

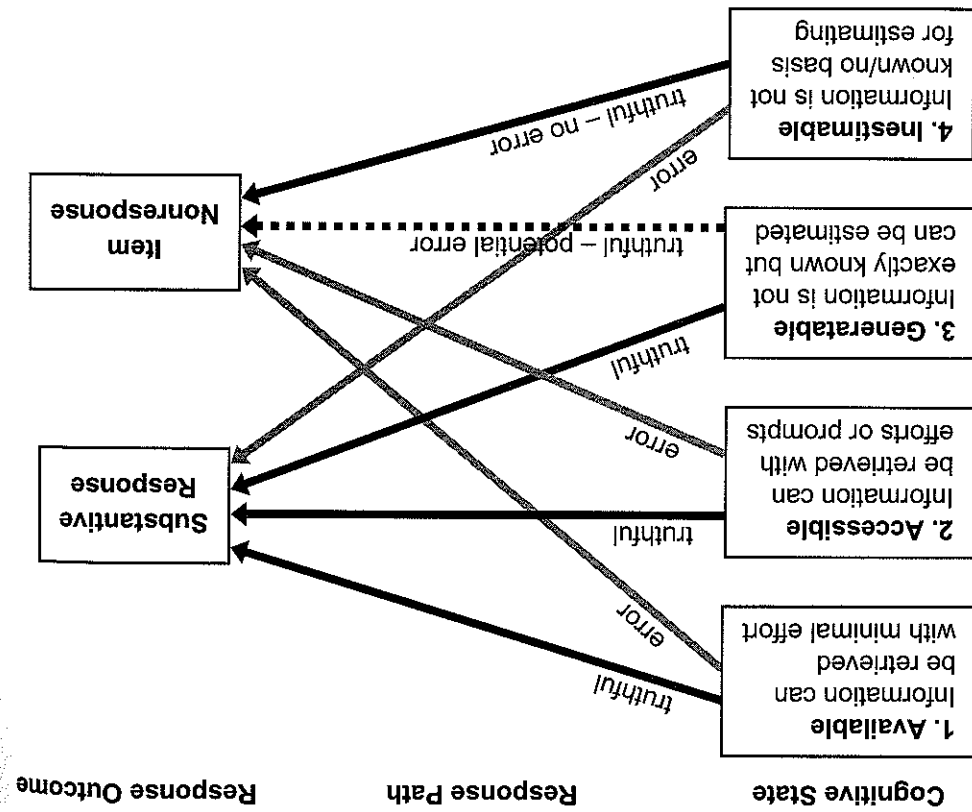


Figure 6.12 Beatty-Herrmann model of response process for item-missing data.

brief description of the survey, item nonresponse occurs after the measurement has been fully revealed. The causes of item nonresponse that have been studied in methodological research include: (a) inadequate comprehension of the intent of the question, (b) judged failure to retrieve adequate information, and (c) lack of willingness or motivation to disclose the information (see Beatty and Herrmann, 2002; Krosnick, 2002). However, research in this area is in its infancy. Most of the methodological research on question wording (see Chapter 7) has focused on properties of the questions that change the substantive answers. A research program in the causes of item-missing data would be of great utility to practitioners. There is evidence for item-missing data arising from respondents' judging that they do not have adequately precise answers. Some experiments show persons failing to give a specific income value but willingly providing an estimate within an income category [e.g., between \$50,000 and \$75,000 (Juster and Smith, 1997)]. Evidence for the effect of motivation for the respondent role is that open questions (requiring the respondents to write in answers they invent) tend to have larger missing data than closed questions (requiring the respondents to choose from a list of answers).

Figure 6.12 is a model of the response process posited by Beatty and Herrmann which distinguishes four levels of cognitive states regarding the information sought by the survey question: available, accessible, generatable, and

6.7 DESIGN FEATURES TO REDUCE UNIT NONRESPONSE

At this point in the chapter, we have noted that nonresponse error can harm the quality of survey statistics, that the extent of harm is a function of how the influences toward nonparticipation relate to the statistic in question, and that the larger the nonresponse rate, the larger the risk of nonresponse error (other things being equal). In general, the only visible part of the quality impacts of nonresponse is the nonresponse rate. Hence, much effort of survey researchers has been focused on reducing the nonresponse rates.

Figure 6.13 decomposes the participation into three steps: contact, the initial decision regarding participation, and the final decision regarding participation. The last step arises because many survey designs use repeated efforts to address the concerns of reluctant respondents.

We have learned in Section 5.3.4 that the different modes of data collection tend to have different average response rates. The typical finding is that face-to-face surveys have higher response rates than telephone surveys. Telephone surveys have higher response rates than self-administered paper and Web surveys, other things being equal. It is a common finding that the use of interviewers in face-to-face and telephone surveys increases response rates, both because of higher success at delivering the survey request and because of their effectiveness in addressing any concerns about participation that sample persons may have.

There are several features in Figure 6.13 that address interviewer actions. First, leverage-salience theory of survey participation offers several deductions about interviewer behavior. Recall that different sample persons are likely to vary in how they evaluate the survey request (assigning different "leverages" to different attributes). Since these are unknown to the interviewer, the interviewer must somehow discern them in order to gain their cooperation.

One further deduction from leverage-salience theory is that training interviewers to recite the same introductory description to each sample person will not be effective. This appears to have empirical support. When Morton-Williams (1993) compared response rates for interviewers instructed to recite a standard