Maternal Effects on Feeding: A Research Report

Wanda Wyrwicka

The Development of Food Preferences: Parental Influences and the Primacy Effect
Springfield, Ill.: Charles C Thomas, 1981. 117 pp. $12.75

Review by
Bennett G. Galef, Jr.

Wanda Wyrwicka is research neurobiologist at the Brain Research Institute of the University of California (Los Angeles) School of Medicine. She is author of The Mechanisms of Conditioned Behavior. Bennett G. Galef, Jr., is professor of psychology at McMaster University (Canada). He is author of a chapter in The Development of Perception: Psychobiological Perspectives, Vol. 1, edited by R. N. Aslin, J. R. Alberts, and M. R. Petersen.

The past decade has seen increased interest in the role of social influence in the development of feeding behavior. Experimentation has frequently focused on the effects of social interaction on diet selection and the performance of associated foraging behavior. The feeding behavior of a range of vertebrate species has been found susceptible to socially induced modification.

Wyrwicka’s brief monograph presents a detailed account of her studies both of the role of maternal influence in the development of feeding behavior in kittens and of the role played by socially determined early feeding history in the diet preference of adult cats. By means of appropriate application of rewarding electrical brain stimulation, Wyrwicka induced mother cats, chronically implanted with electrodes, to ingest one of several normally unacceptable foods. Weanling kittens, feeding with a mother that ingested an unusual food, rapidly accepted their mother’s diet and, in some cases, continued to exhibit into adulthood a preference for the normally unacceptable diet to which they had been weaned. Although the size of experimental groups is often small, relevant control groups are occasionally lacking, and statistical analyses are not described, the data presented are sufficiently robust to support the conclusion that the ingestive behavior of a mother cat can profoundly affect diet acceptance by her kittens. Data suggesting that early feeding history can markedly alter diet preference in adulthood are less consistent.

Although the central focus of the book is a careful description of Wyrwicka’s methods, observations, and results, two introductory chapters place the author’s experiments in context by reviewing related work by others (Hall, Lipsitt, Hogan, Jacobs, and Galef) in the fields of infant and juvenile feeding. Potential contributions of Wyrwicka’s data to an understanding of imitative learning, primacy effects, and the role of learning in food preference development are discussed at appropriate places in the text.

The review of the relevant literature is not comprehensive, and this selectivity will limit the usefulness of the volume as a general introduction to work in the areas of maternal effects on juvenile feeding and primacy effects in food preference determination. Particularly noteworthy among the lacunae in citation are the absence of any mention of Z. Y. Kuo’s pioneering studies of early experience effects on adult food preference in cats and dogs, the extensive Japanese and recent French work on social learning of food preference in infrahuman primates, and the few studies of the role of social factors in facilitating diet acceptance by human infants. I found several citations of Vilhjalmur Stefansson’s insightful discussion of the role of feeding history in determining breadth of diet acceptance as a personal communication from the late H. Gantt uninformative, when direct reference to the relevant pages in Stefansson’s classic My Life with the Eskimo (Macmillan, 1913) would surely have been a greater service to the reader.

The Development of Food Preferences will be of interest to experts in the areas of behavioral development, food preference determination, imitative behavior, mother-young interaction, and related fields. Although much of the material presented here is available in published articles, Wyrwicka’s findings are not so widely known as they should be. The present reasonably priced report...
makes readily accessible a thought-provoking investigation of the development of feeding behavior.

Introducing Psychology

Lyle E. Bourne, Jr., and Bruce R. Ekstrand

Psychology: Its Principles and Meanings. 4th ed.

John P. Dworetzky

Psychology
St. Paul, Minn.: West, 1982. 718 pp. $22.95. (Accompanied by study guide, $7.95; and instructor's manual)

Jonathan L. Freedman

Introductory Psychology. 2nd ed.
Reading, Mass.: Addison-Wesley, 1982. 662 pp. $22.95

Frank B. McMahon and Judith W. McMahon

Psychology: The Hybrid Science. 4th ed.
Homewood, Ill.: Dorsey Press, 1982. 720 pp. $19.95


Principles of Psychology

Ronald E. Smith, Irwin G. Sarason, and Barbara R. Sarason

Psychology: The Frontiers of Behavior. 2nd ed.

Review by
Margaret W. Matlin

The authors of the first book under review are associated with the University of Colorado, Boulder. Lyle E. Bourne, Jr., is professor of psychology and director of the Institute of Cognitive Science. Bruce R. Ekstrand is dean of the Graduate School and associate vice-chancellor for research. John P. Dworetzky, author of the second book, is professor at Glendale College. He has written Introduction to Child Development. Author of the third book, Jonathan L. Freedman, is professor and chairperson of the Department of Psychology at the University of Toronto (Canada). He is author of Crowding and Behavior. The first author of the fourth book, Frank B. McMahon, is professor of psychology at Southern Illinois University at Edwardsville. Judith W. McMahon, second author of the fourth book, is assistant professor of psychology at the Lindenhurst Colleges in St. Charles, Missouri. The two are also coauthors of Abnormal Behavior: Psychology's View. Richard H. Price, first author of the fifth book, is professor and chairperson of the community psychology program and faculty associate in the Survey Research Center at the Institute for Social Research of the University of Michigan. He is coauthor of Abnormal Psychology in the Human Context with S. Lynn. Second author of the fifth book, Mitchell Glickstein, is professor of neuroscience at University College London (England) and has contributed a chapter to T. C. Ruch and H. D. Patton's Physiology and Biophysics. David L. Horton, third author, is professor of psychology at the University of Maryland (College Park) and coauthor of Human Learning with T. W. Tumage. The last author of the fifth book, Ronald H. Bailey, is a free-lance author residing in East Meredith, New York. His numerous books include The Role of the Brain. The authors of the last book under review are affiliated with the Department of Psychology at the University of Washington. Ronald E. Smith, professor and director of the clinical psychology training program, is coeditor of Psychological Perspectives in Youth Sports with F. L. Smoll. Irwin G. Sarason, professor, is editor of Test Anxiety: Theory, Research, and Applications. Barbara R. Sarason, senior research associate, is author of a chapter in J. D. Wine and M. D. Smye's Social Competence. Margaret W. Matlin, reviewer, is professor of psychology at the State University of New York at Geneseo. Her most recent textbooks are Perception and Cognition.

Authors of introductory psychology textbooks face an awesome task. They must introduce psychology to beginning students whose knowledge of the strategies and content of psychology has often been gathered from Sunday supplements and popular magazines. The authors must convince students that psychology uses methodologies other than questionnaires and informal observation and that psychologists examine topics such as pattern recognition and attribution theory as zealously as they examine infantile autism and hypnosis. Introductory textbooks must therefore achieve a satisfactory balance between scientific sophistication and high interest level. All six of the textbooks included in the present review attempt to achieve this balance. Their degree of success ranges from acceptable to excellent.

Instructors in introductory psychology have approximately 150 alternatives from which to select a textbook. My sample of 4% of the options will appeal to instructors seeking middle-level textbooks that cover the standard topics in the traditional biology-to-sociology order. The six books, however, emphasize somewhat different content areas. Table 1 lists the approximate number of chapters devoted to each major topic.

Notice that the books by Dworetzky and Smith and his coauthors cover psychopathology and psychotherapy in somewhat more detail than do the other four texts. Freedman's and Price et al.'s textbooks include an extra social psychology chapter. McMahon and McMahon emphasize developmental psychology more than the other authors do.

Introductory psychology textbooks make extensive use of special features to emphasize important points and to capture student interest. All of the books reviewed here begin with chapter outlines and end with chapter summaries. All six have glossaries in which new terms are defined. The books by Dworetzky and Freedman, however, feature running glossaries, in which each new term is defined in the margin of the page on which it is first introduced. The other four texts have glossaries at the end of the book, where they may be overlooked by many students. All of the books use a special typeface—such as italics or boldface print—to emphasize new terms. None of them, however, consistently supplies concise definitions for each new term when it is introduced. In this respect, the Dworetzky and Freedman books offer an advantage because they supply brief definitions adjacent to the text.

Table 2 lists additional special features. Three of the books provide a pronunciation guide for difficult new terms, a feature that probably would be appreciated by all but the most sophisticated introductory students. Four books include demonstrations, or small-scale experi-