Chapter 13 –
Data collection in the field,
Nonresponse error, and
Questionnaire screening

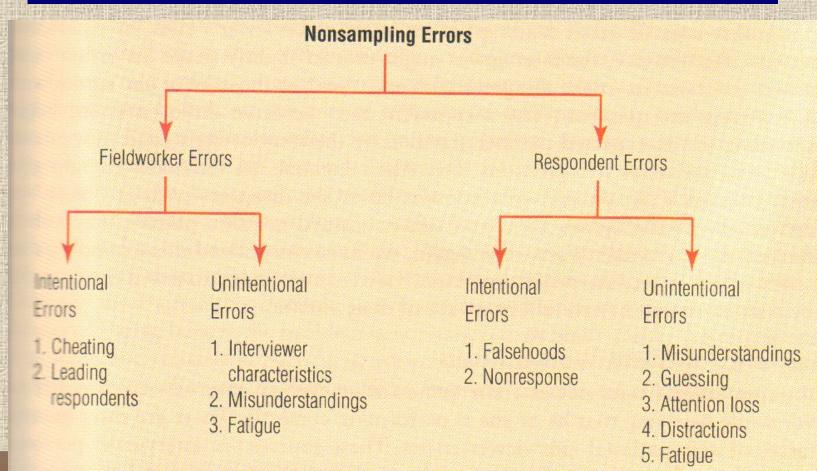
Chapter 13 – nonresponse error and questionnaire screening – step 9

There are 2 kinds of error in survey research:

- 1. Sampling error
- 2. Nonsampling error Cannot be measured!
 - which is defined as all errors in a survey except those due to the sample plan and sample size.
- (1) all types of nonresponse error,
- (2) data gathering errors,
- (3) data handling errors, (4) data analysis errors,
 - (5) interpretation errors

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Possible errors in the field data collection





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Field data collection quality control

TYPES OF ERRORS

Intentional field-worker errors

Cheating

Leading respondent

Unintentional field-worker errors

Interviewer characteristics

Misunderstandings

Fatigue

Intentional respondent errors

Falsehoods

Nonresponse

Unintentional respondent errors

Misunderstandings

Guessing

Attention loss
Distractions

CONTROL MECHANISMS

Supervision Validation

Selection and training of interviewers Orientation sessions and role playing Require breaks and alternate surveys

Assuring third-person anonymity and confidentiality Incentives

Validation checks

Third-person technique

Assuring third-person anonymity and confidentiality

Incentives

Third-person technique

Well-drafted questionnaire

Direct questions

Well-drafted questionnaire

Response options (e.g., "unsure")

Reversal of scale endpoints

Prompters

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Data Collection Errors with Online Surveys

- Multiple submissions by the same respondent
- Bogus respondents and/or responses
- Misrepresentation of the population

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Nonresponse error

Nonresponse is defined as a failure on the part of a prospective respondent to take part in the survey or to answer specific questions on the questionnaire.

There are 3 different types of potential nonresponse error:

- A prospective respondent may refuse to participate in the survey
- A respondent may break off or stop answering in the middle of the survey
- A respondent may refuse to answer a particular question but continue to answer following questions

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Measuring nonresponse error

The **response rate** essentially enumerates the percentage of the total sample with which interviews were completed.

Response rate is defined as the ratio of the number of completed interviews to the number of eligible units in the sample.

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Measuring nonresponse error

CASRO

Response Rate Response rate =

Formula

completions

completions + $\left(\frac{\text{completions}}{\text{completions} + \text{ineligible}}\right)$

× (refusals + not reached)

Here are the calculations.

Response rate =
$$\frac{400}{400 + \left(\frac{400}{400 + 300}\right)(100 + 200)}$$

Calculation of CASRO Response Rate

$$=\frac{400}{400 + (0.57)(300)}$$

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<u>Discussion question:</u> On your first day as a student marketing intern at the O-Tay Research Company, the supervisor hands you a list of yesterday's telephone interviewer records. She tells you to analyze them and to give her a report.

Ron	Mar	y	Pam	Isabelle	Designation
Completed 20	30 1	5	19	\mathbf{C}	
Refused 10	2 8	3	9	R	
Ineligible 15	4 1	4	15	IR	
Busy 20	10 2	21	23	В	
Disconnected	0 1		3 2	D	
Break-off 5	2 7	7	9	T	
No answer 3	2 4	1	3	NA	
	VOTE STATE	1007			

Well, get to it!

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Reducing Nonresponse Error

- Mail surveys:
 - Advance notification
 - Monetary incentives
 - Follow-up mailings
- Telephone surveys:
 - Callback attempts



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Unreliable Responses

Unreliable responses are found when conducting questionnaire screening, and an inconsistent or unreliable respondent may need to be eliminated from the sample.