THE THIRD CHILD A STUDY IN THE PREDICTION OF FERTILITY

CHARLES F. WESTOFF, ROBERT G. POTTER, JR. AND PHILIP C. SAGI Princeton, N.J., Princeton University Press, 1963, 293 pp., \$6.50.

Any social scientist with an interest in demographic research would profit by reading this book, whether the particular topics covered are in his field or not. Apart from the intrinsic value of the results, he will meet everywhere—in the design, description, specification of hypotheses, discussion and comments—the exhaustive search for significant pattern and detail, assessed with balanced judgment, which marks the good social survey. At first sight the findings of the study may appear disappointing since many of the broad, sweeping theories about the social and psychological influences on the fertility of American couples disappear in the careful analysis of interacting factors. This would be a mistaken attitude since crude and essentially useless generalizations about large, heterogeneous groups are replaced by specific evidence about the behavior of limited and more homogeneous subpopulations.

The book reports on the second phase of the study of current fertility in the United States. The results of the earlier survey work were given in *Family Growth in Metropolitan America*, by the same authors with Elliot G. Mishler, published in 1961, and reviewed in the *Milbank Memorial Fund Quarterly* (Vol. XL, p. 241, April, 1962). Briefly, the population studied is of white, native Americans, living in the largest metropolitan areas and having two children, of whom the second was born in September 1956. A probability sample

of 1,165 couples was interviewed six months after the birth of the second child; the data collected included details of contraceptive practice, desired number and spacing of children, birth date, and a vast array of responses to questions on social, economic, and religious background, attitudes, and personality. Three years later 905 couples from the original sample were again interviewed, the losses being due mainly to failures to find addresses and to refusals. Information was recorded on fertility since the previous interview, changes in social and economic status, and further characteristics of which knowledge was needed for the exploration of ideas suggested by the examination of the earlier data. The volume reviewed presents the analysis of the data from the second interview with the main emphasis on how to predict which couples would have a third child in the given time.

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In assessing the results of the study it is necessary constantly to remember the very special nature of the group surveyed. This is even more important for the second phase than the first. Attention is concentrated on the fertility of the restricted group over a short part of the reproductive period, couples (otherwise eligible) who had a second as well as a third child in the interval are excluded, and the sample is biased by losses. Although there are strong reasons for believing that these limitations do not seriously hinder the framing of valid generalizations about order and patterns, the quantitative interpretation of the estimates of correlation and components of variability becomes very difficult. The authors are keenly aware of these problems, some of which arise from the deliberate narrowing of the survey population to eliminate "nuisance" variation. Only in a few places, notably in the multivariate analysis, do they relax their usual caution and, in my opinion, put a greater weight on the estimates than they can bear.

The book is divided into five parts, of which Part I is a brief introduction to the background, methods, and objectives of the survey and Part IV a general summary. Part V contains five important appendices on methodology; particularly notable is Appendix C in which the reliability of the data on fertility planning is examined by comparison of the answers of the same respondents to identical questions asked in 1957 and 1960. However, the detailed exposition of concepts, hypotheses, and methods of index construction in the earlier volume is not repeated. The main substance of the report is in Parts II and III. In the words of the authors, Part II is an attempt to determine "to what extent number and spacing of births are controlled by fertility preferences," and Part III is an investigation of "how well measures of fertility and preferences can be predicted by social and psychological factors." In my view, general direct answers to such questions are of little value and are almost meaningless. What is important is how the specific, component elements in the complex situation combine to produce the over-all pattern; this is exactly what the authors examine with thoroughness and sophistication.

There are 126 statistical tables in the book, many of them extensive, and the summary of major findings covers 15 pages. A brief account of these would distort by condensation. Instead, I will mention two themes which seem to me of particular importance and interest, to give the flavor of the work. In Part II, convincing evidence is given that as desired family size is approached the effectiveness of contraception increases sharply; this is not due to changes in methods, increased skills, or lower fecundity but, almost certainly, to less risk-taking. Interlocking findings are that planned spacing of birth intervals is much less effective than the control of family size and that this is associated with weak and vague spacing preferences. In Part III, the interrelations of fertility with religion, education, and socio-economic status are closely explored. Fertility increases with greater "religiousness" among Catholics, but the reverse holds for Protestants; these relations are due more to the number of children desired than to success in planning. Education at Catholic colleges is associated with the higher fertility but not education at Catholic elementary schools; this is linked with a positive correlation of fertility with socio-economic class for Catholics which does not appear for Protestants. Both these themes are studied from many viewpoints by well-judged breakdowns of the data into subcategories.

The statistical tools used in the analysis are mainly correlation coefficients and components of variance. I think these tools are crude and not fully adequate for the task, since interpretation is difficult except when the data conform approximately to the theoretical model for which the methods were designed, namely, multivariate normal distributions. In many of these analyses the data do not conform and I would have preferred more use of simple frequencies, group means, and standardization. For this and other reasons, I find the formal factor analysis of Chapter XV disappointing and unilluminating. Nevertheless, because the authors use these methods with skill and a good appreciation of the limitations, they are not enticed to unsound conclusions.

It is good that a third phase of this study is planned, in which the same couples will be interviewed near the end of their reproductive period. We can fairly hope that the future research will be as well considered and intelligently assessed as that reported in the present volume.

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