking. Addictive Behaviors 2(1): 113-119, 1977.

(*198*) KAZDIN, A.E. Self-monitoring and behavior change. In: Mahoney, M.J., Thoresen, C.E. (Editors). Self-Control: Power to the Person. Monterey, Brooks/Cole Publishing Company, 1974, pp. 218-246.

(*199*) KEUTZER, C.S. Behavior modification of smoking: The experimental investigation of diverse techniques. Behaviour Research and Therapy 6(2): 137-157, May 1968.

(*200*) KEUTZER, C.S., LICHTENSTEIN, E., MEES, H.L. Modification of smoking behavior: A review. Psychological Bulletin 70(6): 520-533, December 1968.

(*201*) KOENIG, K.P., MASTERS, J. Experimental treatment of habitual smoking. Behavioral Research and Therapy 3 (4): 235-243, December 1965.

(*202*) KOPEL, S.A. The Effects of Self-Control, Booster Sessions, and Cognitive Factors on the Maintenance of Smoking Reduction. Doctoral dissertation, University of Oregon, 1974, 67 pp. Dissertation Abstracts International 35(8): 4182-B-4183-B, February 1975. (University Microfilms No. 75-3895).

(*203*) KOPEL, S., ARKOWITZ, H. The role of attribution and self-perception in behavior change: Implications for behavior therapy. Genetic Psychology Monographs 92: 175-212, 1975.

(*204*) KOSKELA, K., PUSKA, P., TUOMILEHTO, J. The North Karelia project: A first evaluation. International Journal of Health Education 19(1): 59-66, 1976.

(*205*) KREITLER, S., SHAHAR, A., KREITLER, H. Cognitive orientation, type of smoker and behavior therapy of smoking. British Journal of Medical Psychology 49(2): 167-175, June 1976.

(*206*) LANDO, H.A. Aversive conditioning and contingency management in the treatment of smoking. Journal of Consulting and Clinical Psychology 44(2): 312, April 1976.

(*207*) LANDO, H.A. A comparison of excessive and rapid smoking in the modification of chronic smoking behavior. Journal of Consulting and Clinical Psychology 43(3): 350-355, June 1975.

(*208*) LANDO, H.A. Measurement and technique innovations. An objective check upon self-reported smoking levels: A preliminary report. Behavior Therapy 6(4): 547-549, July 1975.

(*209*) LANDO, H.A. Self-pacing in eliminating chronic smoking: Serendipity revisited? Behavior Therapy 7(5): 634-640, October 1976.

(*210*) LANDO, H.A. Successful treatment of smokers with a broad-spectrum behavioral approach. Journal of Consulting and Clinical Psychology 45(3): 361-366, June 1977.

(*211*) LANDO, H.A., DAVISON, G.C. Cognitive dissonance as a modifier of chronic smoking behavior: A serendipitous finding. Journal of Consulting and Clinical Psychology 43(5): 750, October 1975.

(*212*) LAWSON, D.M., MAY, R.M. Three procedures for the extinction of smoking behavior. Psychological Record 20(2): 151-157, April 1970.

(*213*) LAWTON, M.P. Group methods in smoking withdrawal. Archives of Environmental Health 14(2): 258-265, February 1967.

(*214*) LE MEITOUR-KAPLAN, A. Situational analysis: Profile of women's smoking habits in continental Western Europe. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department, of Health, Education and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 309-327.

(*215*) LEVENBERG, S.B., WAGNER, M.K. Smoking cessation: Long-term irrelevance of mode of treatment. Journal of Behavior Therapy and Experimental Psychiatry 7(1): 93-95, March 1976.

(*216*) LEVENTHAL, H. Changing attitudes and habits to reduce risk factors in chronic disease. American Journal of Cardiology 31(5): 571-580, May 1973.

(*217*) LEVENTHAL, H. Effect of fear communications in the acceptance of preventive health practices. In: Zagona, S.V. (Editor). Studies and Issues in Smoking Behavior. Tucson, University of Arizona Press, 1967, pp. 17-27.

(*218*) LEVENTHAL, H. Experimental studies of anti-smoking communications. In: Borgatta, E.F., Evans, R.R. (Editors). Smoking, Health, and Behavior. Chicago, Aldine Publishing Company, 1968, pp. 95-121.

(*219*) LEVENTHAL, H. Fear appeals and persuasion: The differentiation of a motivational construct. American Journal of Public Health 61(6): 1208-1224, June 1971.

(*220*) LEVINE, B.A. Effectiveness of contingent and non-contingent electric shock in reducing cigarette smoking. Psychological Reports 34: 223-226, February 1974.

(*221*) LEVINSON, B.L., SHAPIRO, D., SCHWARTZ, G.E., TURSKY, B. Smoking elimination by gradual reduction. Behavior Therapy 2(4): 477-487, October 1971.

(*222*) LEWITTES, D.J., ISRAEL, A.C. Responsibility contracting for the maintenance of reduced smoking: A technique innovation. Behavior Therapy 6 (5): 696-698, 1975.

(*223*) LICHTENSTEIN, E. Lichtenstein replies. Journal of Consulting and Clinical Psychology 42(4): 625-626, August 1974.

(*224*) LICHTENSTEIN, E. Modification of smoking behavior: good designs—ineffective treatments. Journal of Consulting and Clinical Psychology 36(2): 163-166, April 1971.

(*225*) LICHTENSTEIN, E. Social learning. In: Jarvik, M.E., Cullen, J.W., Gritz, E.R., Vogt, T.M., West, L.J. Research on Smoking Behavior. NIDA Research Monograph 17. U.S. Department of Health, Education and Welfare, Public Health Service, Alcohol, Drug Abuse and Mental Health Administration, National Institute on Drug Abuse, DHEW Publication No. (ADM) 78-581, December 1977, pp. 348-354.

(*226*) LICHTENSTEIN, E., DANAHER, B.G. Modification of smoking behavior: A critical analysis of theory, research, and practice. In: Hersen, M., Eisler, R.M., Miller, P.M. (Editors). Progress in Behavior Modification, Volume 3. New York, Academic Press, Inc., 1976, pp. 79-132.

(227) LICHTENSTEIN, E., DANAHER, B.G. What can the physician do to assist the patient to stop smoking? In: Brashear, R.E., Rhodes, M.L. (Editors). Chronic Obstructive Lung Disease: Clinical Treatment and Management. St. Louis, Mosby, 1978, pp. 227-241.

(228) LICHTENSTEIN, E., GLASGOW, R.E. Rapid smoking: Side effects and safeguards. Journal of Consulting and Clinical Psychology 45(5): 815-821, October 1977.

(229) LICHTENSTEIN, E., HARRIS, D.E., BIRCHLER, G.R., WAHL, J.M., SCHMAHL, D.P. Comparison of rapid smoking, warm, smoky air, and attention placebo in the modification of smoking behavior. Journal of Consulting and Clinical Psychology 40(1): 92-98, February 1973.

(230) LICHTENSTEIN, E., KEUTZER, C.S. Modification of smoking behavior: A later look. In: Rubin, R.D., Fensterheim, H., Lazarus, A.A., Franks, C.M. (Editors). Advances in Behavior Therapy. Proceedings of the Third Conference of the Association for Advancement of Behavior Therapy. New York, Academic Press, 1971, pp. 61-75.

(231) LICHTENSTEIN, E., KEUTZER, C.S., HIMES, K.H. "Emotional" role-playing and changes in smoking attitudes and behavior. Psychological Reports 25(2): 379-387, October 1969.

(232) LICHTENSTEIN, E., RODRIGUES, M.-R.P. Long-term effects of rapid smoking treatment for dependent cigarette smokers. Addictive Behaviors 2(2): 109-112, 1977.

(233) LINDENTHAL, J.J., MYERS, J.K., PEPPER, M.P. Smoking, psychological status and stress. Social Science and Medicine 6(5): 583-591, October 1972.

(234) MACCOBY, N., FARQUHAR, J.W. Communication for health: Unselling heart disease. Journal of Communication 25(3): 114-126, Summer 1975.

(235) MACCOBY, N., FARQUHAR, J.W., WOOD, P.D., ALEXANDER, J. Reducing the risk of cardiovascular disease: Effects of a community-based campaign on knowledge and behavior. Journal of Community Health 3(2): 100-114, Winter 1977.

(236) MADOF, F. The Effect of Certain Learning Variables, Applied in Imagination, on the Modification of Smoking Behavior. Doctoral dissertation, Temple University, 1976, 208 pp. Dissertation Abstracts International 36(12 part 1): 6360-B, June 1976. (University Microfilms No. 76-12,015).

(237) MAIR, J.M.M. Psychological problems and cigarette smoking. Journal of Psychosomatic Research 14(3): 277-283, September 1970.

(238) MALISZEWSKI, T.F., BASS, D.E. "True" and "apparent" thiocyanate in body fluids of smokers and nonsmokers. Journal of Applied Physiology 8(3): 289-291, November 1955.

(239) MANN, L., JANIS, I.L. A follow-up study on the long-term effects of emotional role playing. Journal of Personality and Social Psychology 8(4): 339-342, 1968.

(240) MARRONE, R.L., MERKSAMER, M.A., SALZBERG, P.M. A short duration group treatment of smoking behavior by stimulus saturation. Behavior Research and Therapy 8(4): 347-352, November 1970.

(241) MARSTON, A.R., FELDMAN, S.E. Toward the use of self-control in behavior modification. Journal of Consulting and Clinical Psychology 39(3): 429-433, December 1972.

(242) MARSTON, A.R., MCFALL, R.M. Comparison of behavior modification approaches to smoking reduction. Journal of Consulting and Clinical Psychology 36(2): 153-162, April 1971.

(243) MAUSNER, B. Some comments on the failure of behavior therapy as a technique for modifying cigarette smoking. Journal of Consulting and Clinical Psychology 36(2): 167-170, April 1971.

(244) MAUSNER, B., MAUSNER, J.S., RIAL, W.Y. The influence of a physician on the smoking behavior of his patients. In: Zagona, S.V. Studies and Issues in Smoking Behavior. Tucson, University of Arizona Press, 1967, pp. 103-106.

(245) MCALISTER, A. Helping people quit smoking: Current progress. In: Enelow, A.J., Henderson, J.B. (Editors). Applying Behavioral Science to Cardiovascular Risk. Proceedings of a Conference, Seattle, Washington, June 17-19, 1974. American Heart Association, Inc., 1975, pp. 147-165.

(246) MCALISTER, A.L. Toward the Mass Communication of Behavioral Counseling: A Preliminary Experimental Study of a Televised Program to Assist in Smoking Cessation. Doctoral dissertation, Stanford University, June 1976, 134 pp. University Microfilms, Inc., Ann Arbor, Michigan, 1975. (University Microfilms No. 77-7128).

(247) MCALISTER, A.L., FARQUHAR, J.W., THORESEN, C.E., MACCOBY, N. Behavioral science applied to cardiovascular health: Progress and research needs in the modification of risk-taking habits in adult populations. Health Education Monographs 4(1): 45-74, 1976.

(248) MCALISTER, A., MEYER, A.J., MACCOBY, N. Long-term results of education to reduce smoking: Stanford three community study. Circulation (Abstracts) 53, 54 (Supplement II)II-226, October 1976.

(249) MCCALLUM, R.N. The Modification of Cigarette Smoking Behavior: A Comparison of Treatment Techniques. Doctoral dissertation, University of Missouri, Columbia, 1970, 211 pp. Dissertation Abstracts International 31(10): 6264-B, April 1971. (University Microfilms No. 71-8360).

(250) MCFALL, R.M. Effects of self-monitoring on normal smoking behavior. Journal of Consulting and Clinical Psychology 35(2): 135-142, October 1970.

(251) MCFALL, R.M., HAMMEN, C.L. Motivation, structure, and self-monitoring: Role of nonspecific factors in smoking reduction. Journal of Consulting and Clinical Psychology 37(1): 80-86, 1971.

(252) MCFARLAND, J.W. Physical measures used in breaking the smoking habit. Archives of Physical Medicine and Rehabilitation 46(4): 323-327, April 1965.

(253) MCFARLAND, J.W. The role of church groups in smoking and health. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 949-952.

(254) MCFARLAND, J.W., GIMBEL, H.W., DONALD, W.A.J., FOLKENBERG, E.J. The five-day program to help individuals stop smoking. A preliminary report. Connecticut Medicine 28(12): 885-890, December 1964.

(255) MCGRATH, M.J., HALL, S.M. Self-management treatment of smoking behavior. Addictive Behaviors 1(4): 287-292, 1976.

(256) MCKENNELL, A.C. Smoking motivation factors. British Journal of Social and Clinical Psychology 9(1): 8-22, February 1970.

(257) MEADE, T.W., WALD, N.J. Cigarette smoking patterns during the working day. British Journal of Preventive and Social Medicine 31(1): 25-29, March 1977.

(258) MEYER, A.J., HENDERSON, J.B. Multiple risk factor reduction in the prevention of cardiovascular disease. Preventive Medicine 3(2): 225-236, June 1974.

(259) MEYER, A.J., MCALISTER, A., NASH, J., MACCOBY, N., FARQUHAR, J.W. Maintenance of cardiovascular risk reduction: Results in high risk subjects. Circulation (Abstracts) 53, 54 (Supplement II): II-226, October 1976.

(260) MILLER, A., GIMPL, M. Operant conditioning and self-control of smoking and studying. Journal of Genetic Psychology 119(2): 181-186, December 1971.

(261) MILLER, L.C., SCHILLING, A.F., LOGAN, D.L., JOHNSON, R.L. Potential hazards of rapid smoking as a technic for the modification of smoking behavior. New England Journal of Medicine 297(11): 590-592, September 15, 1977.

(262) MITTELMARK, M.B. Information on Imminent Versus Long-Term Health Consequences: Impact on Children's Smoking Behavior, Intentions, and Knowledge. Doctoral dissertation, University of Houston, May 1978, 166 pp.

(263) MORGANSTERN, K.P., RATLIFF, R.G. Systematic desensitization as a technique for treating smoking behavior: a preliminary report. Behavior Research and Therapy 7: 397-398, 1969.

(264) MOZER, M.H. The Intensive Application of Self Control Procedures in the Reduction of Smoking. Doctoral dissertation, University of Montana, 1972, 171 pp. Dissertation Abstracts International 33(7): 3318-B, January 1973. (University Microfilms No. 72-33,062).

(265) MULTIPLE RISK FACTOR INTERVENTION TRIAL (MRFIT). A national study of primary prevention of coronary heart disease. Journal of the American Medical Association 235(8): 825-827, February 23, 1976.

(265a) MULTIPLE RISK FACTOR INTERVENTION TRIAL (MRFIT). Multiple Risk Factor Intervention Trial (MRFIT):Smoking cessation procedures and cessation and recidivism patterns for a large cohort of MRFIT participants. In: Schwartz, J.L. Progress in Smoking Cessation: Proceedings of the International Conference on Smoking Cessation, June 21-23, 1978. New York, American Cancer Society, 1979, 15 pp.

(266) MULTIPLE RISK FACTOR INTERVENTION TRIAL GROUP. Statistical design considerations in the NHLI Multiple Risk Factor Intervention Trial (MRFIT). Journal of Chronic Diseases 30(5): 261-275, May 1977.

(267) MURDOCK, R., EVA, J. Smoking clinics—whither? Community Health 6(3): 155-159, December 1974.

(268) MURPHY, W.D. The Contribution of Relaxation and Relief to Covert Sensitization in the Treatment of Smoking. Doctoral dissertation, Ohio University, 1976, 107 pp. Dissertation Abstracts International 37(8): 4157-B, February 1977. (University Microfilms No. 77-3487).

(269) NATIONAL CANCER INSTITUTE. AMERICAN CANCER SOCIETY. Cigarette Smoking Among Teen-Agers and Young Women. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1208, 1977, 31 pp.

(270) NATIONAL CANCER INSTITUTE. The Smoking Digest. Progress Report on a Nation Kicking the Habit. U.S. Department of Health, Education and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, October 1977, 127 pp.

(271) NATIONAL CLEARINGHOUSE FOR SMOKING AND HEALTH. Adult Use of Tobacco, 1975. U.S. Department of Health, Education and Welfare, Public Health Service, June 1976, 133 pp.

(272) NATIONAL INTERAGENCY COUNCIL ON SMOKING AND HEALTH. Guidelines for Research on the Effectiveness of Smoking Cessation Programs. A Committee Report. New York, National Interagency Council on Smoking and Health, October 1974, 46 pp.

(273) NELSON, S.K. Behavioral control of smoking with combined procedures. Psychological Reports 40(1): 191-196, February 1977.

(274) NEMZER, D.E. Results of Four Cigarette Cessation Clinics in Nassau and Suffolk Counties, New York. Riverhead, New York, American Lung Association of Nassau-Suffolk, 1973. 24 pp.

(*275*) NEWMAN, A. The effect of reinforcement of intention statements and/or execution of self-control in smokers and ex-smokers. Addictive Behaviors 2(1): 15-20, 1977.

(*276*) NORTON, G.R., BARSKE, B. The role of aversion in the rapid-smoking treatment procedure. Addictive Behavior 2(1): 21-25, 1977.

(*277*) NOVAR, L.G. Self-Control of Smoking Behavior—A Comparative Study of Constructional and Eliminative Approaches. Doctoral dissertation, University of Chicago, 1976. Dissertation Abstracts International 38(2): 709-A, August 1977.

(*278*) NULAND, W., FIELD, P.B. Smoking and hypnosis: A systematic clinical approach. International Journal of Clinical and Experimental Hypnosis 18(4): 290-305, October 1970.

(*279*) OBER, D.C. Modification of smoking behavior. Journal of Consulting and Clinical Psychology 32(521): 543-549, October 1968.

(*280*) O'BRIEN, R.M., DICKINSON, A.M. Contingency factors in negative practice of smoking. Psychological Reports 40(2): 495-505, April 1977.

(*281*) OCHSNER, A., DAMRAU, F. Control of cigarette habit by psychological aversive conditioning: Clinical evaluation in 53 smokers. Journal of the American Geriatrics Society 18(5): 365-369, May 1970.

(*283*) OHLIN, P., LUNDH, B., WESTLING, H. Carbon monoxide blood levels and reported cessation of smoking. Psychopharmacology 49(3): 263-265, 1976.

(*284*) O'KEEFE, M.T. The anti-smoking commercials: A study of television's impact on behavior. Public Opinion Quarterly 35(2): 242-248, 1971.

(*285*) ORNE, M.T. Hypnosis in the treatment of smoking. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 489-507.

(*286*) ORR, R.G. Smoking-withdrawal clinics. New England Journal of Medicine 285(3): 1384, December 9, 1971.

(*287*) OTTENS, A.J. The effect of transcendental meditation upon modifying the cigarette smoking habit. Journal of School Health 45(10): 577-583, December 1975.

(*288*) OWEN, T.B. Tar and nicotine from U.S. cigarettes: Trends over the past twenty years. In: Wynder, E.L., Hoffmann, D., Gori, G.B. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume I. Modifying the Risk for the Smoker. U.S. Department of Health, Education and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 76-1221, 1976, pp. 73-80.

(*289*) PAINTER, J.H. The Modification of Smoking Behavior in a Controlled Public Clinic. Doctoral dissertation, Arizona State University, 1972, 145 pp. Dissertation Abstracts International 32(8): 4867-B, February 1972. (University Microfilms No. 72-6256).

(*290*) PAUN, D. Zehn Jahre Gruppentherapie in der Raucherberatungs-stelle Berlin-Friedrichshain (Ten years of group therapy at the counseling service in Berlin-Friedrichshain). In: Gibel, W. Gesundheitsschaden durch Rauchen—Moeglichkeiten einer Prophylaxe. Berlin, Akademie-Verlag, 1976, pp. 162-172.

(*291*) PEABODY, H.D., JR. A practical approach to the office management of cessation of cigarette smoking. In: Richardson, R.G. (Editor). The Second World Conference on Smoking and Health. The proceedings of a conference organized by the Health Education Council, Imperial College, London, September 20-24, 1971. London, Pitman Medical, 1972, pp. 185-189.

(292) PECHACEK, T.F. An Evaluation of Cessation and Maintenance Strategies in the Modification of Smoking Behavior. Doctoral dissertation, University of Texas at Austin, 1977, 75 pp. University Microfilms, Inc., Ann Arbor, Michigan, November 1977. (University Microfilms No. 77-23,013).

(293) PECHACEK, T.F. A probabilistic model of intensive designs. Journal of Applied Behavior Analysis 11(3): 357-362, Fall 1978.

(294) PEDERSON, L.L., LEFCOE, N.M. A psychological and behavioural comparison of ex-smokers and smokers. Journal of Chronic Diseases 29(7): 431-434, 1976.

(295) PEDERSON, L.L., SCRIMGEOUR, W.G., LEFCOE, N.M. Comparison of hypnosis plus counseling, counseling alone, and hypnosis alone in a community service smoking withdrawal program. Journal of Consulting and Clinical Psychology 43(6): 920, December 1975.

(296) PERRI, M.G., RICHARDS, C.S., SCHULTHEIS, K.R. Behavioral self-control and smoking reduction: A study of self-initiated attempts to reduce smoking. Behavior Therapy 8(3): 360-365, June 1977.

(297) PERRY, C., MULLEN, G. The effects of hypnotic susceptibility on reducing smoking behavior treated by an hypnotic technique. Journal of Clinical Psychology 31(3): 498-505, July 1975.

(298) PETERSON, D.I., LONERGAN, L.H., HARDINGE, M.G., TEEL, C.W. Results of a stop-smoking program. Archives of Environmental Health 16(2): 211-214, February 1968.

(299) PETTIGREW, A.R., FELL, G.S. Microdiffusion method for estimation of cyanide in whole blood and its application to the study of conversion of cyanide to thiocyanate. Clinical Chemistry 19(5): 466-471, 1973.

(300) PETTIGREW, A.R., FELL, G.S. Simplified colorimetric determination of thiocyanate in biological fluids, and its application to investigation of the toxic amblyopias. Clinical Chemistry 18(9): 996-1000, 1972.

(301) PHILLIPS, A.J. Smoking control programs for Canadian adults. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 269-273.

(302) PINCHERLE, G., WRIGHT H.B. Smoking habits of business executives. Doctor variation in reducing cigarette consumption. Practitioner 205(1226): 209-212, August 1970.

(303) PLATT, E.S., KRASSEN, E., MAUSNER, B. Individual variation in behavioral change following role playing. Psychological Reports 24: 155-170, February 1969.

(304) POMERLEAU, O.F. Some suggestions for research in the smoking-cessation clinic. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 643-648.

(305) POMERLEAU, O.F. Strategies for maintenance: The problem of sustaining abstinence from cigarettes. Paper presented at the International Conference on Smoking-Cessation, New York, June 1978, 16 pp.

(306) POMERLEAU, O.F. Why people smoke: Current psychobiological models. In: Davidson, O. (Editors). Behavioral Medicine: Changing Health Lifestyles. New York, Bruner/Mazel, 1979, 38 pp. (to be published)

(307) POMERLEAU, O.F. You can get patients to change their habits. Medical Times 104(10): 149-158, October 1976.

(*308*) POMERLEAU, O.F., ADKINS, D.M., PERTSCHUK, M. Predictors of outcome and recidivism in smoking-cessation treatment. Addictive Behaviors 3:65-70, 1978 Meeting for the Association for The Advancement of Behavior Therapy, New York, December 1976, 7 pp.

(*309*) POMERLEAU, O., BASS, F., CROWN, V. Role of behavior modification in preventive medicine. New England Journal of Medicine 292(24): 1277-1282, June 1975.

(*310*) POMERLEAU, O.F., POMERLEAU, C.S. Break the Smoking Habit. A Behavioral Program for Giving Up Cigarettes. Champaign, Illinois, Research Press Company, 1977, 108 pp.

(*311*) POPE, J.W., MOUNT, G.R. The control of cigarette smoking through the application of a portable electronic device designed to dispense an aversive stimulus in relation to subject's smoking frequency. Behavioral Engineering 2(2): 52-56, Winter 1975.

(*312*) PORTER, A.M.W., MCCULLOUGH, D.M. Counselling against cigarette smoking. A controlled study from a general practice. Practitioner 209(1253): 686-689, November 1972.

(*313*) POWELL, J., AZRIN, N. The effects of shock as a punisher for cigarette smoking. Journal of Applied Behavior Analysis 1(1): 63-71, Spring 1968.

(*314*) PREMACK, D. Mechanisms of self-control. In: Hunt, W.A. Learning Mechanisms in Smoking. Chicago, Aldine Publishing Company, 1970, pp. 107-130.

(*315*) PRIMO, R.V. Covert Avoidance Learning: A Refined Covert Sensitization Method for the Modification of Smoking Behavior. Doctoral dissertation, University of Pittsburgh, 1972, 134 pp. Dissertation Abstracts International 33(8): 3958-B-3959-B, February 1973. (University Microfilms No. 73-4992).

(*316*) PUSKA, P., KOSKELA, K., PAKARINEN, H., PUUMALAINEN, P., SOININEN, V., TUOMILEHTO, J. The North Karelia project: A programme for community control of cardiovascular diseases. Scandinavian Journal of Social Medicine 4(2): 57-60, 1976.

(*317*) PYKE, S., AGNEW, N.M., KOPPERUD, J. Modification of an overlearned maladaptive response through a relearning program: A pilot study on smoking. Behaviour Research and Therapy 4(3): 197-203, August 1966.

(*318*) PYSZKA, R.H., RUGGELS, W.L., JANOWICZ, L.M. IR and D Report. Health Behavior Change: Smoking Cessation. Menlo Park, Stanford Research Institute, December 1973, 31 pp.

(*319*) RAW, M. Persuading people to stop smoking. Behaviour Research and Therapy 14(2): 97-101, 1976.

(*320*) REA, J.N., TYRER, P.J., KASAP, H.S., BERESFORD, S.A.A. Expired air carbon monoxide, smoking, and other variables. A community study. British Journal of Preventive and Social Medicine 27(2): 114-120, May 1973.

(*321*) REED, H.D., JR., JANIS, I.L. Effects of a new type of psychological treatment on smokers' resistance to warnings about health hazards. Journal of Consulting and Clinical Psychology 42(5): 748, October 1974.

(*322*) REED, K. Smoking control with an in-patient general hospital population. In: Zagona, S.V. (Editor). Studies and Issues in Smoking Behavior. Tucson, University of Arizona Press, 1967, pp. 107-109.

(*323*) REEDER, L.G. Sociocultural factors in the etiology of smoking behavior: An assessment. In: Jarvik, M.E., Cullen, J.W., Gritz, E.R., Vogt, T.M., West, L.J. Research on Smoking Behavior. (NIDA Research Monograph 17). U.S. Department of Health, Education, and Welfare, Public Health Service, Alcohol, Drug Abuse, and Mental Health, National Institute on Drug Abuse, DHEW Publication No. (ADM) 78-201.581, December 1977, pp. 186-201.

(324) REID, D.D., BRETT, G.Z., HAMILTON, P.J.S., JARRETT, R.J., KEEN, H., ROSE, G. Cardiorespiratory disease and diabetes among middle-aged male civil servants. A study of screening and intervention. Lancet 1(7856): 469-473, March 23, 1974.

(325) RELINGER, H., BORNSTEIN, P.H., BUGGE, I.D., CARMODY, T.P., ZOHN, C.J. Utilization of adverse rapid smoking in groups: Efficacy of treatment and maintenance procedures. Journal of Consulting and Clinical Psychology 45(2): 245-249, April 1977.

(326) RESNICK, J.H. The control of smoking behavior by stimulus satiation. Behaviour Research and Therapy 6(1): 113-114, February 1968.

(327) RESNICK, J.H. Effects of stimulus satiation on the overlearned maladaptive response of cigarette smoking. Journal of Consulting and Clinical Psychology 32(5-Part 1): 501-505, October 1968.

(328) RICHARDSON, F.L. The Effect of Nonspecific Factors on the Modification of Smoking Behavior in Treatment Follow-up. Doctoral dissertation, University of Southern California, 1972, 140 pp. Dissertation Abstracts International 33(4): 1804-B-1805-B, October 1972. (University Microfilms No. 72-26,050).

(329) RICHMOND, H.W. A fifteen-year prospective study of the incidence of coronary heart disease related to cigarette smoking habits in Cummins Engine Company management personnel with results of a vigorous anti-smoking education campaign. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 275-281.

(330) RINGOLD, A., GOLDSMITH, J.R., HELWIG, H.L., FINN, R., SCHUETTE, F. Estimating recent carbon monoxide exposures. A rapid method. Archives of Environmental Health 5: 308-318, October 1962.

(331) RODGERS, M.P. The Effect of Social Support on the Modification of Smoking Behavior. Doctoral dissertation, University of Michigan, 1977, 289 pp. Dissertation Abstracts International 38(3): 1448-B, September 1977. (University Microfilms No. 77-18,105).

(332) ROGERS, R.W. A protection motivation theory of fear appeals and attitude change. Journal of Psychology 91: 93-114, September 1975.

(333) ROGERS, R.W., DECKNER, C.W. Effects of fear appeals and physiological arousal upon emotion, attitudes, and cigarette smoking. Journal of Personality and Social Psychology 32(2): 222-230, 1975.

(334) ROGERS, R.W., DECKNER, C.W., MEWBORN, C.R. An expectancy-value theory approach to the long-term modification of smoking behavior. Journal of Clinical Psychology 34(2): 562-566, April 1978.

(335) RORKE, G.W. Situational analysis: Profile of women's smoking habits in Canada and the United Kingdom. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 299-307.

(336) ROSE, G. Anti-smoking programmes. In: Tibblin, G., Keys, A., Werkoe, L. (Editors). Preventive Cardiology. Proceedings of an International Symposium, Skovde, Sweden, August 21, 1971. New York, John Wiley and Sons, 1972, pp. 92-96.

(337) ROSE, G. Smoking cessation in high-risk subjects. Health Magazine 12(4): 19-22, Winter 1975/76.

(*338*) ROSE, G. Physician counseling and personal intervention. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 515-523.

(*339*) ROSEN, G.M., LICHTENSTEIN, E. An employee incentive program to reduce cigarette smoking. Journal of Consulting and Clinical Psychology 45(5): 957, October 1977.

(*340*) ROSENBERG, A. An investigation into the effect on cigarette smoking of a new anti-smoking chewing gum. Journal of International Medical Research 5(1): 68-70, 1977.

(*341*) ROSS, C.A. Smoking withdrawal research clinics. In: Zagona, S.V. (Editor). Studies and Issues in Smoking Behavior. Tucson, University of Arizona Press, 1967, pp. 111-113.

(*342*) ROVNER, R.A. Effects of Contingency Contracting on Cigarette Smoking. Doctoral dissertation, University of Maryland, 1975, 80 pp. Dissertation Abstracts International 37(2): 986-B, August 1976. (University Microfilms No. 76-18,711).

(*343*) ROYAL COLLEGE OF PHYSICIANS. Smoking or Health: The Third Report from the Royal College of Physicians of London. London, Pitman Medical Publishing Co. Ltd., 1977, 128 pp.

(*344*) ROZENSKY, R.H. The effect of timing of self-monitoring behavior on reducing cigarette consumption. Journal of Behavior Therapy and Experimental Psychiatry 5(4): 301-303, December 1974.

(*345*) ROZENSKY, R., BELLACK, A. Behavior change and individual differences in self-control. Behaviour Research and Therapy 12(3): 267-268, September 1974.

(*346*) RUSSELL, M.A.H. Effect of electric aversion on cigarette smoking. British Medical Journal 1(5688): 82-86, January 10, 1970.

(*347*) RUSSELL, M.A.H. Realistic goals for smoking and health. A case for safer smoking. Lancet 1(7851): 254-258, February 16, 1974.

(*348*) RUSSELL, M.A.H. Tar, nicotine and CO yields in cigarettes. British Medical Journal 3(5982): 540, August 30, 1975.

(*349*) RUSSELL, M.A.H. Tobacco smoking and nicotine dependence. In: Gibbins, R.J., Israel, Y., Kalant, H., Popham, R.E., Schmidt, W., Smart, R.G. (Editors). Research Advances in Alcohol and Drug Problems, Volume 3. New York, John Wiley and Sons, 1976, pp. 1-47.

(*350*) RUSSELL, M.A.H., ARMSTRONG, E., PATEL, U.A. Temporal contiguity in electric aversion therapy for cigarette smoking. Behaviour Research and Therapy 14(2): 103-123, 1976.

(*351*) RUSSELL, M.A.H., COLE, P.V. Confirmation of abstinence from smoking. British Medical Journal 2(6038): 755-756, September 25, 1976. (letter)

(*352*) RUSSELL, M.A.H., WILSON, C., FEYERABEND, C., COLE, P.V. Effect of nicotine chewing gum on smoking behaviour and as an aid to cigarette withdrawal. British Medical Journal 2(6032): 391-393, August 14, 1976.

(*353*) RYAN, F.J. Cold turkey in Greenfield, Iowa: A follow-up study. In: Dunn, W.L., Jr. (Editor). Smoking Behavior: Motives and Incentives. New York, John Wiley and Sons, 1973, pp. 231-241.

(*354*) SACHS, D.P.L., HALL, R.G., HALL, S.M. Effects of rapid smoking. Physiologic evaluation of a smoking-cessation therapy. Annals of Internal Medicine 88(5): 639-641, May 1978.

(*355*) SACHS, L.B., BEAN, H., MORROW, J.E. Comparison of smoking treatments. Behavior Therapy 1(4): 465-472, November 1970.

(*356*) ST. PIERRE, R., LAWRENCE, P.S. Reducing smoking using positive self-management. Journal of School Health 45(1): 7-9, January 1975.

(*357*) SALK, G.C. A Comparison of Two Smoking Reduction Treatments Under Conditions Designed to be Interfering or Not Interfering with the Smoking Habit. Doctoral dissertation, University of Louisville, 1975, 127 pp. Dissertation Abstracts International 36(8): 4178-B, February 1976. (University Microfilms No. 75-25,474).

(*358*) SANDERS, S. Mutual group hypnosis and smoking. American Journal of Clinical Hypnosis 20(2): 131-135, October 1977.

(*359*) SCHACHTER, S. Pharmacological and psychological determinants of smoking. Annals of Internal Medicine 88(1): 104-114, January 1978.

(*360*) SCHACHTER, S., SILVERSTEIN, B., KOZLOWSKI, L.T., PERLICK, D., HERMAN, C.P., LIEBLING, B. Studies of the interaction of psychological and pharmacological determinants of smoking. Journal of Experimental Psychology: General 106(1): 3-40, March 1977.

(*361*) SCHLEGEL, R.P., KUNETSKY, M. Immediate and delayed effects of the "five-day plan to stop smoking" including factors affecting recidivism. Preventive Medicine 6(3): 454-461, September 1977.

(*362*) SCHMAHL, D.P., LICHTENSTEIN, E., HARRIS, D.E. Successful treatment of habitual smokers with warm, smoky air and rapid smoking. Journal of Consulting and Clinical Psychology 38(1): 105-111, February 1972.

(*363*) SCHMIDT, F. Medikamentose unterstuetzung der raucherentwohnung. Bericht ueber versuche an ueber 5000 rauchern im doppelblindversuch. (Medical support of nicotine withdrawal. Report on a double blind study in over 5000 smokers.) Muenchener Medizinische Wochenschrift 166(11): 557-564, March 15, 1974.

(*364*) SCHNEIDER, N.G., POPEK, P., JARVIK, M.E., GRITZ, E.R. The use of nicotine gum during cessation of smoking. American Journal of Psychiatry 134(4): 439-440, April 1977.

(*365*) SCHOPP, R.F. The Effects of Experimenter Knowledge on Self-Monitoring and Self-Reinforcement Approaches to Control of Smoking. Doctoral dissertation, North Carolina State University at Raleigh, 1977, 91 pp. Dissertation Abstracts International 38(7): 3414-B, January 1978. (University Microfilms No. 77-29,674).

(*366*) SCHWARTZ, J.L. A critical review and evaluation of smoking control methods. Public Health Reports 84(6): 483-506, June 1969.

(*367*) SCHWARTZ, J.L. Research methodology in smoking cessation: A critique. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 649-653.

(*368*) SCHWARTZ, J.L. Smoking cures: Ways to kick an unhealthy habit. In: Jarvik, M.E., Cullen, J.W., Gritz, E.R., Vogt, T.M., West, L.J. (Editors). Research on Smoking Behavior. NIDA Research Monograph 17, December 1977. DHEW Publication No. (ADM) 78-581, pp. 308-337.

(*369*) SCHWARTZ, J.L. Status of cessation control programs in Europe and North America. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 869-882.

(*370*) SCHWARTZ, J.L., DUBITZKY, M. Changes in anxiety, mood, and self-esteem resulting from an attempt to stop smoking. American Journal of Psychiatry 124(11): 138-142, May 1968.

(*371*) SCHWARTZ, J.L., DUBITZKY, M. Expressed willingness of smokers to try 10 smoking withdrawal methods. Public Health Reports 82(10): 855-861, October 1967.

(*372*) SCHWARTZ, J.L., DUBITZKY, M. Maximizing success in smoking cessation methods. American Journal of Public Health 59(8): 1392-1399, August 1969.

(*373*) SCHWARTZ, J.L., DUBITZKY, M. One-year follow-up results of a smoking cessation program. Canadian Journal of Public Health 59: 161-165, April 1968.

(*374*) SCHWARTZ, J.L., DUBITZKY, M. Psycho-Social Factors Involved in Cigarette Smoking and Cessation. Final Report of the Smoking Control Research Project, Berkeley, September 1968, 680 pp.

(*375*) SCHWARTZ, J.L., DUBITZKY, M. Requisites for success in smoking withdrawal. In: Borgatta, E.F., Evans, R.R. (Editors). Smoking, Health, and Behavior. Chicago, Aldine Publishing Company, 1968, pp. 231-247.

(*376*) SCHWARTZ, J.L., RIDER, G. Smoking cessation methods in the United States and Canada: 1969-1974. In: Steinfeld, J. Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 695-732.

(*377*) SHAPIRO, D., TURSKY, B., SCHWARTZ, G.E., SHNIDMAN, S.R. Smoking on cue: A behavioral approach to smoking reduction. Journal of Health and Social Behavior 12(2): 108-113, June 1971.

(*378*) SHEPHARD, R.J., RODE, A., ROSS, R. Reinforcement of a smoking withdrawal program: The role of the physiologist and the psychologist. Canadian Journal of Public Health 64(2, Supplement): S42-S51, March/April 1973.

(*379*) SHEWCHUK, L.A. Guidelines for organizing smoking withdrawal clinics. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. DHEW Publication No. (NIH) 77-1413, 1977, pp. 665-668.

(*380*) SHEWCHUK, L.A. Problems of high-risk populations and high-risk nonresponders: Smoking behavior. In: Cullen, J.W., Fox, B.H. Isom, R.N. (Editors). Cancer: The Behavioral Dimensions. New York, Raven Press, 1976, pp. 93-99.

(*381*) SHEWCHUK, L.A. Special Report. Smoking cessation programs of the American Health Foundation. Preventive Medicine 5(3): 454-474, September 1976.

(*382*) SHEWCHUK, L.A., DUBREN, R., BURTON, D., FORMAN, M., CLARK, R.R., JAFFIN, A.R. Preliminary observations on an intervention program for heavy smokers. International Journal of the Addictions 12(2-3): 323-336, 1977.

(*383*) SHEWCHUK, L.A., WYNDER, E.L. Guidelines on smoking cessation clinics. Preventive Medicine 6(1): 130-133, March 1977.

(*384*) SIPICH, J.F., RUSSELL, R.K., TOBIAS, L.L. A comparison of covert sensitization and "non-specific" treatment in the modification of smoking behavior. Journal of Behavior Therapy and Experimental Psychiatry 5(2): 201-203, September 1974.

(*385*) SLETTEN, P.M. An Experimental Study of the Effects of Training Smokers with Behavior Chains Designed to be Antagonistic to Smoking. Doctoral dissertation, University of South Dakota, 1972, 58 pp. Dissertation Abstracts International 33(6): 2823-B, December 1972. (University Microfilms No. 72-32, 737).

(*386*) SLOAN, M.D. The Effect of Self-Monitoring, Surveillance, and Verbal Contingencies on Smoking Frequency. Doctoral dissertation, University of South Carolina, 1976, 77 pp. Dissertation Abstracts International 37(10): 5378-B, April 1977. (University Microfilms No. 77-6783).

(*387*) SPIEGEL, H. A single-treatment method to stop smoking using ancillary self-hypnosis. International Journal of Clinical and Experimental Hypnosis 18(4): 235-250, October 1970.

(*388*) SPIEGEL, H. Termination of smoking by a single treatment. Archives of Environmental Health 20: 736-742, June 1970.

(*389*) SROLE, L., FISCHER, A.K. Smoking behavior 1953 and 1970: The Midtown Manhattan Study. In: Dunn, W.L. Jr. (Editor). Smoking Behavior: Motives and Incentives. New York, John Wiley and Sons, 1973, pp. 255-265.

(*390*) SROLE, L., FISCHER, A.K. The social epidemiology of smoking behavior 1953 and 1970: The Midtown Manhattan Study. Social Science and Medicine 7(5): 341-358, May 1973.

(*391*) STAMLER, J. Acute myocardial infarction—progress in primary prevention. British Heart Journal 33(Supplement): 145-164, 1971.

(*392*) STAMLER, J. Coronary risk factors and prevention of atherosclerotic coronary heart disease. Chicago Medicine 73(14): 509-518, July 4, 1970.

(*393*) STANLEY, J.C. Designing psychological experiments. In: Wolman, B.B. (Editor). Handbook of General Psychology. Englewood Cliffs, Prentice-Hall, 1973, pp. 90-106.

(*394*) STEFFY, R.A., MEICHENBAUM, D., BEST, J.A. Aversive and cognitive factors in the modification of smoking behaviour. Behaviour Research and Therapy 8(2): 115-125, May 1970.

(*395*) STERLING, T.D., WEINKAM, J.J. Smoking characteristics by type of employment. Journal of Occupational Medicine 18(11): 743-754, November 1976.

(*396*) STEVENS, S.S. Mathematics, measurement, and psychophysics. In: Stevens, S.S. Handbook of Experimental Psychology. New York, John Wiley and Sons, Inc., 1951, pp. 1-49.

(*397*) STEWART, R.D. The effect of carbon monoxide on humans. Annual Review of Pharmacology 15: 409-423, 1975.

(*398*) STRAITS, B.C. Research design and methodology in laboratory settings. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 635-641.

(*399*) STRAITS, B.C. Resume of the Chicago study of smoking behavior. In: Zagona, S.V. Studies and Issues in Smoking Behavior. Tucson, University of Arizona Press, 1967, pp. 73-78.

(*400*) STRAITS, B.C. Social and psycho-physiological correlates of smoking withdrawal. Social Science Quarterly 51(1): 81-96, June 1970.

(*401*) STRELTZER, N.E., KOCH, G.V. Influence of emotional role-playing on smoking habits and attitudes. Psychological Reports 22(3-1): 817-820, June 1968.

(*402*) STROSS, L. Practical office approaches. Diseases of the Chest 54(3): 192-195, September 1968.

(*403*) STRUBEL, K. Frage: Raucherberatungsstellen (Question: Smokers' counselling centers). Deutsche Gesundheitswesen 29(36): 1720-1721, September 1974.

(404) STURZENBERGER, E. Die hypnotische aversionsbehandlung von rauchern (Hypnotic aversion treatment of smokers). In: Gibel, W. Gesundheitsschaden durch Rauchen—Moeglichkeiten einer Prophylaxe. Berlin, Akademie-Verlag, 1976, pp. 173-181.

(405) SUEDFELD, P., BEST, J.A. Satiation and sensory deprivation combined in smoking therapy: Some case studies and unexpected side-effects. International Journal of the Addictions 12(2-3): 337-359, 1977.

(406) SUEDFELD, P., IKARD, F.F. Attitude manipulation in restricted environments: IV. Psychologically addicted smokers treated in sensory deprivation. British Journal of Addictions 68(2): 170-176, 1973.

(407) SUEDFELD, P., IKARD, F.F. Use of sensory deprivation in facilitating the reduction of cigarette smoking. Journal of Consulting and Clinical Psychology 42(5): 888-895, December 1974.

(408) SUSHINSKY, L.W. Expectation of future treatment, stimulus satiation, and smoking. Journal of Consulting and Clinical Psychology 39(2): 343, October 1972.

(409) SUTHERLAND, A., AMIT, Z., GOLDEN, M., ROSEBERGER, Z. Comparison of three behavioral techniques in the modification of smoking behavior. Journal of Consulting and Clinical Psychology 43(4): 443-447, August 1975.

(410) SYME, S.L., JACOBS, M.J. Smoking cessation activities in the Multiple Risk Factor Intervention Trial: A preliminary report. In: Steinfeld, J., Griffiths, W., Ball, K., Taylor, R.M. (Editors). Proceedings of the Third World Conference on Smoking and Health, New York, June 2-5, 1975. Volume II. Health Consequences, Education, Cessation Activities, and Social Action. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Cancer Institute, DHEW Publication No. (NIH) 77-1413, 1977, pp. 613-615.

(411) TAYLOR, P.W. Cigarette Smoking Behavior: Self-Managed Change. Doctoral dissertation, North Texas State University, 1977, 73 pp. Dissertation Abstracts International 38(3): 1425-B, September 1977. (University Microfilms No. 77-19,688).

(412) THOMPSON, D.S., WILSON, T.R. Discontinuance of cigarette smoking: "Natural" and with "therapy." A ten-week and ten-month follow-up study of 298 adult participants in a five-day plan to stop smoking. Journal of the American Medical Association 196(12): 1048-1052, June 20, 1966.

(413) THOMPSON, E.L. Smoking education programs 1960-1976. American Journal of Public Health 68(3): 250-257, March 1978.

(414) THORESEN, C.E., COATES, T.J. Behavioral self-control: Some clinical concerns. In: Hersen, M., Eisler, R.M., Miller, P.M. (Editors). Advances in Behavior Modification, Volume 3. New York, Academic Press, 1975, pp. 307-352.

(415) THORESEN, C.E., MAHONEY, M.J. Behavioral Self-Control. New York, Holt, Rinehart and Winston, Inc., 1974, 177 pp.

(416) TOOLEY, J.T., PRATT, S. An experimental procedure for the extinction of smoking behavior. Psychological Record 17(2): 209-218, April 1967.

(417) TORI, C.D. A smoking satiation procedure with reduced medical risk. Journal of Clinical Psychology 34(2): 574-577, April 1978.

(418) TRAHAIR, R.C.S. Giving up cigarettes: 222 case studies. Medical Journal of Australia I: 929-932, May 6, 1967.

(419) TRAHAIR, R.C.S. Motivation to give up cigarettes: Problems and solutions. Medical Journal of Australia I: 177-180, January 25, 1969.

(420) U.S. PUBLIC HEALTH SERVICE. The Health Consequences of Smoking. A Reference Edition. U.S. Department of Health, Education and Welfare, Public Health Service, Center for Disease Control, DHEW Publication No. (CDC) 78-8357, 1976, 657 pp.

(421) U.S. PUBLIC HEALTH SERVICE. Survey of Health Professionals: Smoking and Health, 1975. U.S. Department of Health, Education and Welfare, Public Health Service, Center for Disease Control, 1977, 33pp.

(422) U.S.PUBLIC HEALTH SERVICE. Teenage Smoking. National Patterns of Cigarette Smoking Ages 12 through 18, in 1972 and 1974. U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, DHEW Publication No. (NIH) 76-931, 123 pp.

(423) VOGT, T.M. Smoking behavioral factors as predictors of risks. In: Jarvik, M.E., Gullen, J.W., Gritz, E.R., Vogt, T.M., West, L.J. (Editors). Research on Smoking Behavior. NIDA Research Monograph 17. U.S. Department of Health, Education and Welfare, Public Health Service, Alcohol, Drug Abuse and Mental Health Administration, National Institute on Drug Abuse, DHEW Publication No. (ADM) 78-581, December 1977, pp. 98-111.

(424) VOGT, T.M., SELVIN, S., WIDDOWSON, G., HULLEY, S.B. Expired air carbon monoxide and serum thiocyanate as objective measures of cigarette exposure. American Journal of Public Health 67(6): 545-549, June 1977.

(425) VON DEDENROTH, T.E.A. The use of hypnosis in 1000 cases of "tobaccomaniacs." American Journal of Clinical Hypnosis 10(3): 194-197, January 1968.

(426) WAGNER, M.K., BRAGG, R.A. Comparing behavior modification approaches to habit decrement-smoking. Journal of Consulting and Clinical Psychology 34(2): 258-263, April 1970.

(427) WALLACE, N.D., DAVIS, G.L., RUTLEDGE, R.B., KAHN, A. Smoking and carboxyhemoglobin in the St. Louis metropolitan population. Archives of Environmental Health 29: 136-142, September 1974.

(428) WARNER, K.E. The effects of the anti-smoking campaign on cigarette consumption. American Journal of Public Health 67(7): 645-650, July 1977.

(429) WATKINS, H.H. Hypnosis and smoking: A five-session approach. International Journal of Clinical and Experimental Hypnosis 24(4): 381-390, October 1976.

(430) WEINBLATT, E., SHAPIRO, S., FRANK, C.W. Changes in personal characteristics of men, over five years, following first diagnosis of coronary heart disease. American Journal of Public Health 61(4): 831-842, April 1971.

(431) WEIR, J.M., DUBITZKY, M., SCHWARTZ, J.L. Counselor style and group effectiveness in a smoking withdrawal study. American Journal of Psychotherapy 23(1): 106-118, January 1969.

(432) WERKO, L. Can we prevent heart disease? Annals of Internal Medicine 74(2): 278-288, February 1971.

(433) WEST, D.W., GRAHAM, S., SWANSON, M., WILKINSON, G. Five year follow-up of a smoking withdrawal clinic population. American Journal of Public Health 67(6): 536-544, June 1977.

(434) WHITMAN, T.L. Aversive control of smoking behavior in a group context. Behaviour Research and Therapy 10(2): 97-104, 1972.

(435) WHITMAN, T.L. Modification of chronic smoking behavior: A comparison of three approaches. Behaviour Research and Therapy 7(3): 257-263, September 1969.

(436) WILDE, G.J.S. Behaviour therapy for addicted cigarette smokers: A preliminary investigation. Behaviour Research and Therapy 2(2): 107-109, September 1964.

(437) WILDE, G.J.S. Correspondence. Behaviour Research and Therapy 2(5): 313, February 1965.

(438) WILHELMSEN, L. One year's experience in an anti-smoking clinic. Scandinavian Journal of Respiratory Diseases 49(4): 251-259, 1968.

(439) WILHELMSEN, L. A smoking cessation program in a field trial. In: Tibblin, G., Keys, A., Werko, L. Preventive Cardiology. Proceedings of an International Symposium, Skovde, Sweden, August 21, 1971. New York, John Wiley and Sons, 1972, pp. 97-102.

(*440*) WILHELMSEN, L. Synpunkter pa rokavvanjning. Rokavvanjningsverksamhet i Goteborg (Viewpoints on smoking withdrawal. Smoking withdrawal clinic activity in Goteborg). Social Medicinsk Tidskrifts 2(Special No.): 116-119, February 1971.

(*441*) WILHELMSEN, L., TIBBLIN, G., WERKO, L. A primary preventive study in Gothenburg, Sweden. Preventive Medicine 1(1/2): 153-160, March 1972.

(*442*) WILHELMSSON, C., VEDIN, J.A., ELMFELDT, D., TIBBLIN, G., WILHELMSEN, L. Smoking and myocardial infarction. Lancet 1(7904): 415-420, February 22, 1975.

(*443*) WILLIAMS, H.O. Routine advice against smoking. A chest clinic pilot study. Practitioner 202(1211): 672-676, May 1969.

(*444*) WILSON, J., MATTHEWS, D.M. Metabolic inter-relationships between cyanide, thiocyanate and vitamin B_{12} in smokers and non-smokers. Clinical Science 31(1): 1-7, August 1966.

(*445*) WINER, B.J. Statistical Principles in Experimental Design. New York, McGraw-Hill Book Company, 1971, pp. 203-228.

(*446*) WINETT, R.A. Parameters of deposit contracts in the modification of smoking. Psychological Record 23(1): 49-60, Winter 1973.

(*447*) WISOCKI, P.A., ROONEY, E.J. A comparison of thought stopping and covert sensitization techniques in the treatment of smoking: A brief report. Psychological Record 24(2): 191-192, Spring 1974.

(*448*) WOEBER, R., BAUERMANN, E. Raucherentwohnungslehrgang fuer abhangige Raeucher (Courses for habitual smokers to stop smoking). Rehabilitation. Sozialmedizin, Physikalische Medizin, Praeventivmedizin 28(3-4): 33-46, 1975.

(*449*) WORLD HEALTH ORGANIZATION, REGIONAL OFFICE FOR EUROPE. Working group on methodology of multifactor preventive trials in ischaemic heart disease. Community Health 5(2): 101-103, October 1973.

(*450*) WRIGHT, M.E. A single-treatment method to stop smoking using ancillary self-hypnosis: Discussion. International Journal of Clinical and Experimental Hypnosis 18(4): 261-267, October 1970.

(*451*) YATES, A.J. Theory and Practice in Behavior Therapy. New York, John Wiley and Sons, 1975, pp. 114-132.

(*452*) YOUNGGREN, J.N., PARKER, R.A. The smoking control clinic: A behavioral approach to quitting smoking. Professional Psychology 8(1): 81-87, February 1977.

PART III

EDUCATION AND PREVENTION

20. YOUTH EDUCATION.

CONTENTS

LIST OF TABLES

Introduction

In January 1964, the report on smoking and health of the Advisory Committee to the Surgeon General of the Public Health Service was released. It presented to the public incontrovertible evidence that cigarette smoking was associated with disease. Major health professional organizations had already endorsed or committed themselves to educational programs against cigarettes (*18*). Several States had passed anti-cigarette resolutions urging the adoption of public health education in regard to the hazards of smoking; the Canadian Government had already begun to pursue a strong educational program against smoking (*78*). Since then, programs in the schools have proliferated, both in this country and abroad. Many state and local ordinances have required teachers to cover the facts on the negative effects of smoking on the body, but, in the absence of detailed information, we do not know in what ways educators have complied with these regulations. In any case, this chapter does not deal with the role of the educator, which is covered in a separate chapter, but reviews and discusses those antismoking programs directed toward youth that have been reported in the literature.

While many recommendations have been made for school programs and many programs have been described in the professional literature, there must be thousands that have never been reported. It is hoped that a comprehensive review can be made of ongoing programs, with a view toward describing them and selecting for review those that show promise of being effective in changing behavior. These, we hope, can be evaluated, and recommendations made for programmatic directions that appear to be potentially effective. There are many opinions concerning the relative effectiveness of various approaches, but few programs have been evaluated systematically. Thus, many recommendations for programs in schools are based on a general philosophy of education and others are based on studies specifically in the area of youthful smoking.

In the remainder of this section, we review some of the recommendations that have been made. Many are based on the belief that the greatest deterrent to smoking is knowledge of the adverse effects on health, others are based on the belief that attitude change is more important, and still others stress the influence of adult exemplars, peers, or both. Social and psychological components are discussed by some. Some recommend that all these facets be taken into account.

The second section of this chapter, which points to school programs reported in the literature, is divided into two parts. First, past and present school programs are described briefly. Second, three noteworthy programs are singled out for particular attention. In the first part, programs are divided into general programs, those that involve young people talking to other young people, those that involve physicians, and those that have an evaluation component.

In the third section, programs outside the formal education structure are touched upon, including those sponsored by voluntary health agencies and other organizations.

There follows a summary of the state of knowledge regarding smoking programs for young people. While many programs have been reviewed and discussed, it should be remembered that, in the absence of evaluative research, no one knows which programs are most effective, which subject matter material should be covered, or which approaches are most likely to yield desirable results. The chapter ends with general conclusions and recommendations.

Current Smoking Education Approaches

Although recommendations for school smoking programs vary widely, one common goal, expressed either implicitly or explicitly, is maximal prevention of those illnesses related to cigarette smoking. It can be summed up by a statement that Secretary Califano made at the National School Health Conference in May 1977: "Effective health education early in life can help to prevent the major diseases of adulthood" (*21*). It is not surprising, then, that most recommendations emphasize the effects of smoking on health, long-term and immediate (*1, 4, 18, 24, 46, 47, 48, 50, 59, 61, 95*). However, there is increasing concern that facts alone are not sufficient to deter teenagers from becoming smokers. Some take the position that positive, favorable attitudes toward realization of the hazards of smoking are necessary. Where negative attitudes exist, efforts should be made to redirect them into positive ones and to affect behavior as well as attitudes. As Bynner pointed out at the Second World Conference on Smoking and Health, "there is good evidence from research into attitude change to suggest that an attempt to bring about change in a favorable direction on a combination of all these attitudes may be more effective than simply continuing to supply information about health risk alone" (*20*). Briney (*16*) found no significant relationship between knowledge of the effects of cigarette smoking and smoking behavior of high school seniors. Many have pointed out that youth imitates, and that one of the major influences is the example set by parents, teachers, health professionals, and other significant adults with whom the teenager is in contact. Thus, focusing attention on the exemplar is recommended (*4, 48, 57, 62, 96, 101, 104*). Closely related to the example which adults set for teenagers is the total environment, or climate, in which the adolescent finds himself. As Horn stated, "There are serious difficulties in attempting to influence young people by teaching them in the classroom to adopt behavior opposed to practices that are encouraged in the larger environment. Educators have found that smoking education programs in school meet with strong counterforces in television advertising and the smoking patterns of parents, other adults, and people youngsters admire in their own group" (*54*). A

number of people have addressed this problem and made suggestions for counteragents in the schools to cope with it (*4, 20, 57, 96, 101, 104, 109*). Although cigarette advertising no longer appears on television, it continues to be an accepted part of program content. Another area that is touched on by some is that of the social-psychological components of teenage smoking. Approaches here focus on the individual and personal behavior choices, recognizing the needs some believe cigarette smoking fulfills (*4, 12, 24, 28, 29, 48, 50, 75, 101, 105*). Many recommend taking all of these into account, as exemplified by the position statement of the American Association for Health, Physical Education, and Recreation (*4*).

School Programs

School programs have usually followed one or more of the approaches outlined above, taking into account the health threat, the influence of adult exemplars, peer influence, or combinations of these. Many are one-time campaigns, with little or no evaluation. Because of this lack, it is impossible to report on the results or on the effectiveness of these programs. Only a few are carefully planned, long-term programs, with a systematic evaluation plan.

Past and Ongoing Programs

In citing school programs, we have divided them into four categories: general, youth-to-youth, those involving physicians, and programs with strong evaluation components. General programs include both demonstration and long-term programs. Demonstration programs are those that are either one-time antismoking campaigns or innovative classroom procedures, as opposed to established programs that are or have been a part of the school curriculum. Long-term programs are those that extend over several years and include a large number of children. Youth-to-youth, physician, and evaluation component programs may also fit into these definitions, but they are discussed separately.

General Programs

Demonstration Programs

A number of original and imaginative techniques have been reported in the literature, including an experiment demonstrating to fourth-grade students the effect of tar on the lungs (*10*), use of students' questions to assist in the development of a health unit (*17*), a school survey conducted by students (*33*), construction of a model of a smoking man (*67*), construction of a train filled with empty cigarette packs (*51*), and a health fair put on by college students in an East Harlem junior high school (*58*). Other antismoking campaigns em-

ployed combinations of speeches, films, posters, and other exhibits (*35, 56, 72*).

It is difficult to assess the effectiveness of these programs since some reported no evaluation results (*10, 17, 33, 58, 70*) and others were assessed merely on the basis of students' reactions (*51, 56, 67*). Estrin, in 1965, compared responses of ninth- and tenth-grade students to a questionnaire administered before the campaign with responses to a questionnaire administered "several weeks after". There was no difference in the proportion of smokers, nor in the proportion of smokers who said they would be interested in trying to stop smoking, but there was a decrease in the number of cigarettes smoked. However, there was no control group with which to compare the results (*35*).

Long-Term Programs

Several programs that have reached a large number of children but have had no experimental-control evaluation are reported on in this section.

Surveys of smoking habits of students in grades 6 through 12 in Selah, Washington, were done in 1961, 1962, and 1964. Filmstrips were shown, literature was distributed, and an essay contest was held. After the first survey, results were reported to the students, stressing the fact that smoking students tend not to compete successfully athletically or academically, nor do they participate in extracurricular activities. Over the period of the program, the proportion of smokers at the junior high school level increased, but the proportion of smokers at the senior high school level stayed the same. The conclusion of the authors was that "an educational antismoking campaign defeats its purpose and actually increases the numbers who smoke" (*2*).

A program begun in Pennsylvania in 1962 placed emphasis on changing the social status of smoking. Much of the work was done through teachers and youth leaders. By 1967, 8,000 kits containing smoking and health information and resource materials for teachers and students and 10,000 copies of a teacher's resource unit had been distributed. A variety of pamphlets, posters, and audiovisual aids was prepared, regional meetings were held, and other activities such as school assemblies, exhibits, youth forums, and the like were planned. This effort was reported by Bohlayer (*14*).

A program initiated in 1968 in Monticello, New York, and designed to reach pupils in kindergarten through twelfth grade, featured a curriculum based on psychosocial needs of students, with emphasis on concept formation, attitude formation, and habit establishment. The program, funded for 3 years, was reported by Fleckman (*39*).

In Germany, a comprehensive campaign aimed at school children has been going on since the late 1960's. Newspaper articles, posters, and other means of conveying messages, such as badges, were tried.