

## B

## Research Designs for Complete Examples

### B.1 Women's Health and Drug Study

Data used in most of the large sample examples were collected with the aid of a grant from the National Institute on Drug Abuse (#DA 00847) to L. S. Fidell and J. E. Prather in 1974–1976. Methods of collecting the data and references to the measures included in the study are described here approximately as they have been previously reported (Hoffman & Fidell, 1979).

#### Method

A structured interview, containing a variety of health, demographic, and attitudinal measures, was given to a randomly selected group of 465 female, 20- to 59-year-old, English-speaking residents of the San Fernando Valley, a suburb of Los Angeles, in February 1975. A second interview, focusing primarily on health variables but also containing the Bem Sex Role Inventory (BSRI; Bem, 1974) and the Eysenck Personality Inventory (EPI; Eysenck & Eysenck, 1963), was conducted with 369 (79.4%) of the original respondents in February 1976.

The 1975 target sample of 703 names was approximately a .003 probability sample of appropriately aged female residents of the San Fernando Valley, and was randomly drawn from lists prepared by listers during the weeks immediately preceding the sample selection. Lists were prepared for census blocks that had been randomly drawn (proportional to population) from 217 census tracts, which were themselves randomly drawn after they were stratified by income and assigned probabilities proportional to their populations. Respondents were contacted after first receiving a letter soliciting their cooperation. Substitutions were not allowed. A minimum of four callbacks was required before the attempt to obtain an interview was terminated. The completion rate for the target sample was 66.1%, with a 26% refusal rate and a 7.9% "unobtainable" rate.

The demographic characteristics of the 465 respondents who cooperated in 1975 confirmed the essentially white, middle- and working-class composition of the San Fernando Valley, and agreed, for the most part, with the profile of characteristics of women in the valley that was calculated from 1970 Census Bureau data. The final sample was 91.2% white, with a median family income (before taxes) of \$17,000 per year and an average Duncan scale (Featherman, 1973) socioeconomic level (SEL) rating of 51. Respondents were also well educated (13.2 years of school completed, on average), and predominantly Protestant (38%), with 26% Catholic, 20% Jewish, and the remainder "none" or "other." A total of 52.9% worked (either full-time—33.5%—or part-time—19.4%). Seventy-eight percent were living with

husbands at the time of the first interview, with 9% divorced, 6% single, 3% separated, 3% widowed, and fewer than 1% "living together." Altogether, 82.4 of the women had children; the average number of children was 2.7, with 2.1 children, on the average, still living in the same house as the respondent.

Of the original 465 respondents, 369 (79.4%) were re-interviewed a year later. Of the 96 respondents who were not re-interviewed, 51 refused, 36 had moved and could not be relocated, 8 were known to be in the Los Angeles area but were not contacted after a minimum of 5 attempts, and 1 was deceased. Those who were and were not re-interviewed were similar (by analyses of variance) on health and attitudinal variables. They differed, however, on some demographic measures. Those who were re-interviewed tended to be higher-SEL, higher-income white women who were better-educated, were older, and had experienced significantly fewer life change units (Rahe, 1974) in 1975.

The 1975 interview schedule was composed of items assessing a number of demographic, health, and attitudinal characteristics (see Table B.1). Insofar as possible, previously tested and validated items and measures were used, although time constraints prohibited including all items from some measures. Coding on most items was prearranged so that responses given large numbers reflected increasingly unfavorable attitudes, dissatisfaction, poorer health, lower income, increasing stress, increasing use of drugs, and so forth.

The 1976 interview schedule repeated many of the health items, with a shorter set of items assessing changes in marital status and satisfaction, changes in work status and satisfaction, and so forth. The BSRI and EPI were also included, as previously mentioned. The interview schedules for both 1975 and 1976 took 75 minutes on average to administer and were conducted in respondent's homes by experienced and trained interviewers.

To obtain median values for the masculine and feminine scores of the BSRI for a comparable sample of men, the BSRI was mailed to the 369 respondents who cooperated in 1976, with instructions to ask a man near to them (husband, friend, brother, etc.) to fill out and return it. The completed BSRI was received from 162 (46%) men, of whom 82% were husbands, 8.6% friends, 3.7% fiances, 1.9% brothers, 1.2% sons, 1.2% ex-husbands, 0.6% brothers-in-law, and 0.6% fathers. Analyses of variance were used to compare the demographic characteristics of the men who returned the BSRI with those who did not (insofar as such characteristics could be determined by responses of the women to questions in the 1975 interview). The two groups differed in that, as with the re-interviewed women, the men who responded presented an advantaged socioeconomic picture relative to those who did not. Respondents had higher SEL2 ratings, were better educated, and enjoyed higher income. The unweighted averages of the men's and women's median masculine scores and median feminine scores were used to split the sample of women into those who were feminine, masculine, androgynous, and undifferentiated.

## B.2 Sexual Attraction Study

Data used in the large sample multiway frequency analysis example (Section 16.6) were collected in 1984 as part of a survey assessing issues surrounding the nature of sexual attraction to clients among clinical psychologists. Data-collection methods and demographic characteristics that follow are approximately as they appear in an *American Psychologist* paper (Pope, Keith-Spiegel, & Tabachnick, 1986).