

CHAPTER 6

NOTES ON SOCIAL RESEARCH METHODS

6.1 INTRODUCTION

Although social research is a tool used in evaluation rather than being essentially evaluative in itself, it is useful to draw attention to some aspects and issues in the planning and implementation of social research.

Much more practical detail will be found in some of the texts listed in the next chapter but we give here some guidelines which will be useful to the evaluator or to the administrator concerned with instituting or assessing evaluation.

6.2 POPULATIONS, SAMPLES AND CONTROLS

Any social research project and most evaluation projects will be concerned with examining a particular number of persons, or the effect of some activity upon that number of persons. It is important to be clear on the definition and boundaries of the population concerned. In general, our study population will be comprised essentially of persons and could be defined along any one of a large number of lines including the following examples:

All persons resident within a particular geographic area.

Ethnic or cultural groups.

All persons attending or who have attended a particular programme during specified periods of time.

Alternatively, in the case of evaluation, we may be concerned with a “population” comprised of institutions. For instance, one might be called upon to examine all primary schools within a country, or alternatively, all hospitals within a country.

This is again a place to stress the importance of existing information. Every country maintains a wide range of specific data and this data is often extremely valuable for purposes of population definition. Social planning and social

research will often be inadequate if the size of the population being planned for or studied is not clearly known and recognized.

In practice it is often quite impossible in a research programme to examine every unit of the population. For reasons of both practicality and quality of research, it is usually vital to have recourse to a sampling of the population.

The essential feature of good sampling is that the sample will consist of a representative cross-section of the total population so that, within reasonable limits of accuracy, the results obtained by studying the sample will be the same as they would have been for the total population. The second characteristic of almost equal importance is that the sampling must be of adequate size. The question of determining both representativeness and size is dealt with very adequately in many of the standard texts. We do stress, however, that the size of the sample required is much more a function of the complexity of the data being sought than of population size. If one is only seeking relatively simple information where there are few variables, then a relatively small sample will be adequate. On the other hand, where the data being sought is complex and highly variable then a bigger sample will be necessary.

The actual detail of various sampling methods will not be dealt with here as there are a variety of excellent text books available which might be consulted.

Less attention is paid in texts to the problem of establishing satisfactory controls in experimental projects or, where pertinent, in evaluative studies. Any experimental project or even any research project is likely to have effects upon the population under study. A fundamental principle is that we must isolate these effects if we are to develop satisfactory experimental design or measurement techniques.

One of the best known examples is the famous Hawthorne Experiment described in the excellent summary by Schofield, as follows:

"A special group of workers assembling telephone parts was set aside from the other workers and the condition of their work situation was changed to see what effect it would have on their output. The lighting in the room was improved and the output went up. Then the ventilation was changed and this also increased output. Then they were given long rest breaks and the output still increased. Finally, the lighting and ventilation were changed back to their original state, the longer rest breaks were stopped, but the output still went up. The researchers were very puzzled, until they saw that it was not the improvement in physical conditions that had caused the output to go up. It was because this group was getting special attention. People were interested in what they were doing; a new spirit was engendered which gave them greater incentives and so the output continued to be high no matter what was done to the lighting and ventilation."

In retrospect it would not be difficult to redesign the Hawthorne Experiment so that one could test out the effect of such changes as differing ventilation in isolation from the side effects resulting from the special attention

being given to the experimental group. This would mean, for instance, finding two groups of workers who could be closely matching in both personal characteristics and their work environment, treating both as experimental groups and giving them special attention but only, in fact, changing the real conditions of one such group at any one time. The research studies by Payne et al and by Roberts and White given under Britain in Part B of this volume both illustrate excellent use of control groups.

The use of controls is often particularly important in regard to young people. We have already stressed above (4.4) the extent to which young people are undergoing an inevitable and natural process of maturation. Many of the programmes which we will be called upon to evaluate are aimed at maximising or directing this process. If we are to evaluate them successfully we must compare the changes in participants with natural changes occurring in a group who did not participate in the programme.

6.3 OBJECTIVITY, RELIABILITY AND VALIDITY

We have already referred in Chapter 2 to some of the problems in obtaining objectivity. However, this is not merely a matter of finding the right organizational structure for evaluation in order to ensure objectivity. It is also a matter of paying very careful attention to aspects of research design.

In designing a questionnaire or interview, questions must be framed in such a way that they will not suggest or lead to any particular response. Similarly, the questionnaires must be presented in such a way, or the interview conducted in such a way, that respondents are not influenced to give any specific pattern of answer.

The second notion which is fundamental to good social research is that of maximising validity, that is, the extent to which information obtained is accurate and truthful. There are many difficulties in attaining complete validity — the frailty of human memory, the repression of matters which people prefer to forget, the tendency to over-emphasize things that people have enjoyed, and the extent to which a respondent will tend to give the information which he feels is expected of him.

The adequately designed piece of social research will try to establish a series of cross-checks so that the researcher may judge the validity, or otherwise, of the data obtained. In addition, just as we must endeavour to retain objectivity through our research design, so every effort must be made to avoid giving cues which influence responses in any particular direction.

Reliability is the extent to which any particular research method will consistently produce the same result from the same people. Again, it is probably

impossible to retain 100 percent reliability. Individuals will feel differently from day-to-day and so may well respond differently to the same question asked at different times. Similarly their responses may vary depending upon the situation in which they are asked the question. Adequately designed research will endeavour to ensure that these variations are taken into account, cross-checked where possible, and limited to those factors over which the researcher has no control. Accordingly the actual detail of research method must be standardized so far as possible to avoid unreliability resulting from changes in interviewer or researcher behaviour.

Although it is theoretically possible to distinguish neatly between these three concepts, they will often be closely inter-related in practice. Complete standardization of research method in any one project although theoretically desirable must be balanced against the extent to which individual respondents are not standardized in the same way. Thus, if the population being studied covers a wide range of different levels of literacy and capacity to verbalize, one must allow for the need to ensure adequate communication to all individuals in the population. In practice, therefore, we must aim at a research method which achieves the greatest possible degree of objectivity, validity and reliability but which at the same time is sufficiently flexible to provide for maximum communication with all individuals in the study population.

This may well mean that the researcher will define as clearly as possible the exact nature of the data which he wishes to obtain; he will then spell-out in the clearest possible terms the questions to be asked to obtain this data, the order in which they will be asked and the method which will be used by the interviewer. He must then give particular attention to the selection and training of interviewers. These interviewers must understand the purpose of the overall study and of every question within it, they must appreciate the importance of standardization, but be able to adapt the standard format in order to ensure the fullest possible communication with and co-operation from each respondent. Again, further information will be found in many of the texts recommended in the next chapter.

6.4 COMPARABILITY AND REPLICATION

It will often be useful to analyse the results of any particular evaluation project in terms of certain characteristics of the population. Whenever this is done it is highly desirable that the characteristics chosen and the way in which these are described should be similar to the patterns used in other studies. It will very often be particularly useful to use the characteristics and the categorizations of variation within each characteristic which are used in the national census. This will enable direct comparability between the study population and that of other research or between the study population and that of the nation as a whole.

Recommendations regarding descriptive statistics on children and youth have been prepared and published by the United Nations.² This provides an extremely valuable set of guidelines for consideration but the guidelines must be examined in the light of the country's own prevailing practices. Where any conflict occurs between the United Nations' recommendations and the statistical practice of the researcher's own country then the choice must be made as to which of the two is the more relevant — in most cases it will be more useful to relate directly to prevailing practices within the country.

Similarly there is often value in developing research methods which can be related directly to those methods and patterns used elsewhere. Obviously this matter will more often be relevant in general social research e.g., in a study of patterns in child-rearing used in a particular culture, than it will be in evaluation projects. However, even in evaluation it will be useful to examine similar projects which have already been carried out, even if in another country, partly to seek clues for the most adequate research design and partly to see whether it might be useful to make direct comparisons of results between two or more such studies.

NOTES AND REFERENCES

1. Schofield, M., *Social Research* (Heinemann Educational Books, London, 1969) pp. 24.
2. United Nations — Economic Commission for Asia and the Far East, *Guidelines for Statistics on Children and Youth* (United Nations, New York, E/CN.11/995, 1971).