

Origins of Sexual Preference

Sexual Preference. Its Development in Men and Women. ALAN P. BELL, MARTIN S. WEINBERG, and SUE KIEFER HAMMERSMITH. Indiana University Press, Bloomington, 1981. xii, 242 pp. \$15. An Official Publication of the Alfred C. Kinsey Institute for Sex Research. *Statistical Appendix*, xiv, 322 pp., illus. \$20.

Sexual Preference attracted considerable media attention in the last half of 1981. This interest centered on the findings and the authors' interpretations of them. I will first consider methodological aspects of the research, then the findings, and then the conclusions drawn by the authors.

These two volumes report results of a survey conducted by the Kinsey Institute for Sex Research. The samples studied involve 686 homosexual males, 293 homosexual females, 337 heterosexual males, and 140 heterosexual females. An earlier book by Bell and Weinberg (*Homosexualities: A Study of Diversity among Men and Women*, Simon and Schuster, 1978) reports data on the characteristics and behavior of the respondents as adults. The present volumes concern the relationship between characteristics of the respondents during childhood and adolescence and their sexual preference as adults. The main volume describes the research, the analytic procedures, and the general findings. The *Statistical Appendix* includes the interview schedule, the marginal distributions of responses to each question, and tables presenting the results of statistical analyses.

One of the strengths of this research is its eclectic theoretical base. The researchers drew on concepts from a variety of perspectives. A primary source was the psychodynamic model, with its emphasis on parents' personality, parents' relationship with each other and with the child, and birth order and relationships with siblings. A second source was social learning theory, which suggests that early sexual experiences influence one's sexual preference. A third source was sociological models that emphasize the importance of peer relationships. A final source was labeling theory, which led to a concern with whether homosexuals were more likely than heterosexuals to have been considered "different" or to have been labeled "homosexual" while they were growing up.

The interview schedule was very comprehensive. It included approximately 200 questions regarding childhood and adolescence. Each item is reproduced in the *Statistical Appendix*. The data obtained are retrospective. The average age of respondents was 26 to 37, so that they were answering questions about events that had occurred 20 to 30 years earlier. Methodological analyses (J. DeLamater and K. McKinney, in *Response Behavior in the Survey Interview*, W. Dijkstra and J. von der Zouwen, Eds., Academic Press, in press) indicate that such questions will elicit underreporting of behavior. The authors do not discuss the possible effects of forgetting on the data obtained. In addition, the items typically asked about people or events "while you were growing up," "while you were in grade school/high school," or "during the time you lived with your parents." Thus, respondents were giving one summary response that may have masked changes over time in, for example, relationship with parents. If it is the "average" quality of such relationships that influences sexual development, then the data obtained are valid. But if it is the character of the relationship at a particular age, the occurrence of a critical event, or a pattern of change over time that is influential these items may not elicit the necessary data.

The research was conducted in the San Francisco Bay Area in 1969-1970. The sample of homosexuals was obtained as follows. Recruiters were placed in locales frequented by homosexuals; advertisements were placed in newspapers; invitations were sent to persons on the mailing lists of homophile organizations; and posters and matchbooks were distributed inviting homosexuals to volunteer to be interviewed. The resulting "pool" of respondents numbered 4460. Respondents were selected from this pool according to several criteria. There is no indication of the completion rate, the percentage of those selected who were interviewed. Interviews were conducted with 575 white males, 111 black males, 229 white females, and 64 black females. There is no way of ascertaining how representative the sample is.

The research was designed to identify variables that discriminate those with a homosexual preference from those with a heterosexual one. The heterosexual

sample was drawn from the Bay Area population by block sampling techniques. It was intended to be one-half the size of the homosexual sample. Again, there is no information about completion rate. Data were obtained from 284 white males, 53 black males, 101 white females, and 39 black females.

The interviewees were asked to classify both their current sexual feelings and their current sexual behavior on the Kinsey scale, which ranges from "exclusively homosexual" (score of 6) through "equally heterosexual and homosexual" (score of 3) to "exclusively heterosexual" (score of 0). The ratings of feelings and behavior were averaged. Those whose mean was 2 or more were classified as homosexual, and those whose mean was less than 2 were considered heterosexual.

The first stage of the analysis involved comparing homosexuals with heterosexuals on every item in the questionnaire, by means of analysis of variance. The criteria for inclusion of a variable in subsequent analyses were (i) a statistically significant difference in response between the two groups (ii) that was at least ten percentage points in magnitude and (iii) whose correlation with adult sexual preference was at least .10. In the analyses, the effects of age, education, and occupation were controlled so that the differences that were found are not due to variation on these factors. Closely related items were subjected to factor analyses, and composite measures were constructed on the basis of these analyses. The percentages for the two groups and the significance of the difference (if any) on each item are displayed in tables in the *Statistical Appendix*. All analyses were done separately for males and females.

Variables that discriminated between the two groups were classified into nine "stages." Classification was based either on chronology or on theoretical hypotheses. Further, the researchers assumed that these stages occur in a developmental sequence that is invariant across respondents. The stages in sequence are: (i) parental personality traits and sexual attitudes; (ii) parental relationships; (iii) parent-child relationships; (iv) parental identification; (v) sibling relationships; (vi) sibling identifications; (vii) gender conformity; (viii) peer relationships and sexual experiences during grade school; (ix) peer relationships and sexual experiences during high school. Multiple regression analysis was employed to relate each variable to adult sexual preference. Variables were added stage by stage; those that were not relat-

ed to adult sexual preference or to other variables that were related to preference were dropped.

The surviving variables were included in path analyses. Variables were ordered according to the sequence outlined above. These analyses are explicitly termed causal ones. The authors assume that significant results illuminate the causes of adult sexual preference.

Most of *Sexual Preference* is devoted to reporting the results of the analyses for white males (N : homosexual = 575; heterosexual = 284) and white females (N : homosexual = 229; heterosexual = 101). Chapters 3 through 9 report the results for males, and chapters 10 through 16 report them for females. The findings are presented according to the sequence employed in the path analyses.

The presentation is nontechnical; it is primarily descriptive, very clear and concise. There are no data tables. Technical information concerning the analyses, when included, is usually in footnotes. However, bibliographic references are identified only by number; authors' names are never employed. This makes it unnecessarily difficult to assess the adequacy of the literature coverage and the extent to which the findings are consistent with earlier work. The presentation of results separately for men and women produces substantial redundancy in discussion of substantive ideas, prior research, and the current findings.

Chapter 17 summarizes the major findings. Adult sexual preference is the outcome of a complex process; it is found to be related to characteristics of the mother and father, relationships of parents with each other and with the child, degree of conformity to gender role in childhood, and childhood and adolescent sexual arousal or activities. In general, homosexual feelings or arousal in childhood is associated with homosexual arousal or activities in adolescence, which in turn is closely related to adult preference. The authors conclude that the substantial adolescent-adult paths in their analyses indicate that sexual preference is determined prior to adolescence. This leads them to emphasize the importance of preadolescent experiences. An alternative conclusion that is also consistent with their findings is that sexual preference develops gradually throughout the life cycle and that adolescent experiences are relatively more important than childhood experiences.

Sexual feelings are more important influences than sexual behavior on adult preference. Homosexual respondents reported homosexual feelings that preceded

ed by an average of three years involvement in homosexual activities. Further, a major influence on sexual preference is degree of gender-role conformity. Those who as children enjoyed gender-appropriate activities, those who disliked activities appropriate for the other gender, boys who considered themselves "masculine," and girls who rated themselves as "feminine" were much less likely to experience later homosexual feelings and to engage in homosexual behavior.

In general, the authors interpret their results as providing little support for the psychodynamic model, with its emphasis on parent-child relationships and other familial variables.

These general findings are given additional support by analyses of subgroups, for example, of blacks, bisexuals, and various types of homosexuals. These results are reported in chapter 18.

As the authors indicate, this research is far superior methodologically to prior work on homosexuals. The interview schedule was comprehensive, considerable effort was expended in obtaining the homosexual sample, the analyses involve systematic comparisons with heterosexuals, and sophisticated statistical techniques are used to analyze the data. All of these factors enhance the likelihood that the findings are valid. At the same time, acceptance of the authors' conclusions about the causes of sexual preference must be tempered by concern over the retrospective character of the data, the volunteer or convenience character of the homosexual sample, and the arbitrary classification and sequencing of variables in the path analyses.

Relying on path analyses as the major analytic technique is also problematic because the dependent variable is treated as dichotomous rather than continuous. Since the underlying Kinsey scale is a seven-point one, analyses could have been conducted that used the full range of responses. Alternatively, given the intent to systematically compare the homosexual and heterosexual samples, that is, two known groups, multiple classification analysis could have been employed. Its use would not have required a priori decisions about classification and the sequencing of variables.

Most controversial is the suggestion that homosexuality has its origin in biology. In a final chapter, the authors briefly review the evidence that there are hormonal differences between homosexuals and heterosexuals. While acknowledging that the evidence is inconclusive, they state that their results are consistent with the hypothesis that prenatal hormonal factors predispose some persons

to homosexuality. As I noted above, gender nonconformity during childhood is a major influence on the development of homosexual preference. At the same time, the parental, sibling, and other childhood variables included in the analyses did not explain a great deal of the variance in gender nonconformity. Thus, the authors suggest that hormonal factors cause differences in the fundamental organization of the brain or sex hormones or both that in turn lead to nonconforming gender interests and traits and adult sexual preference for members of the same gender.

This is clearly speculative. This research was not designed to test causal hypotheses that include a biological component. No biological characteristics, such as hormone levels, were measured. It is possible that more detailed analyses centered on the gender-nonconformity measure would provide relevant evidence, but such explorations are not reported in these volumes. In this as in other matters, the analyses and presentation of results lack depth. Interesting and at times fundamental questions raised by the results that could have been further explored are not. It is to be hoped that these two volumes do not represent the final exploration of this unique data set.

Anyone who is interested in the childhood and adolescent correlates of sexual preference should read *Sexual Preference*. Persons with a professional interest in the subject should not rely on media accounts for information about the contents of this work. The readers will find a wealth of interesting data and some provocative conclusions.

JOHN DELAMATER

Department of Sociology,
University of Wisconsin,
Madison 53706

Ritual as Politics

The Politics of Reproductive Ritual. KAREN ERICKSEN PAIGE and JEFFERY M. PAIGE, with the assistance of Linda Fuller and Elisabeth Magnus. University of California Press, Berkeley, 1981. xii, 380 pp. \$25.

Reproductive rituals, such as puberty ceremonies for girls, male initiation rites, birth practices in which fathers publicly mimic labor pains, and elaborate menstrual taboos, have long caught the imagination of anthropologists and laypersons alike. Studies of such rituals are numerous and can be loosely divided into "interpretative" studies that focus on what such rituals mean and "explana-