

Questionnaires and Interviews

Asking questions can provide measurement of many concepts and variables important to transportation research. Transportation practitioners ask questions frequently as part of assessment and evaluation. The important thing to remember when choosing this method is that it must be the most appropriate one to measure the variables as you have defined them.

Whether you use the interview or questionnaire method, it must be because your operational definition calls for the subject's self-report. If it does not, or if there is reason to believe that the person cannot give a valid response then these methods are not appropriate.

The major difference between questionnaires and interviews is the presence of an interviewer. In questionnaires, responses are limited to answers to predetermine questions. In interviews, since the interviewer is present with the subject, there is an opportunity to collect nonverbal data as well and to clarify the meaning of questions if the subjects do not understand.

The written questionnaire has some advantages. For one thing, it is likely to be less expensive, particularly in terms of the time spent collecting the data. Questionnaires can be given to large numbers of people simultaneously; they can also be sent by mail. Therefore, it is possible to cover wide geographic areas and to question large number of people relatively inexpensively.

Another advantage of questionnaires is that subjects are more likely to feel that they can remain anonymous and thus may be more likely to express controversial opinions. This is more difficult in an interview, where the opinion must be given directly to the interviewer. Also, the written question is standard from one subject to the next and is not susceptible to changes in emphasis as can be case in oral questioning. There is always the possibility, however, that the written question will be interpreted differently by different readers, which is one reason for carefully pre-testing questionnaires.

Interviews have many advantages, the most significant of which is questioning people who cannot write their responses. This category also includes illiterate subjects or subjects who do not write as frequently as they speak. Oral responses from these individuals will contain much more information than would their written responses. Another advantage of the interview method is that it actually results in a higher response rate than does the questionnaire. Many people who would ignore a questionnaire are willing to talk, with an interviewer who is obviously interested in what they have to say.

Another advantage of the interview technique is that you can plan to ask questions at several levels to get the most information from the subject. This approach is unique to the interview. The combination of structured and unstructured questions can provide depth

and richness to the data and, at the same time elicit data that are comparable from one subject to the next.

When looking for a questionnaire or interview schedule to use in your study or when developing your own tool, you will have to consider the various kinds of questions that you can ask to obtain a range of data, and then decide which method is best suited to your variables. The content of the questions must be considered first, then the amount of structure in the format.

Question content or the purpose of the question falls into two basic categories: those aimed at facts and those aimed at perceptions or feelings. Factual questions ask subjects for information about themselves or about even or people about which they know something.

Nonfactual questions deal with the subjects' perception of what happened or their feelings about people, events, or things. They may also deal with the subjects' reasons for their behavior. In these kinds of questions, you are not interested in whether the subject's report is accurate but rather in the subject's perception, which may or may not accurately reflect the facts.

The format of interviews and questionnaires, as that of observational methods, can range from very structured to very unstructured, depending on how much is known about the range of possible responses.

Criteria for Selecting the Interview or Questionnaire

Advantages of the Interview	Advantages of the Questionnaire
The subject needs be able to read or write	This approach is less expensive in terms of time and money
The interviewer can observe the responses of the subject	Subjects feel a greater sense of anonymity
Questions may be clarified if they are misunderstood	The format is standard for all subjects and is not dependent on mood of interviewer
An-depth data may be obtained on any subject and are not dependent on predetermined questions	Large samples, covering large geographic areas, compensate for the expected loss of subjects
There is a higher response and retention rate	A greater amount of data over a broad range of topics may be collected