

Marketing research

Chapter 13 –

**Data collection in the field,
Nonresponse error, and
Questionnaire screening**

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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,**

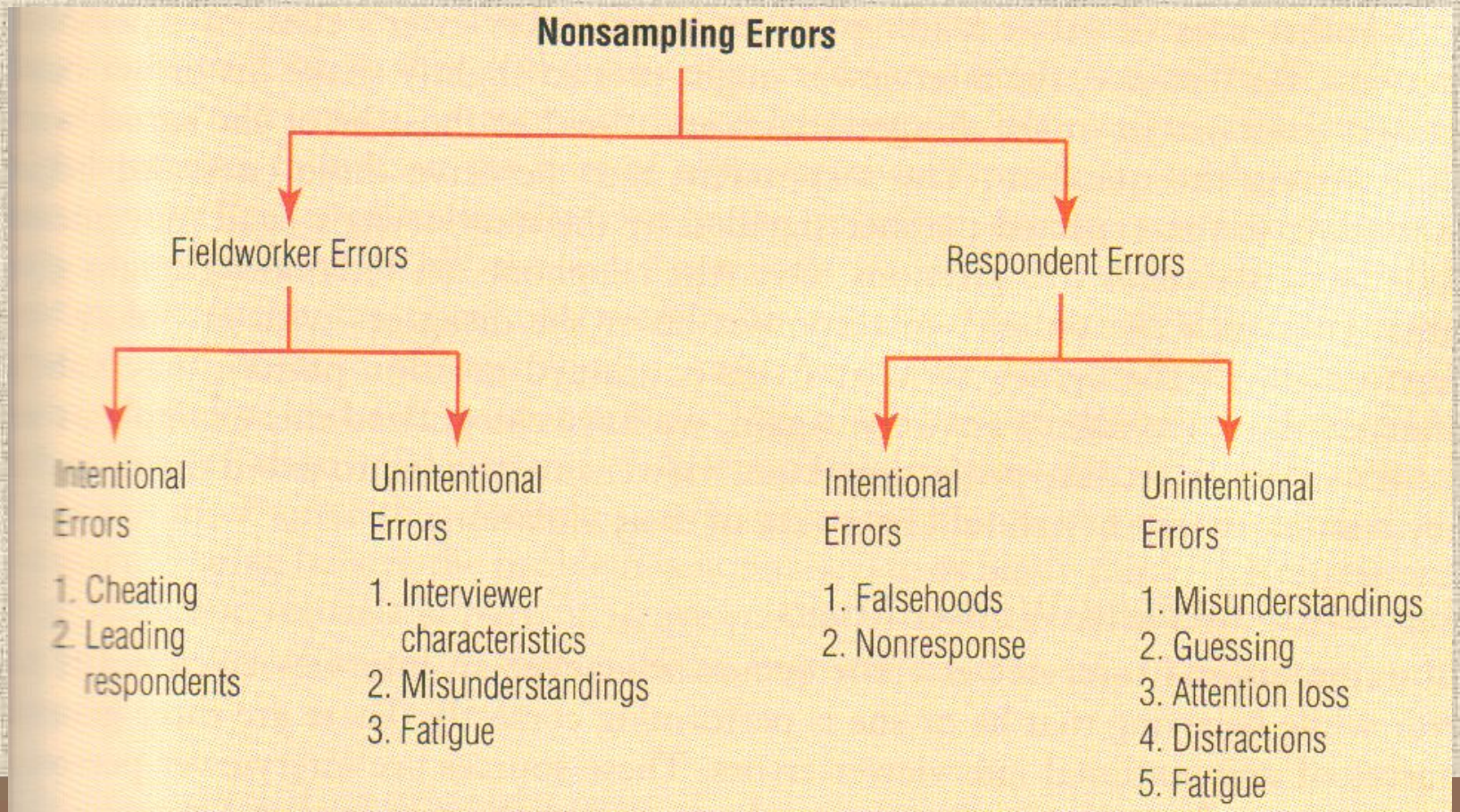
(3) data handling errors, (4) data analysis errors,

(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

CONTROL MECHANISMS

Intentional field-worker errors

Cheating }
Leading respondent }

{ Supervision
{ Validation

Unintentional field-worker errors

Interviewer characteristics
Misunderstandings
Fatigue

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

Intentional respondent errors

Falsehoods

{ Assuring third-person anonymity and confidentiality
{ Incentives
{ Validation checks
{ Third-person technique

Nonresponse

{ Assuring third-person anonymity and confidentiality
{ Incentives
{ Third-person technique

Unintentional respondent errors

Misunderstandings

{ Well-drafted questionnaire
{ Direct questions

Guessing

{ Well-drafted questionnaire
{ Response options (e.g., “unsure”)

Attention loss

Distractions

Fatigue

{ 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 Formula

$$\text{Response rate} = \frac{\text{completions}}{\text{completions} + \left(\frac{\text{completions}}{\text{completions} + \text{ineligible}} \right) \times (\text{refusals} + \text{not reached})}$$

Here are the calculations.

Calculation of CASRO Response Rate

$$\begin{aligned} \text{Response rate} &= \frac{400}{400 + \left(\frac{400}{400 + 300} \right) (100 + 200)} \\ &= \frac{400}{400 + (0.57)(300)} \\ &= 70.0\% \end{aligned}$$

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Discussion question: *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	Mary	Pam	Isabelle	Designation
Completed	20	30	15	19	C
Refused	10	2	8	9	R
Ineligible	15	4	14	15	IR
Busy	20	10	21	23	B
Disconnected	0	1	3	2	D
Break-off	5	2	7	9	T
No answer	3	2	4	3	NA

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.