

KVALITA VÝZKUMU a VÝZKUMNÁ CHYBA

TOTAL SURVEY ERROR

Literatura

Biemer a Lyberg. 2003, kap. 1 a 2

Groves 2004. kap. 1

Historie a hlavní koncepty

Sampling error

Sampling error + Non-sampling error

Cognitive Aspects of Survey Methodology (CASM)

Total Survey Error (TSE)

→ Mean square error (MSE)

Survey Effects

Selection bias

Total Survey Quality (TSQ)

Total Research Quality (TRQ)

Kontext: kvantitativní výzkum - **survey**

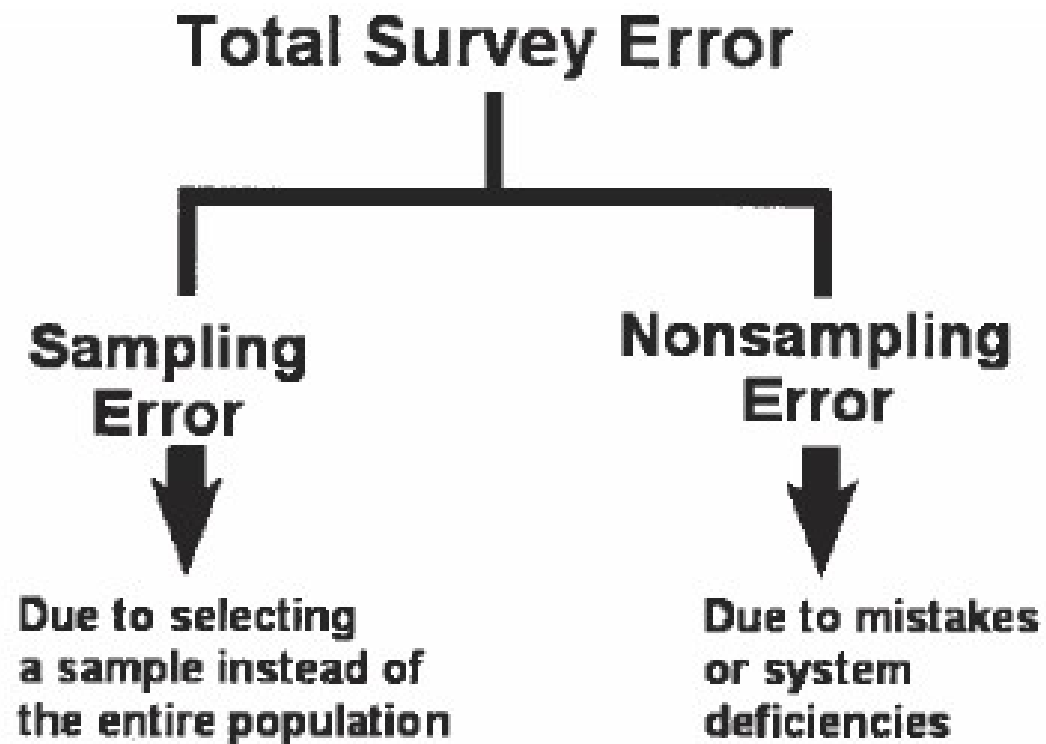
Měření

Výzkumná chyba (survey error)

→ Best practice

→ Total survey error

Sampling error + Non-sampling error

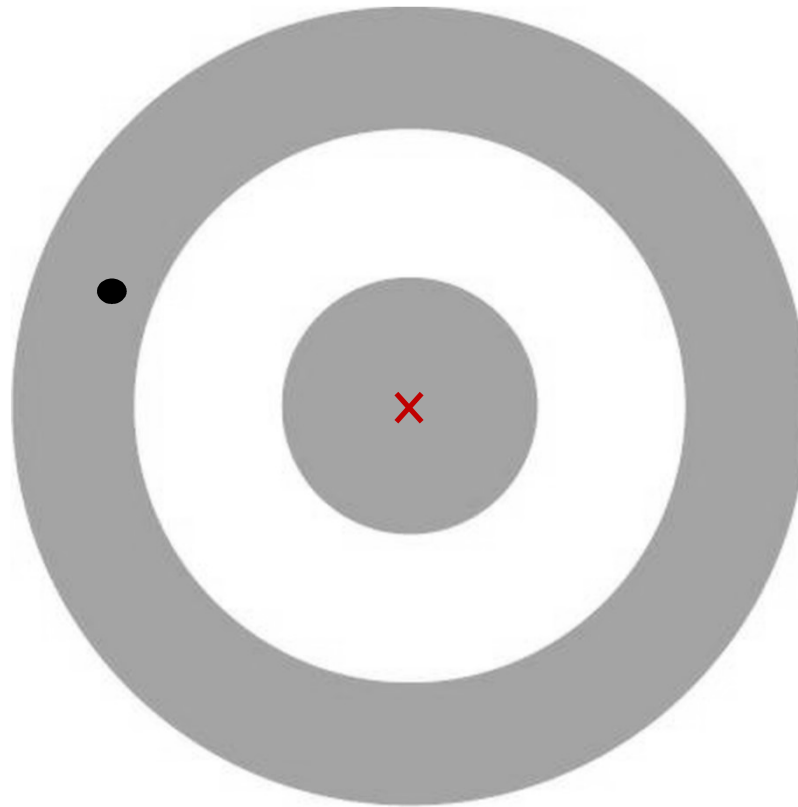


Nonsampling error

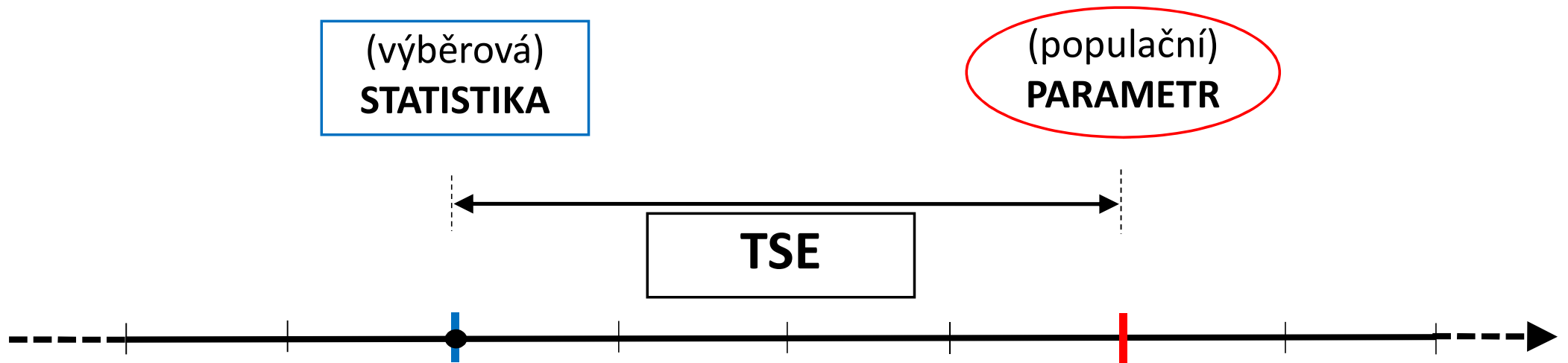
Table 2.2 Five Major Sources of Nonsampling Error and Their Potential Causes

Sources of Error	Types of Error
Specification error	Concepts Objectives Data elements
Frame error	Omissions Erroneous inclusions Duplications
Nonresponse error	Whole unit Within unit Item Incomplete information
Measurement error	Information system Setting Mode of data collection Respondent Interview Instrument
Processing error	Editing Data entry Coding Weighting Tabulation

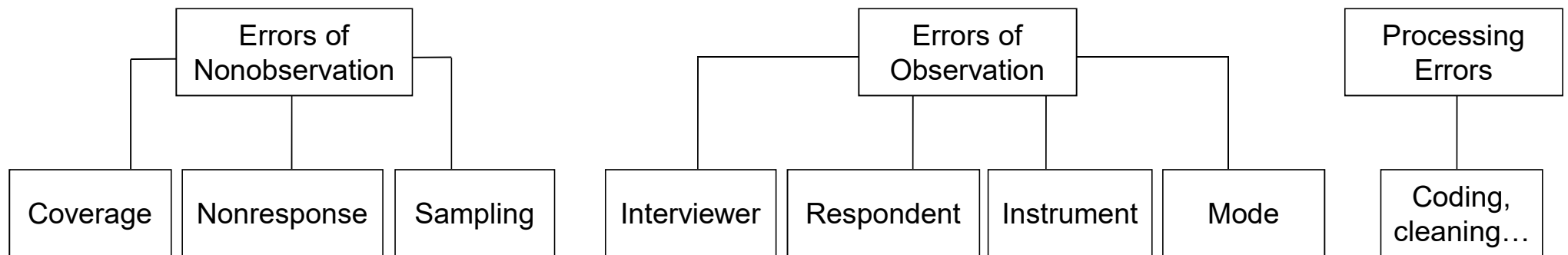
Total Survey Error (TSE)

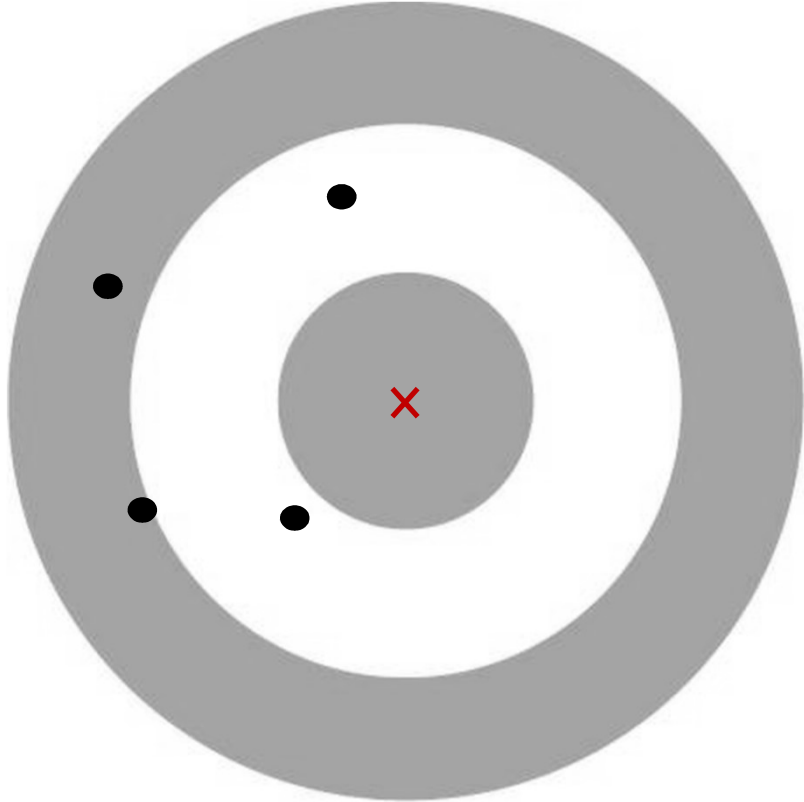


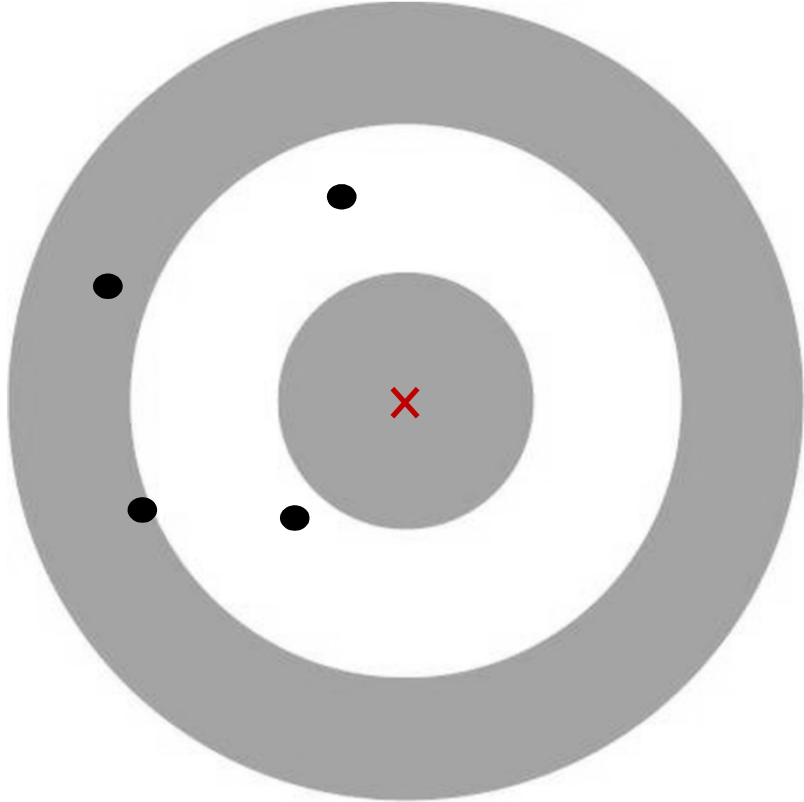
Total Survey Error (TSE)



Zdroje chyb (TSE, Groves 2004)



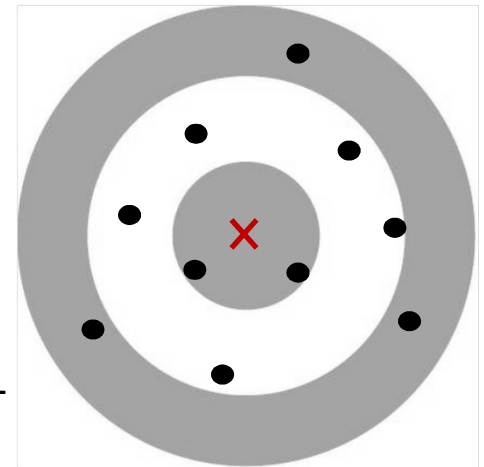




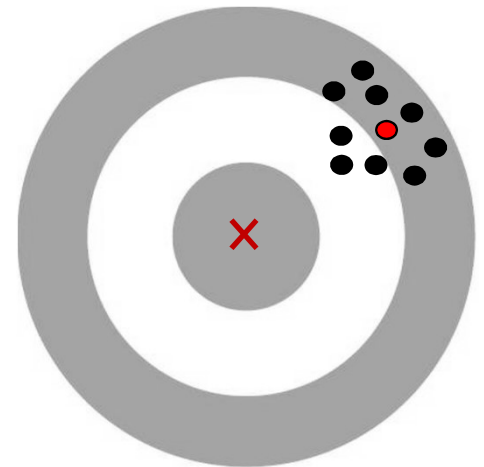
Výpočet MSE

MSE: Bias + variance

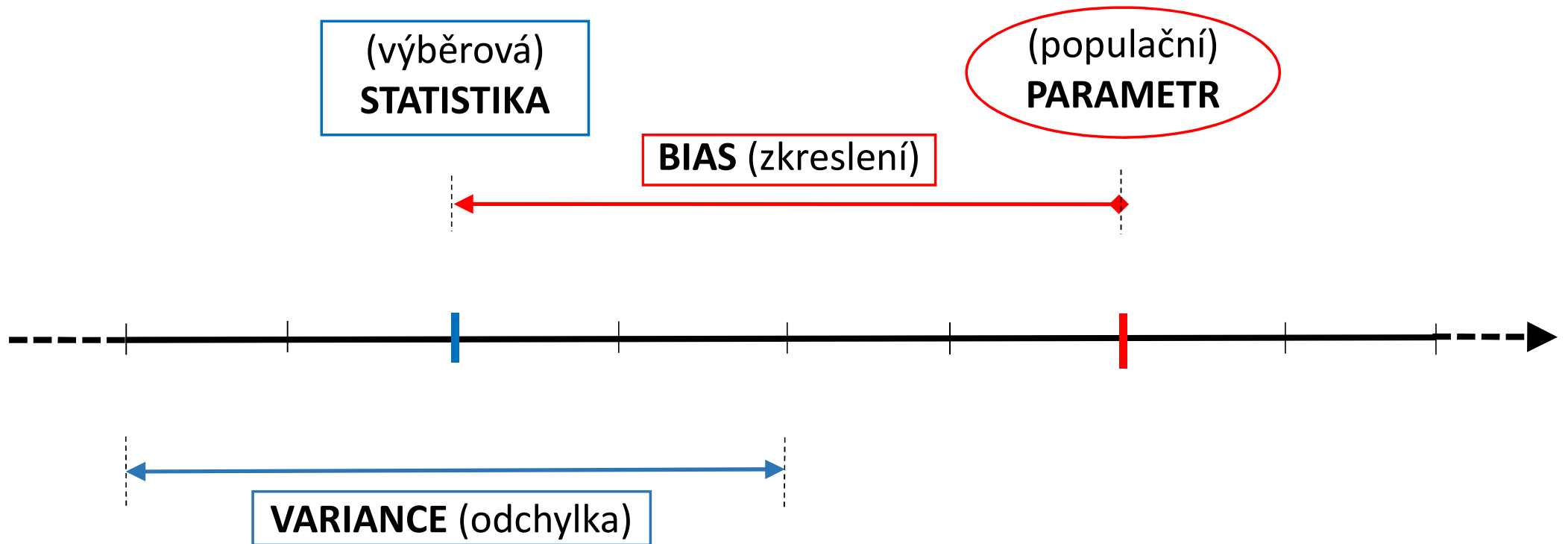
Bias = 0,023
Variance = 21,81
MSE = 21,8



Bias = 20,25
Variance = 1,17
MSE = 21,4

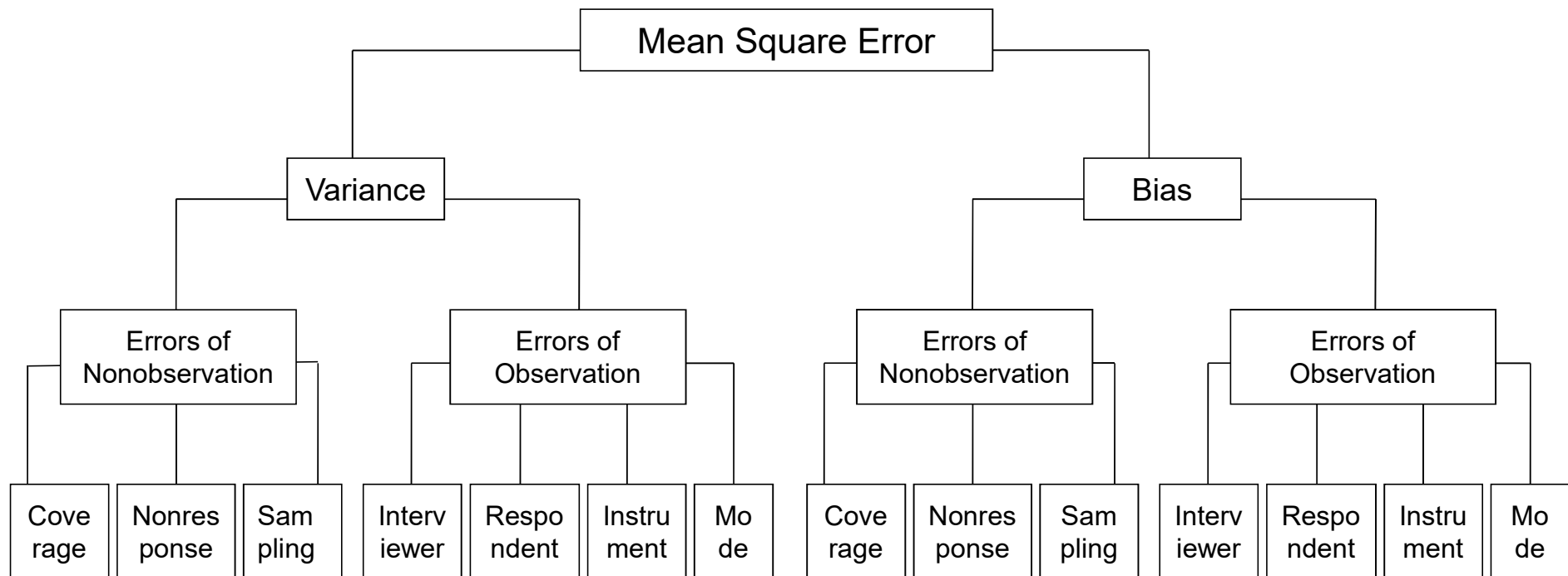


Druhy chyb



Kvalita měření: $X = T + E_s + E_n$

Složky výzkumné chyby (Groves)



Smysl koncepcie TSE (MSE)

Table 2.5 Risk of Variable Errors and Systematic Errors by Major Error Source

MSE Component	Risk of Variable Error	Risk of Systematic Error
Specification error	Low	High
Frame error	Low	High
Nonresponse error	Low	High
Measurement error	High	High
Data processing error	High	High
Sampling error	High	Low

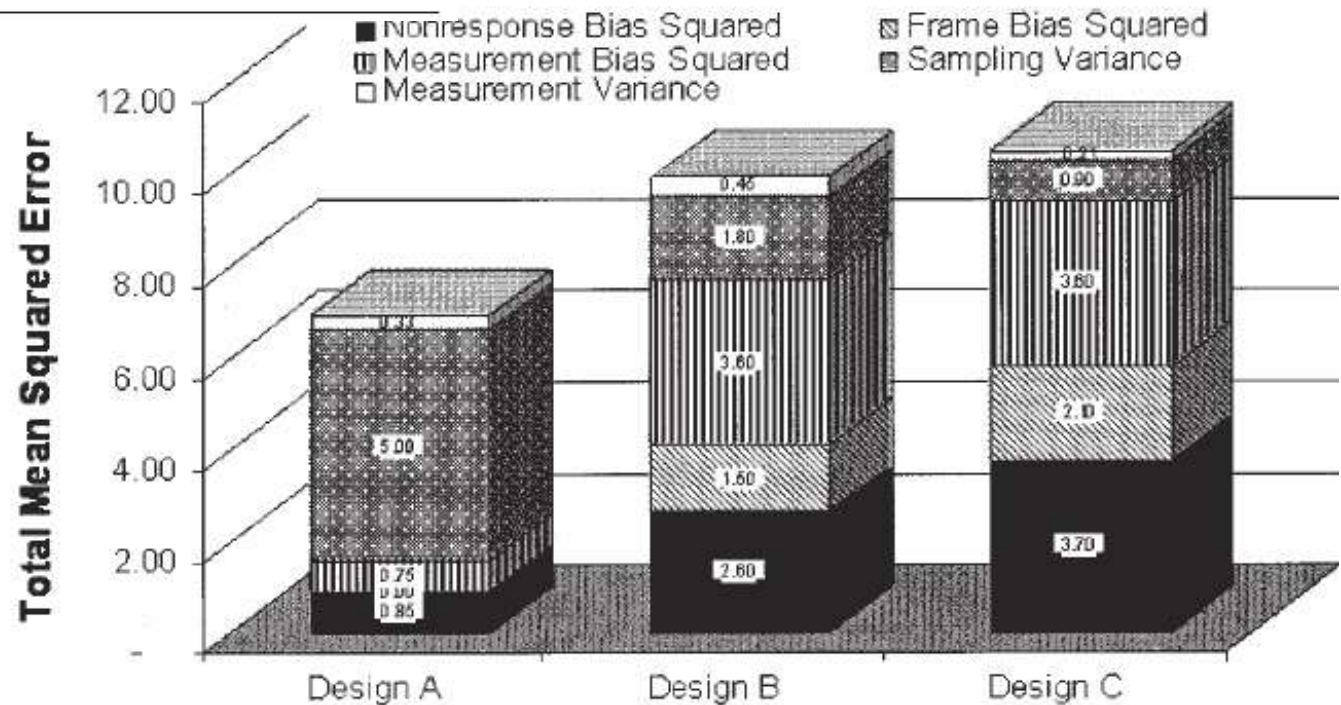
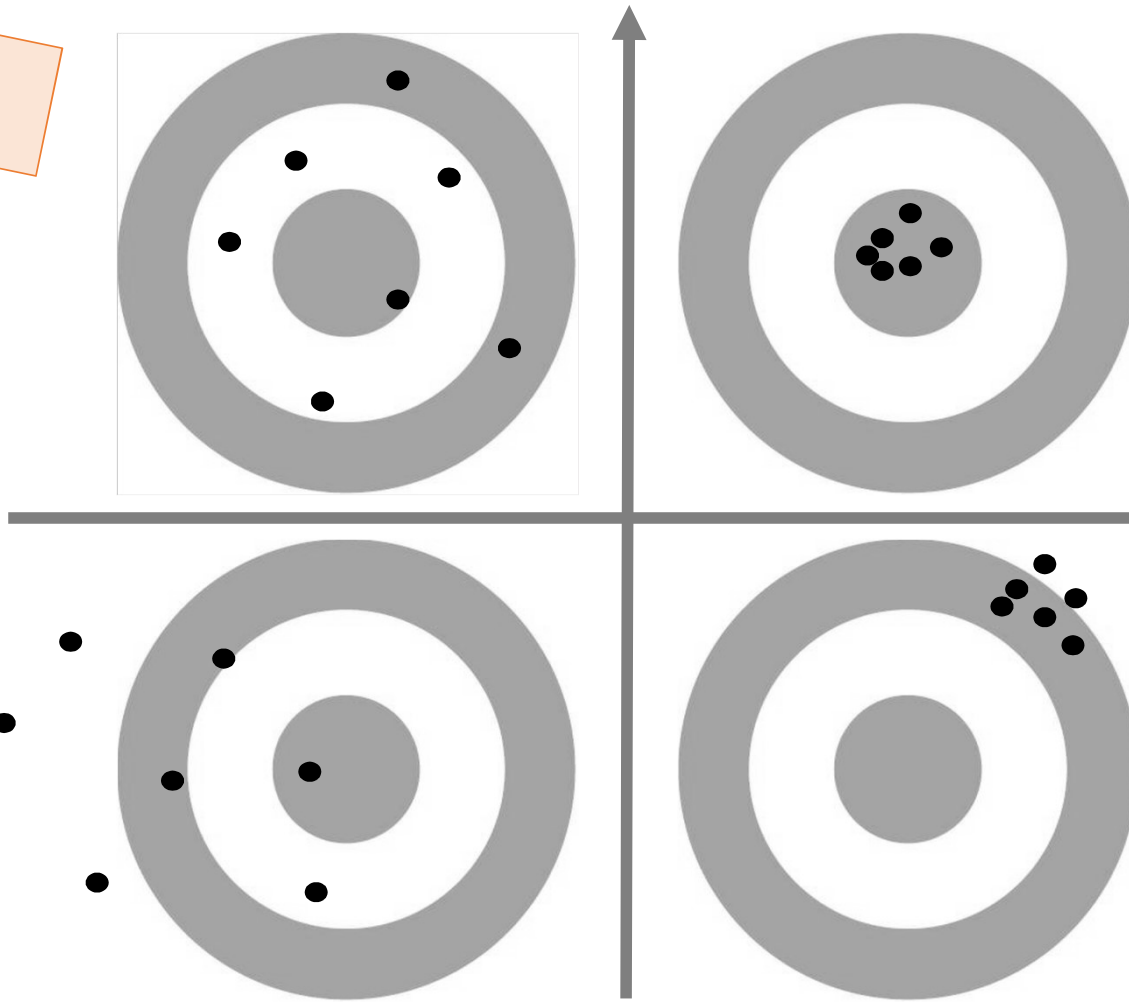


Figure 2.7 Comparison of the total mean squared error for three survey designs. Design A is preferred since it has the smallest total error, even though sampling error is largest for this design.

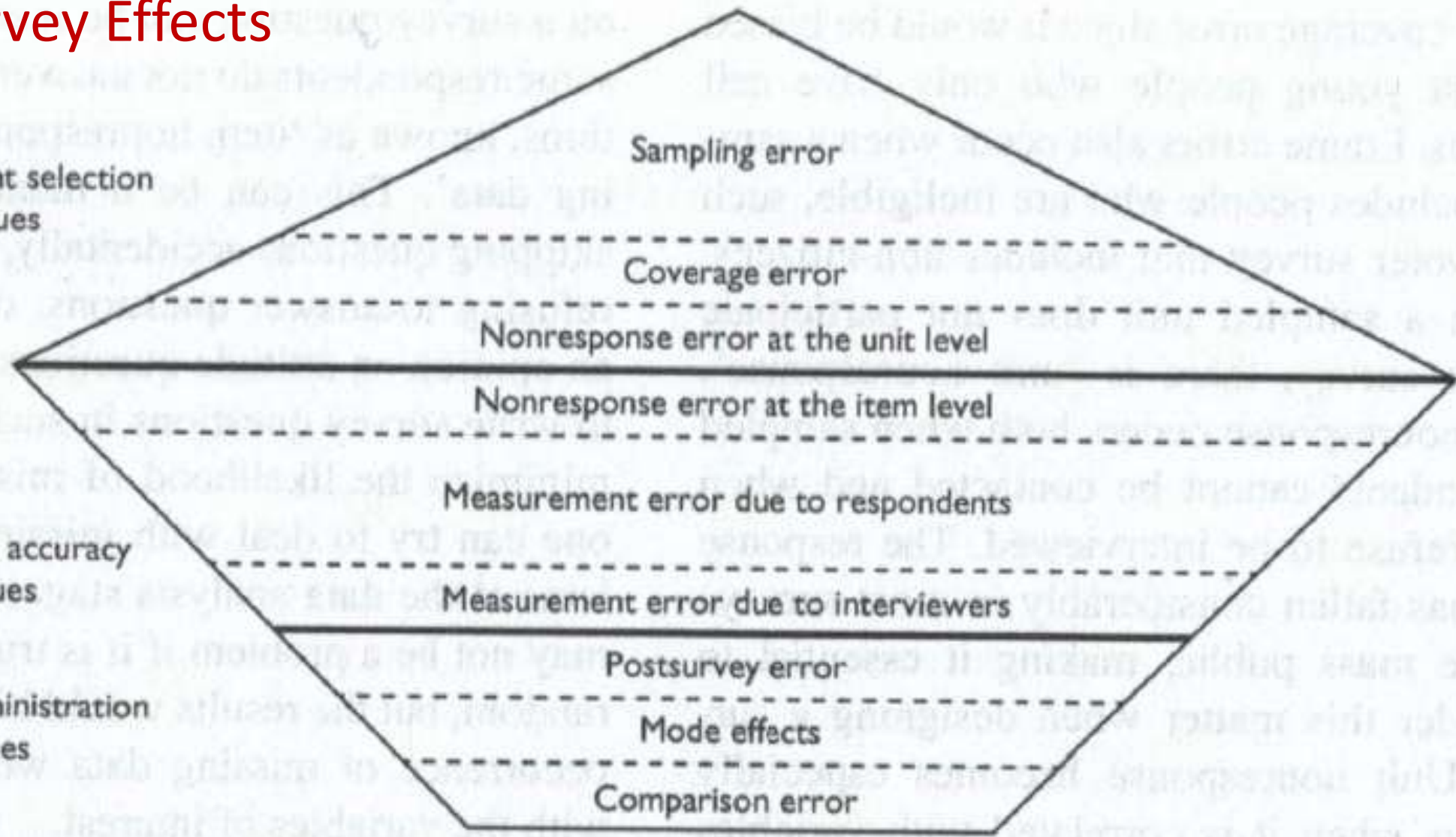
Reprezentativita vzorku

Velikost vzorku

Errors



Survey Effects



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Quality

„fitness for use“

Vícedimenzionální koncept:

- **Accuracy**
- Timeliness
- Accessibility

EUROSTAT (2000)

- *Relevance of the concept*
- *Accuracy of estimates*
- *Timeliness and punctuality in disseminating results*
- *Accessability and clarity of the information*
- *Comparability*
- *Coherence*
- *Completeness*

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