

educational field research.) Although Roth may not be able to garner too many "converts" to his nonpositivist, collaborative media research approach, he should cause many social science researchers to question and clarify their "faith" in, and perhaps even to "expurgate" current methodological "dogma."

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Mitchell, J.J. (1990). *Human growth and development*. Calgary: Detselig, 281 pp. \$16.95 (softcover).

John Mitchell has written a very readable text with a practical orientation which should appeal to many undergraduate students. After a chapter on basic concepts in developmental psychology, the chronological order of development is explored chapter by chapter from prenatal development through middle childhood. Each chapter ends with a summary of the main concepts presented in it. There are boxes scattered through the chapters in which topics are discussed in detail. These include the common 19th century practice of giving infants opium to calm them and using preschoolers as witnesses in court trials. Also helpful are the number of tables which detail the chronology of growth, such as the emergence of various emotions during the first two years of life and the development of the motor abilities of skipping, hopping, and climbing during the preschool years. A light touch is added with a peppering of anecdotes including an opinion by Mark Twain that each person's biography should begin with a discussion of the wine shared by the father and mother on the night of conception.

The section on prenatal development is especially up-to-date and appealing. A multitude of factors that influence prenatal development are discussed, including the relationship between maternal diet and social class and the effects of AIDS, drugs, alcohol, and cigarettes on prenatal development. The topical issues of in-vitro fertilization and surrogate mothers are dealt with in a sensitive way. However, there is no discussion concerning the controversial issue of whether emotional stress on the part of the mother may have adverse effects on the infant. Although the pregnancy screening procedures of amniocentesis and chorionic villus biopsy are described, the related issue of elective abortion is not discussed. Nevertheless, a great deal of practical information about pregnancy and the newer methods of childbirth is included in the book.

The portrait of the newborn is presented in an engaging way. Mitchell points out that one of nature's unsolved mysteries is how parents can perceive the newborn as beautiful when confronted with the wrinkled skin, misshapen head, flattened nose, and scraggly hair of the average baby. The newborn's reflexes

are described as a link with our evolutionary past as well as a basis for future development. But it is possible to take some exception to Mitchell's discussion of the way the newborn experiences the world. Probably one of the more important recent developments in our knowledge about infancy concerns the amazing perceptual abilities of very young infants. Mitchell mentions some of these findings briefly but fails to be impressed with them. As well, he does not mention the findings of other studies, such as the research by DeCaspar and his associates (1980, 1986), that three-day-old infants could discriminate their mother's voice from other voices and that they preferred the reading of passages that had been read during the prenatal period. Nor is the work on early visual and auditory coordination mentioned. All of this research suggests that the young infant is more aware of the environment than he or she appears to be.

Mitchell's discussion of development during infancy combined the theories of Piaget and T.G.R. Bower. However, the controversies of nature versus nurture and experience versus maturation are never directly mentioned or confronted although Mitchell seems to lean toward the blank slate and the overriding importance of maturation. The book might have been strengthened by a discussion of these as well as other controversies. There is some mention of similarities between twins, but this discussion relies strongly on the work of Newman, Freeman, and Holzinger (1937). Mitchell might have updated this section with Lykken's work from the *Minnesota Study of Twins Reared Apart* (1982). On the other hand, the topic of attachment is given very thorough and complete coverage. Separation and stranger anxiety are discussed in a sensitive manner. In general, the developmental tasks of toddlers are covered in a practical and sympathetic manner.

The author offers sound advice on a number of topics. He raises a number of issues on the breast versus bottle feeding controversy, including nutrition versus greater risk of toxins and other pollutants. Unlike most other discussions on this topic, Mitchell points out that breast feeding is more time consuming, often taking up five hours out of each day during the baby's first six months. Ways of coping with children's fears and anger are addressed in a sensitive manner. However, some of the recommendations are presented without a great deal of theoretical background. The very complicated issue of punishment is given a half page which consists of a list of guidelines developed by a psychiatrist.

The preschool years are discussed in an informative as well as an entertaining manner. The real accomplishments as well as the amusing limitations of the young child are chronicled, such as the child's belief that a candle is alive when it is lit, but is not alive when it is not lit. The discussion is dominated by Piaget's view of the preoperational child, but social development and memory development from an information processing perspective are also included. In one of the best sections of the book, the controversy over school experience for the young child is discussed from the standpoint of the various types of

preschool programs and their relative merits. Mitchell concludes that the benefits of these programs outweigh their negative effects.

Middle childhood is also discussed from a Piagetian perspective. While the emphasis is on concrete operations and moral development, the author also deals with social development, self-concept, and self-efficacy. An interesting discussion of learned helplessness and its effect on school performance is included. Unfortunately, there is no mention of criticisms of Piagetian theory.

The greatest strengths of this book are its well-written and logical style, its relevance to practical issues, and its clarity. I liked the chronological organization of the book. Perhaps its greatest weakness is the author's lack of emphasis on research and his hesitancy to cover controversies in depth. There are many references to other developmental texts but few references to original research articles. I liked the lists of advice on various topics. This appears to be a book that students with very practical orientations would like.

References

DeCasper, A. & Fifer, W.P. (1980). Of human bonding: Newborns prefer their mother's voices. *Science*, 208(6), 1174-1176.

DeCasper, A. & Spence, M.J. (1986). Prenatal maternal speech influences newborns perceptions of speech sounds. *Infant Behavior and Development*, 9(2), 133-150.

Lykken, D.T. (1982). Research with twins: The concept of emergence. *Psychophysiology*, 19(4), 361-373.

Newman, H.H., Freeman, F.N., & Holzinger, K.F. (1937). *Twins: A study of heredity and environment*. Chicago: University of Chicago Press.

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