**Chapter 7**

# Choosing the Method of Data Collection

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This chapter guides researchers in the complex decision which mode to choose for a particular survey. When designing a survey, one has to balance survey errors (coverage, sampling, nonresponse and measurement error) and survey costs. In this chapter four main data collection methods are reviewed: face-to-face interviews, telephone interviews, mail surveys and Internet surveys. The guidelines given are based on theoretical and practical considerations and take into account the large body of empirical research on mode comparison. The chapter starts with a treatise on why one should expect mode difference, based on social psychology and communication theories, and availability of communication channels, media related factors, and interviewer effects are discussed. In the next section an overview is given on the influence of data collection mode and measurement and the consequence of a specific mode for question format and complexity of the questionnaire are discussed. This is followed by a detailed overview of empirical evidence on the influence of data collection mode on measurement error. Next mode choice and its consequences for noncoverage and nonresponse are discussed. The chapter ends with a comparison of data collection modes on logistic points, such as, timeliness, personnel requirements, and costs, and presents the reader with an extensive summary Table of advantages and disadvantages of the four main data collection methods (mail, internet, face-to-face, and telephone

## GLOSSARY OF KEY CONCEPTS

**Access Panel.** An access panel is basically a rich database of willing respondents, which is used as a sampling frame for Internet studies, but may be used for other data collection procedures too. Panel members are invited and selected in various ways, through self-selection via websites, through acquisition by other panel members, at the end of successful face-to-face or telephone interviews, and so forth. Quality panels use a probability sample (e.g., RDD telephone interview) to approach and invite potential panel members.

**Computer Assisted Self Interviewing (CASI). Also known as Computer Assisted Self Administered Questionnaires (CSAQ).** Defining characteristic is that the respondent operates the computer: questions are read from the computer screen and responses are entered directly in the computer. One of the most well-known forms of CASI is the web survey. Other forms are Disk-by-mail (DBM) and Interactive Voice Response (IVR).

**Face-to-face interview.** In a face-to-face interview an interviewer administers a structured or partly structured questionnaire to a respondent within a limited period of time and in the physical presence (usually at the home) of the respondent.

**Internet (Web) Survey.** Internet surveys are a form of self-administered questionnaires, in which a computer administers a questionnaire on a web site. Survey questions are viewed and answered using a standard web browser on a PC. The responses are transferred through the Internet to the server.

**Mail (postal) survey.** When a mail questionnaire is used, a respondent receives a structured questionnaire and an introductory letter by mail, answers the questions in her/his own time, without any assistance from the researcher or her/his representative except for any written instructions in the questionnaire or in the accompanying letter, and finally sends the questionnaire back.

**Mixed-mode survey.** A survey where multiple and different data collection modes are used to make contact with the respondents or to complete the total questionnaire.

**Satisficing.** When the cognitive tasks required to answer a question is quite burdensome, respondents may look for ways to avoid expending all the effort required to optimally process the information, while still maintaining the appearance of answering adequately and responsibly; they try to find a heuristic. This is called satisficing. The opposite, respondents attempt to be fully diligent, is called **optimizing**.

**Self-Administered Questionnaire (SAQ).** Questions are administered and answered without the assistance of an interviewer. There are several forms of SAQ, for instance paper questionnaires in mail surveys, group administered questionnaire in schools (e.g., tests), individual questionnaires that are filled in during an interview to ensure privacy, and drop off questionnaires, where surveyors personally deliver questionnaires, but the respondents fills in the questionnaire on their own and either mail it back or keep them for the surveyor to collect.

**Telephone interview.** In a telephone interview the interviewer administers the questions (from a structured questionnaire and within a limited period of time) via a telephone. Telephone interviewing is often centralized; that is, all interviewers work from a central location under direct supervision of a field manager or a quality controller.