Book Reviews

Tobacco Addiction

Smoking Behavior. Motives and Incentives. WILLIAM L. DUNN, JR., Ed. Winston, Washington, D.C., 1973 (distributor, Halsted [Wiley], New York). xiv, 310 pp., illus. $9.95.

In January 1972, while most Americans and most political leaders were greatly concerned about the "drug problem" (which, for most, did not include the use of tobacco or alcohol), a group of distinguished scientists convened on the island of St. Martin to reflect on human cigarette-smoking behavior. Ably edited by William L. Dunn, Jr., *Smoking Behavior* is a collection of papers presented at that meeting.

The topics covered range from genetics to pharmacology, from sociology to psychopathology, and from anthropology to behavioral modification. Each chapter is an exercise in scientific ingenuity that approaches the phenomenon of smoking from a different perspective.

Taken together, the chapters on the role of nicotine make a persuasive case that nicotine is the reinforcing agent in tobacco smoking and that it alters mood in a number of ways. They also support the view that chronic use of nicotine produces a form of pharmacological dependence and that, for some people, the nicotine withdrawal syndrome contributes to the difficulty in giving up smoking.

Much space is devoted to the differences between smokers, ex-smokers, and non-smokers. There is, indeed, evidence that there are personality differences between smokers and non-smokers, that some of these antedate the onset of smoking and probably made the initial effects of smoking more reinforcing for some smokers than for others. One is struck by the observation, made independently by several of the authors, that nicotine (or tobacco smoking) seems to reduce anger and aggression. It also seems that smokers tend to be angrier than non-smokers and that withdrawal of nicotine after prolonged administration results in increased hostility, irritability, and aggression in both monkeys and man.

Each chapter in its own way adds to the evidence that smoking serves different people in different ways, supporting Tomkins's view that there are those who smoke primarily for enjoyment (positive-affect smokers), those who smoke to alleviate distress (anger, fear, and so on), and those who are addicted —where, in addition to the primary motives, withdrawal produces an additional form of distress.

In a summary of the state of our knowledge, Kety observes that while nicotine is likely to be the factor that satisfies some biological need and yields some fundamental reward, "with the repetition of the process in a variety of diverse situations and in association with many different types of rewards, there will develop a huge perisphere of accompanying symbolic, appetitive, gratifying, rewarding associations until a puff of cigarette smoke gives rise in the smoker to an unbelievable array of olfactory, gustatory, visual, and respiratory sensations which may be sources of gratification." Those who have studied narcotics addiction or alcoholism would summarize the situation as it relates to those drugs in similar terms. It may come as a surprise to some that, despite the differences, the prognosis for smoking is not really much better than that for some other forms of drug dependence. Ryan's follow-up report of that unique social experiment in which the entire town of Greenfield, Iowa, stopped smoking on the same day clearly suggests that we should not expect too much from smoking cessation programs: only 10 percent of Greenfield's smokers were still non-smokers seven months after "cold-turkey day."

In reflecting on the conference, Lazarsfeld observes that none of the studies are either influenced by or take a stand in the present controversy about smoking. This is not entirely surprising: the conference was sponsored by the Council for Tobacco Research, U.S.A. Lazarsfeld expresses the hope that "authors taking very opposite positions on the smoking controversy would review the present volume as to its policy implications." Unfortunately, for all the excellence of the individual contributions, this volume by itself does not permit such a policy analysis, since the issues of costs, taxation, economics, and tobacco-related morbidity and mortality are not discussed.

To consider the policy implications it is necessary to recognize that, for the most part, the people of the world now accept the connection between smoking tobacco and medical illness as proven scientific fact but continue to smoke as if the hazards were inconsequential. In 1973, a decade after the U.S. Surgeon General's Report warned of the serious health hazards associated with smoking cigarettes, the overall annual consumption of cigarettes by Americans reached a new record high of 583 billion. Per capita consumption, although still somewhat below the level of 1960, is again on the rise, and the incidence of smoking among teenagers, which had dropped substantially in the late 1960's, is now showing a sharp increase. Recent data indicate a similar situation in other parts of the world.

At the same time, the sum total of human disease, disability, death, and lost productivity directly attributable to cigarette smoking is so staggering that a reduction in cigarette smoking may be the single most important health measure open to us for the foreseeable future. In the United States, one-third of all the deaths for men aged 35 to 59 would not have occurred if cigarette smokers had the same death rates as non-smokers.

Some observers noting the contrast between our apparent concern about illicit drugs and our complacency about smoking begin to suspect a deliberate conspiracy. They point to the tremendous advertising revenues that newspapers and magazines derive from cigarette companies and to the more than $10 billion spent on cigarettes each year. They are critical of legislators from tobacco-growing states (the value of our tobacco crop is approximately $1.6 billion), and of government at all levels—the tobacco tax harvest for 1973 was more than $5.7 billion. Whether or not the best word is "conspiracy," there is no question that powerful forces commonly combine to delay or blunt governmental efforts to deal with the

problems caused by the smoking of tobacco.

But it would be an error to conclude that without such forces rational and effective policies would be easy to implement. This volume documents that, despite its awesome toll, tobacco itself is a powerful force—one that is likely to defy our efforts at control for the near future.

JEROME H. JAFFE
Department of Psychiatry,
Columbia University College of Physicians and Surgeons,
New York City

Women Pursuing Careers

Successful Women in the Sciences. An Analysis of Determinants. Papers from a conference, New York, May 1972. RUTH B. KUNDSIN, Ed. New York Academy of Sciences, New York, 1973. 256 pp. Paper, $20. Annals of the New York Academy of Sciences, vol. 208.

Women and Success. The Anatomy of Achievement. RUTH B. KUNDSIN, Ed. Morrow, New York, 1974. 256 pp. $7.95. New edition of *Successful Women in the Sciences.*

The work under review is a collection of autobiographies and essays touching on many aspects of the complex phenomena associated with the emergence of women from psychological and educational deprivation to their present position of challenge to male domination of the professions and of American cultural life generally. In content *Women and Success* differs from *Successful Women in the Sciences* principally in the addition of a preface by Kundsin and the omission of the summaries and discussions that followed five of the six sessions of the conference on which it is based. As the changed title indicates, the book will be effective for women in other fields as well as for those in science.

The book is well integrated considering the diversity of topics covered and the variety of contributors. An opening statement of purpose is accompanied by an elegant essay by Cynthia Fuchs Epstein giving a sociological view of the pressures acting on women as they attempt to achieve and reconcile their professional and personal goals. This is followed by autobiographies of 12 professional women.

The autobiographical section is the most interesting part of the book. The contributors were selected because they are professionally successful as well as being wives (present or past) and mothers. In their endeavors all of them benefited presumably from native ability, from some parental encouragement, the stimulus of social exclusion or poverty or family conflict in childhood, some exposure to good educational opportunities, and finally from happenstance or luck. Most of them attribute a large degree of their ability to function professionally to their husbands; perhaps they consciously or unconsciously married men who were philosophically compatible with career women. The subjects of the autobiographies (now 41 to 70 years of age approximately) were young and struggling mostly before World War II, before "the pill," in short, in a different era. But their stories will be of value to young women, for they demonstrate that success is possible and illustrate for those who fear the "woman's lib" label the high caliber of their peers.

Five workshops on the broader subjects suggested by the experiences of women pursuing careers make up the remaining two-thirds of the book. Problems of employment are considered in one workshop, psychological determinants of success in another. Another concerns the practical problems of childbearing and rearing and homemaking. The viewpoint of the husband of a successful wife is also presented. The spirit of these essays is serious, scholarly, and factual. The last one, by Estelle Ramey, is witty in addition. In refuting arguments that executive ability is determined by sex hormones, Ramey effectively dispels one cause of self-doubt in many women.

The workshops open several avenues of thought for women and will confirm many of their unexpressed feelings about the influence of family attitudes and of school and college experiences on their career decisions. The thesis that women are reluctant to be considered successful is a challenging one that should prompt every woman, whatever her position, to examine her own motives with respect to her current lifestyle. The argument that women are "other-directed" will also trigger deeper introspection, which could reveal that many women who are really "inner-directed" bow to external pressures. Women may be led to realize that their dilemma arises from a misinterpretation of biological and intellectual (or domestic and professional) roles as fragmenting rather than as complementary. Failure to modify ambivalent psychological attitudes or to find practical solutions for domestic responsibilities constructs barriers to achievement in addition to those put up by the antifeminist "gatekeepers."

If one measures the achievement of women in science in terms of the value of their scientific contributions, the dimension attained is "macro." If one uses more worldly criteria—attainment of decision-making positions in the professions, election to the prestigious academies, participation in the governing councils of the professional societies, acceptance as a scientist rather than as a "woman scientist"—then the anatomy of female achievement is still microscopic. In these essays the second-class status of women in this respect is well documented with statistics, and the political dynamics of the subordination of women are analyzed. The questions are raised, but no answers are provided.

The book is important because it provides a constructive demonstration of the possibilities that exist for women and of what is required—hard work and perseverance—if they are to be made the most of. It will be of interest to newly aroused profeminists of both sexes who want a survey course in the life science of "feminology" and to all those who want to proselytize but lack the verbal facility, the factual information, and the bibliography. Although not comprehensive, this book is a starting point and contains references for further study.

ANNE M. BRISCOE
Department of Medicine,
Columbia University,
Harlem Hospital Center,
New York City

Early Environmentalist

Ellen Swallow. The Woman Who Founded Ecology. ROBERT CLARKE. Follett, Chicago, 1974. xii, 276 pp. + plates. $7.95.

From its breezy style, "relevant" title, and lack of documentation this book appears at first glance to be an amateurish effort to prove that it was Ellen Swallow Richards (or Ellen H. Richards as she is usually called) who founded "ecology" and not Ernst Haeckel, the German zoologist who coined the word in 1873. But despite these faults and a generally bad case of "precursoritis," the book raises new and important questions about two largely unstudied aspects of the history