Chapter 15

IVR: Interactive Voice Response

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The purpose of this chapter is to review Interactive Voice Response (IVR) as a data collection methodology, potential sources of survey error in IVR research, and practical considerations for the IVR researcher.

The chapter is organized around two main topic areas: 1) a comparison of IVR to other modes of data collection, with advantages and disadvantages for each; and 2) a discussion of the potential survey errors associated with IVR studies: measurement error, nonresponse error, and coverage error. The chapter reviews the literature surrounding these potential survey errors and provides practical recommendations to the IVR researcher in order to minimize these survey errors.

GLOSSARY OF KEY CONCEPTS

Break offs. Occur when a respondent fails to complete the survey request. The break off is determined to be at the last question the respondent answered before hanging up or exiting the survey. This results in a partial interview that may or may not be counted towards the final dataset, depending on the researcher's decision.

CATI. The acronym for Computer Assisted Telephone Interviewing, in which a questionnaire to be administered by telephone interviewers is programmed into a computer system that manages the data collection and eliminates the need for interviewers to use paper and pencil to record responses.

Coverage error. Occurs when some people are systematically excluded from the sampling frame or are not given an opportunity to participate in the survey. Examples include lack of telephone in a CATI survey, lack of Web access on a Web survey, or lack of a touchtone phone in an IVR survey.

Inbound studies. Those in which the sample member dials into an IVR system at his or her convenience.

IVR. The acronym for Interactive Voice Response, which is a data collection technology in which the computer plays a recording of the question to the respondent over the telephone, and the respondent indicates the response by pressing the appropriate keys on his or her touchtone telephone keypad.

Outbound studies. Those in which an interviewer dials out to the sample member to recruit respondents to participate and then transfers them directly into the IVR system.

PAPI. The acronym for Paper and Pencil Interviewing, which can take several forms, but is typically a mailed questionnaire in which the respondent is asked to write in their responses and mail their completed questionnaire back to the data collection organization.

Respondent burden. A measure of the amount of time and effort it takes a respondent to respond to a question or a survey.

Social desirability bias. Occurs when the respondent attempts to portray himself or herself in a positive light to the interviewer.

T-ACASI. The acronym for Touchtone-Audio Computer Assisted Self-Interviewing (see IVR).

TDE. The acronym for Touchtone Data Entry (see IVR).

VRE. The acronym for Voice Recognition Entry (see IVR).