INSTITUTE FOR SOCIAL RESEARCH
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A Total Survey Error Perspective on Comparative Surveys

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Presentation Outline

1. Background

2. Integrated Total Survey Error Model

   ▪ Contribution to Errors:

      ▪ Representation: Coverage, Sampling, Nonresponse errors

      ▪ Measurement: Validity, Measurement errors

   ▪ Measurement error – expanded view

3. Conclusion

Background

1. The scope, scale, and number of multicultural, multiregional or multinational (3M) surveys continues to grow

    a. Examples: European Social Survey (20+ countries), the World Values Survey (75+ countries), the Gallup World Poll (160 countries)

2. The purpose is comparability – An estimate for one country should be reasonably comparable to another.

3. However, comparability in 3M surveys is affected by various error sources that we are used to considering plus some additional ones.

Background, continued…

1. 3M surveys have an error typology that differs from monocultural surveys.

   a. Error sources in 3M surveys are typically amplified

   b. 3M surveys often require additional operations – i.e. adaptation, translation

2. Few attempts have been made to adapt the TSE framework to 3M surveys (except see: Smith's (2011) refined TSE model).

3. The proposed TSE typology integrates error sources – and associated methodological and operational challenges that may limit comparability.

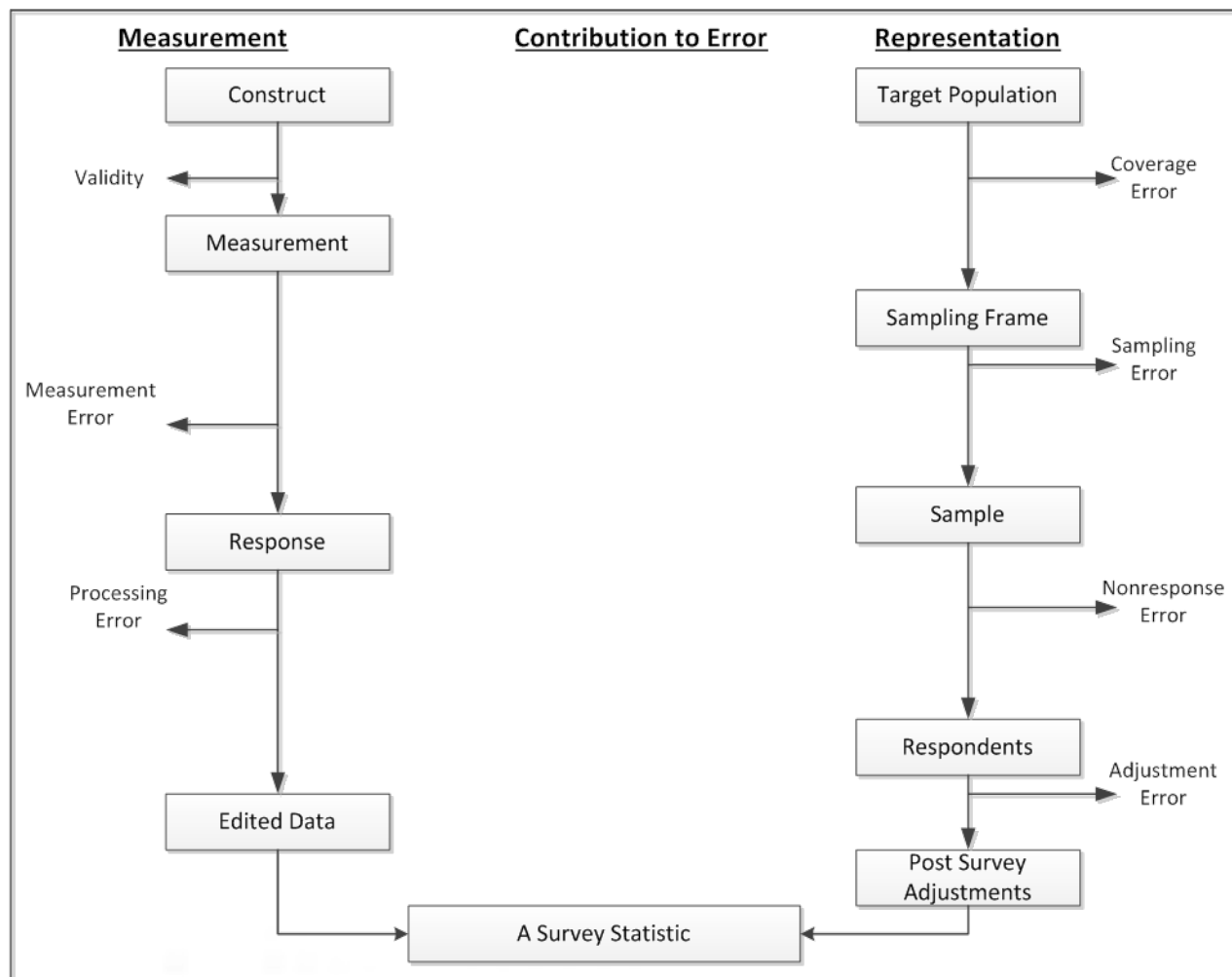# Total Survey Error (Groves et al., 2004)
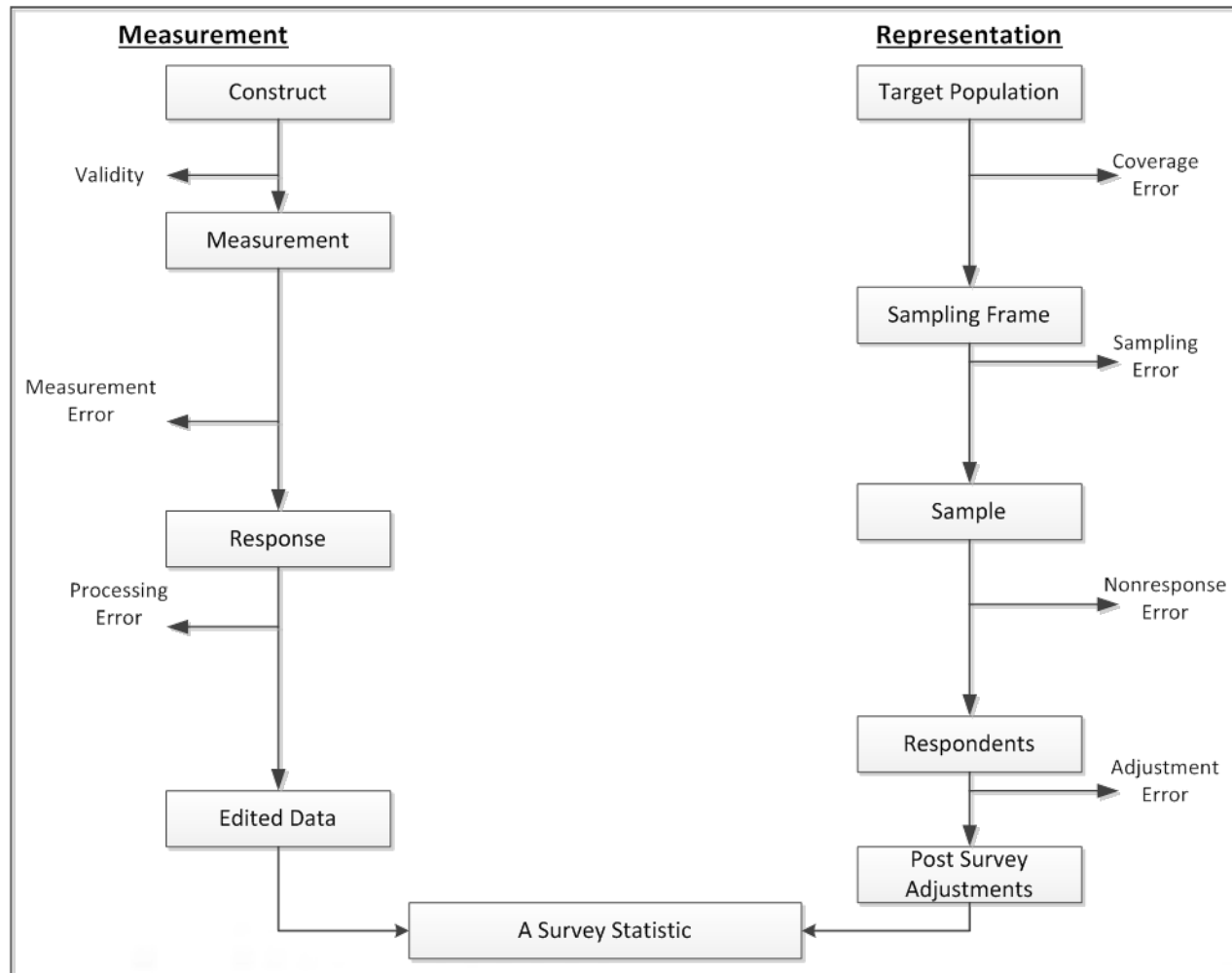
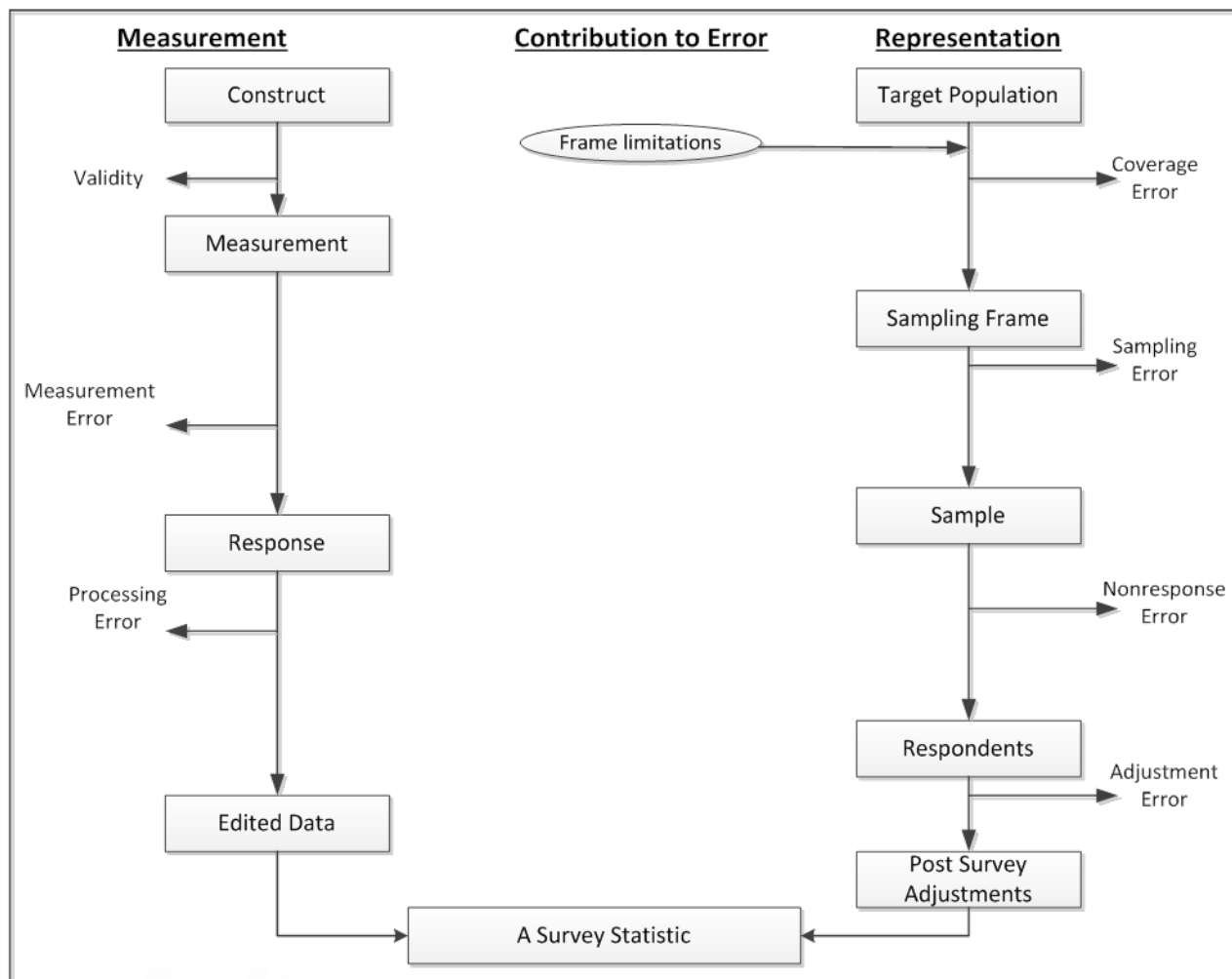# An Integrated TSE Model

Some general points:

1. The framework is statistic specific

2. Error sources may interact

3. Bias/Variance

4. Not all error sources can be quantified
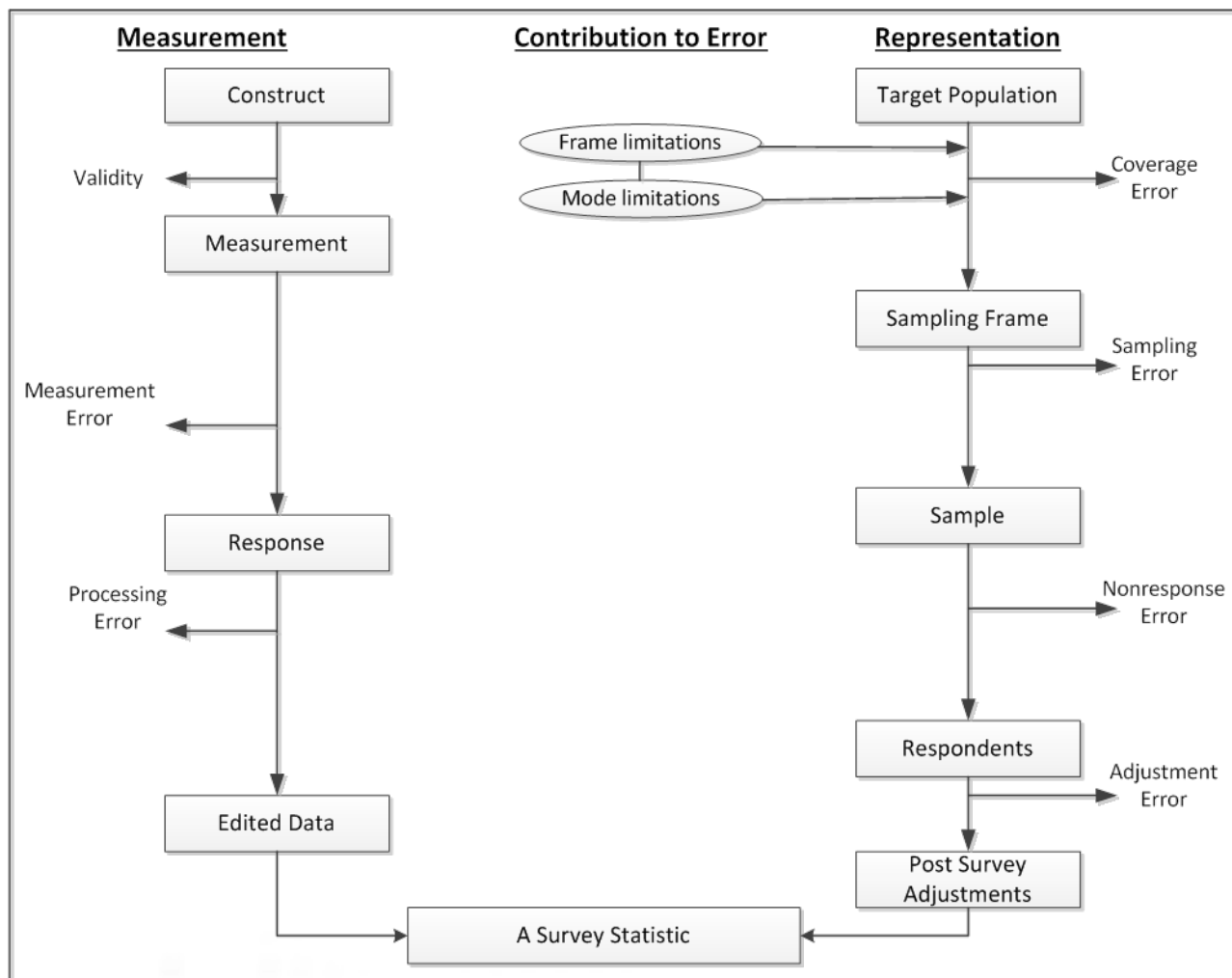
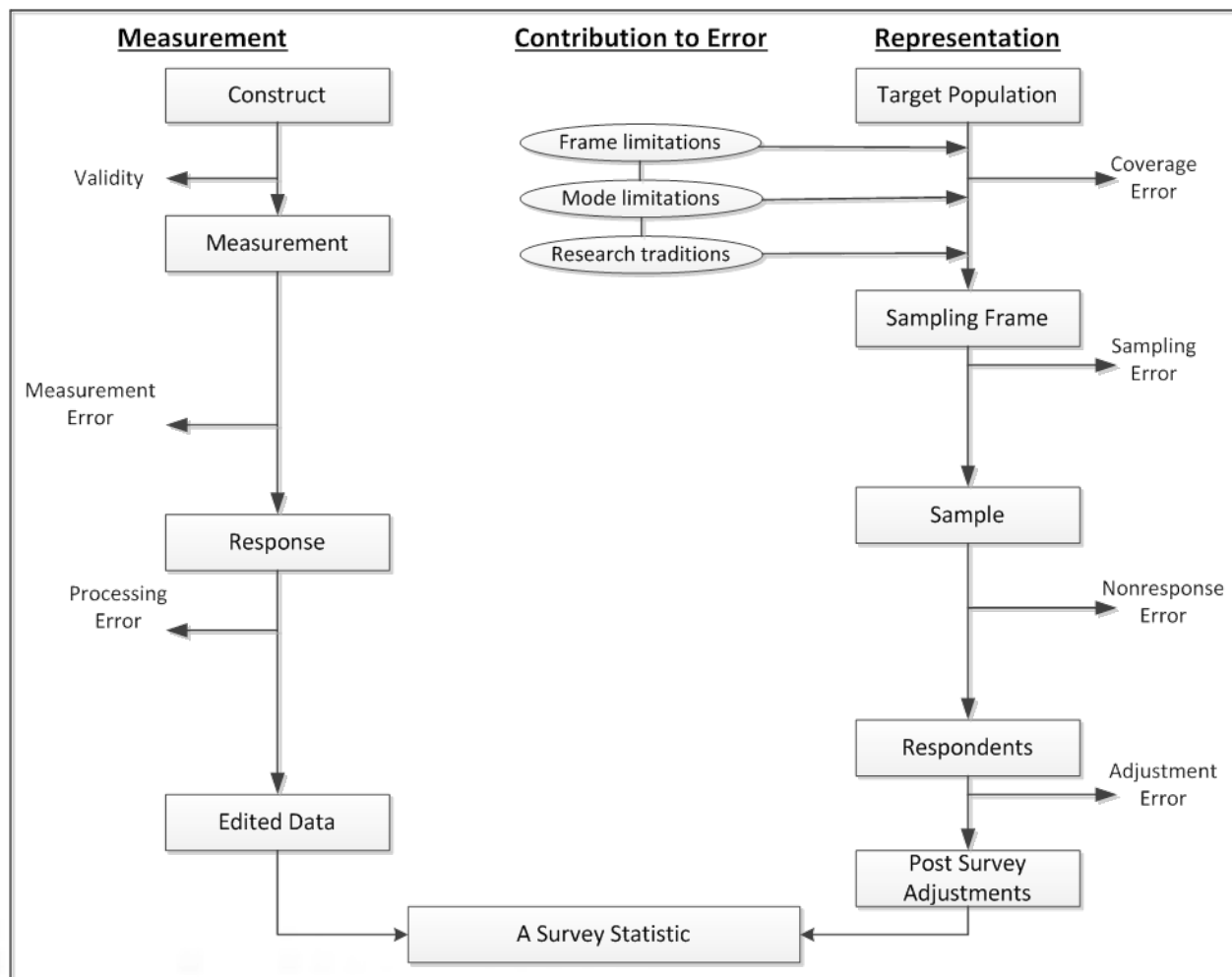# An Integrated Total Survey Error Framework

Modified from Groves et al. (2004)

An Integrated TSE Model: Coverage Error

Modified from Groves et al. (2004)

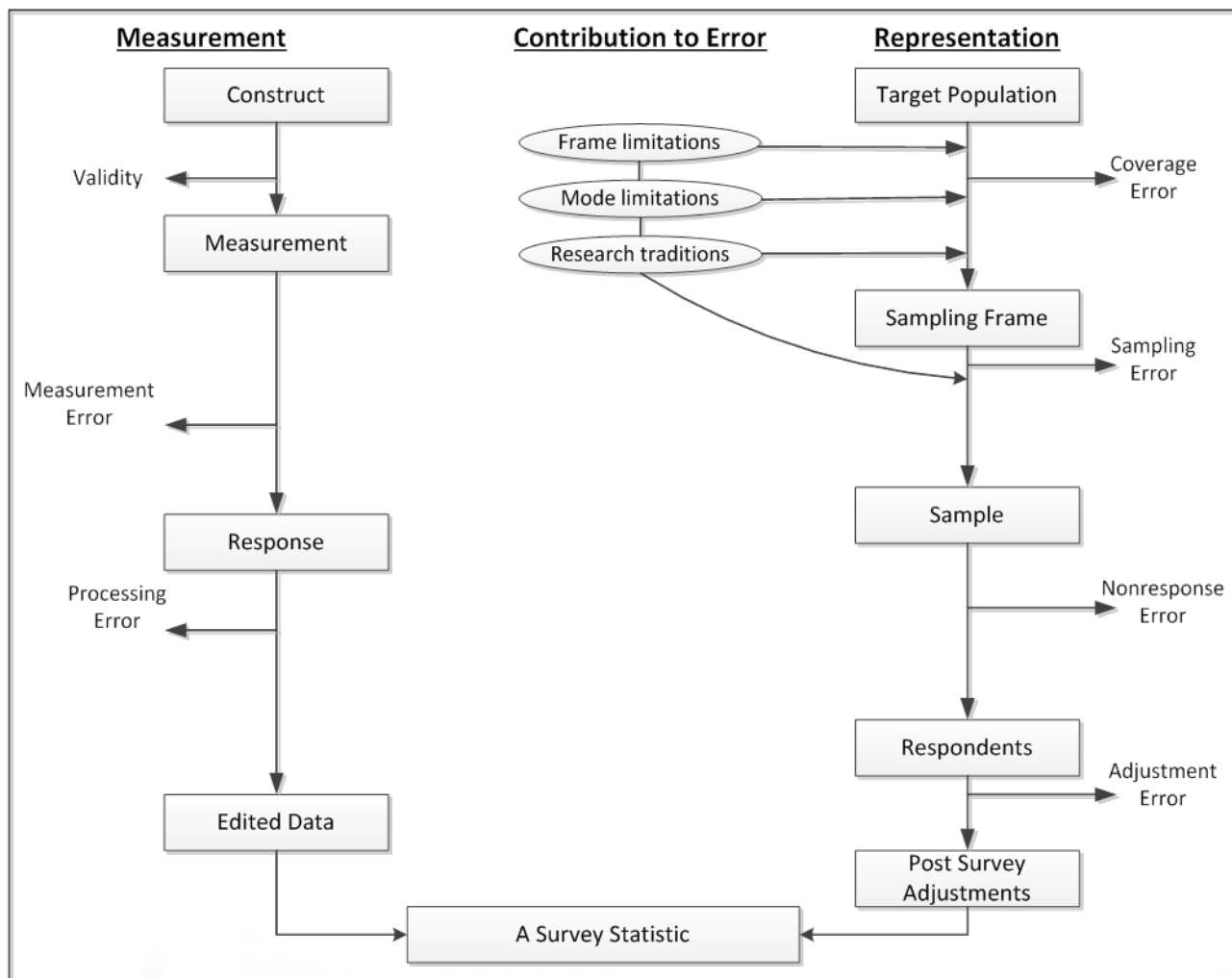# An Integrated TSE Model: Coverage Error

Modified from Groves et al. (2004)

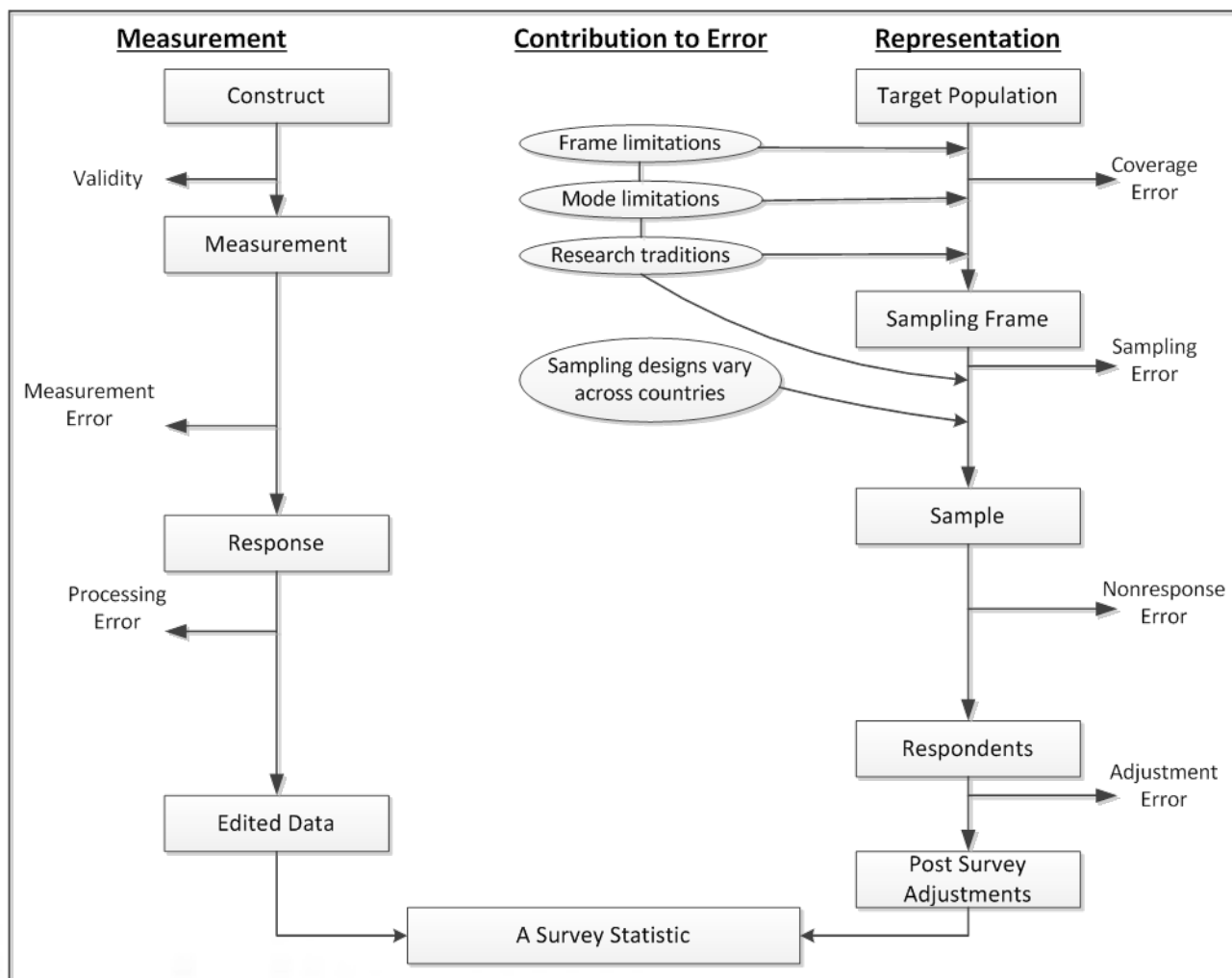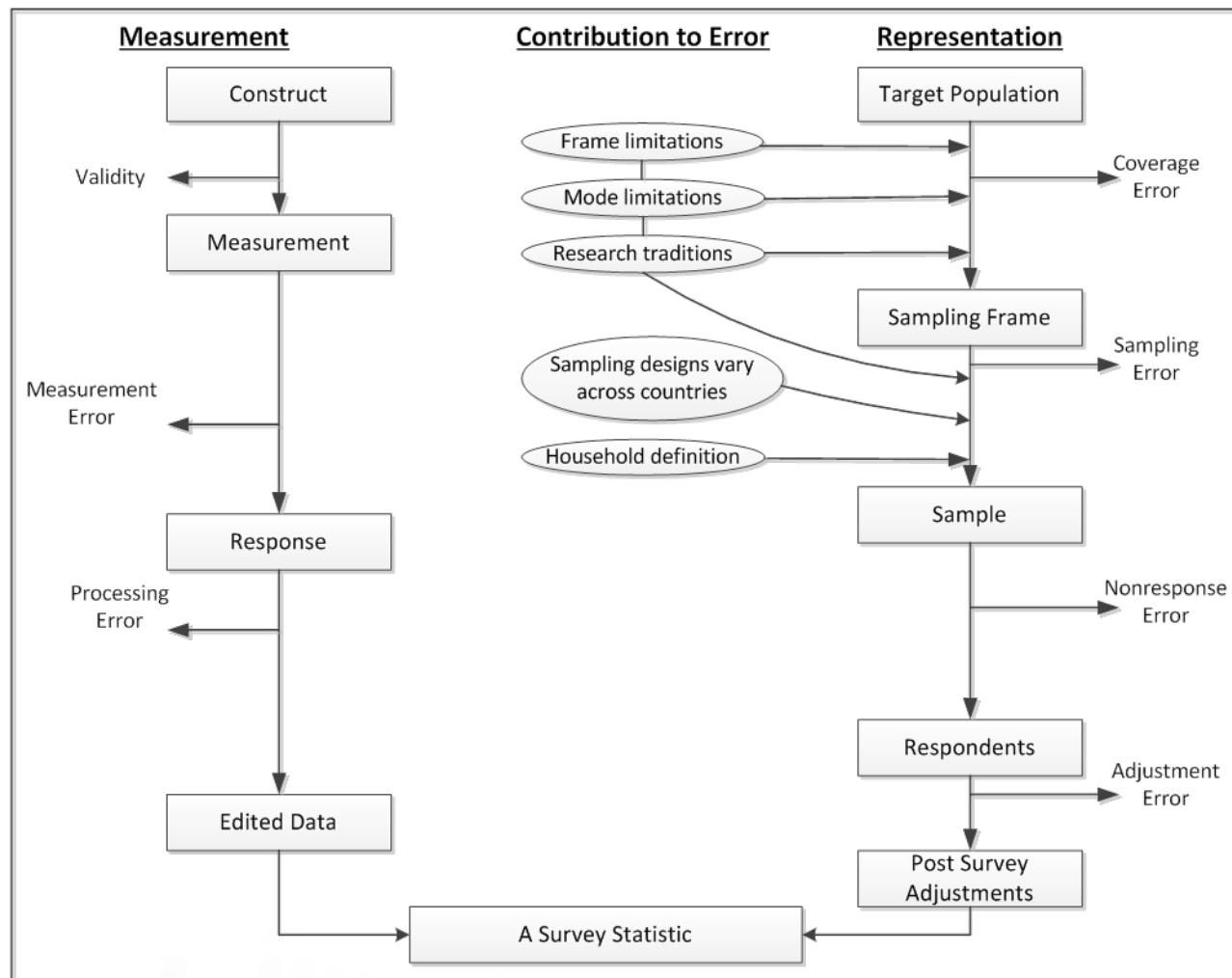# An Integrated TSE Model: Coverage Error

Modified from Groves et al. (2004)

An Integrated TSE Model: Sampling Error

Modified from Groves et al. (2004)

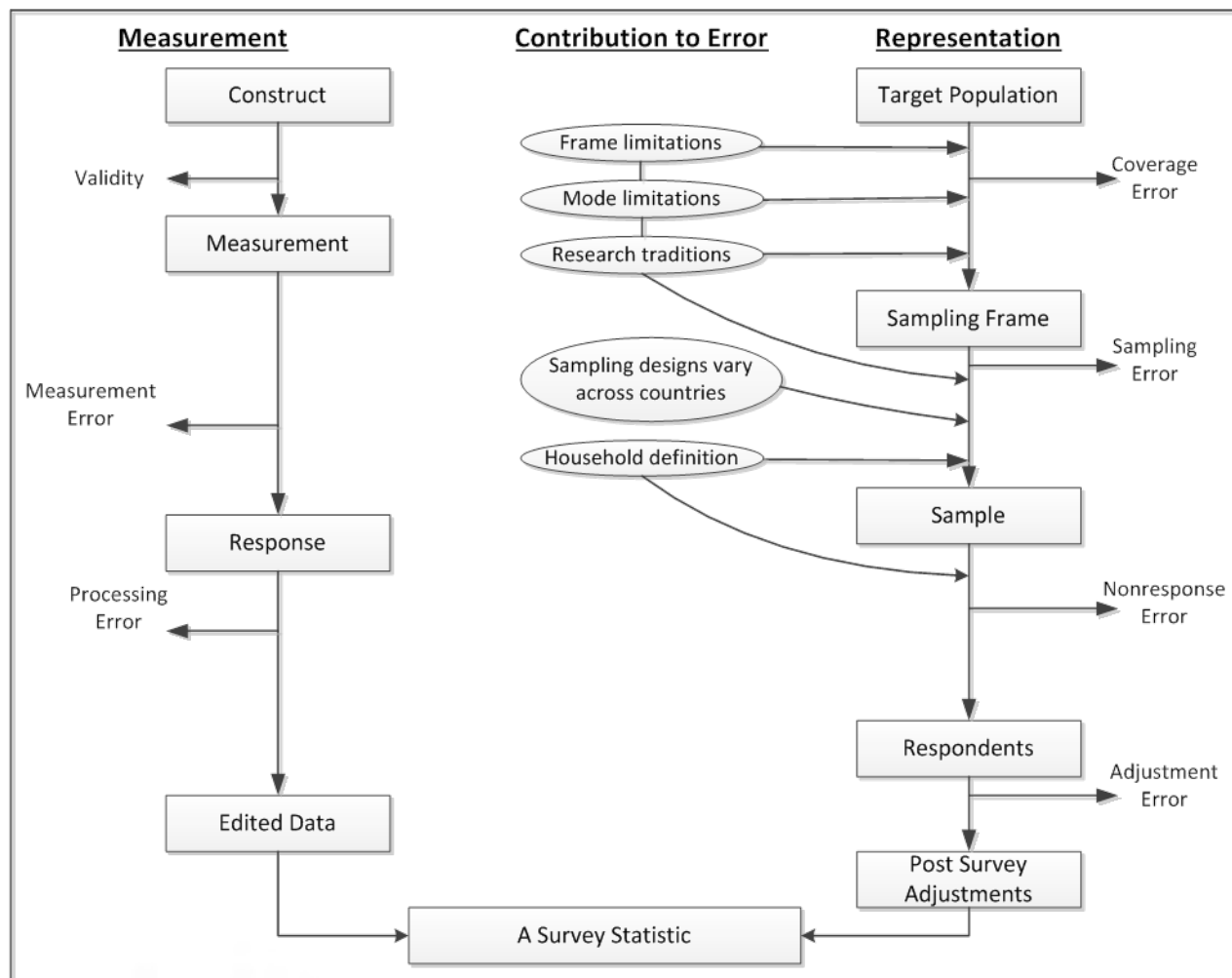# An Integrated TSE Model: Sampling Error

Modified from Groves et al. (2004)

An Integrated TSE Model: Sampling Error

Modified from Groves et al. (2004)

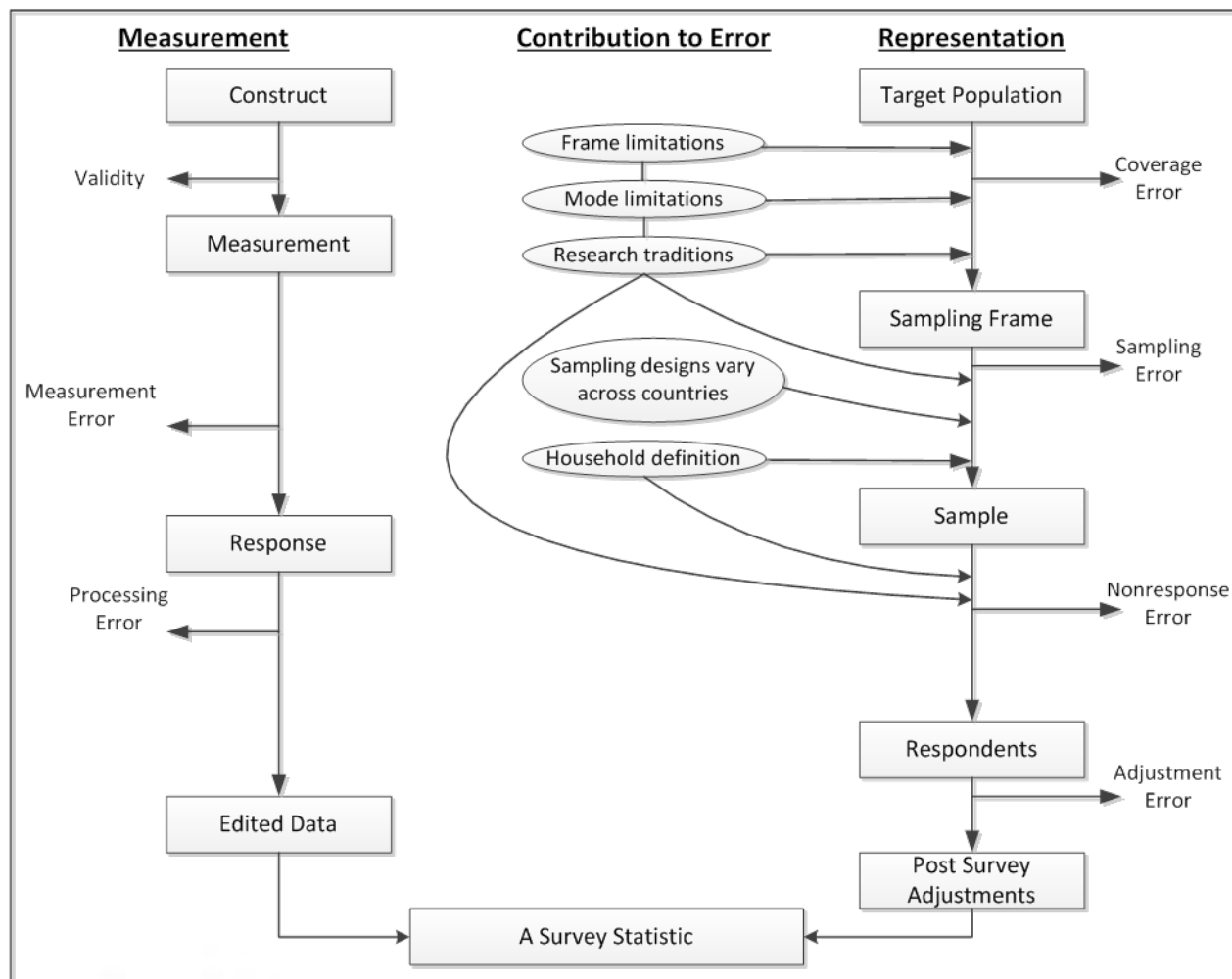# An Integrated TSE Model: Nonresponse Error

Modified from Groves et al. (2004)

An Integrated TSE Model: Nonresponse Error

Modified from Groves et al. (2004)

An Integrated TSE Model: Nonresponse Error

Modified from Groves et al. (2004)

An Integrated TSE Model: Adjustment Error

Modified from Groves et al. (2004)

An Integrated TSE Model: Validity Error

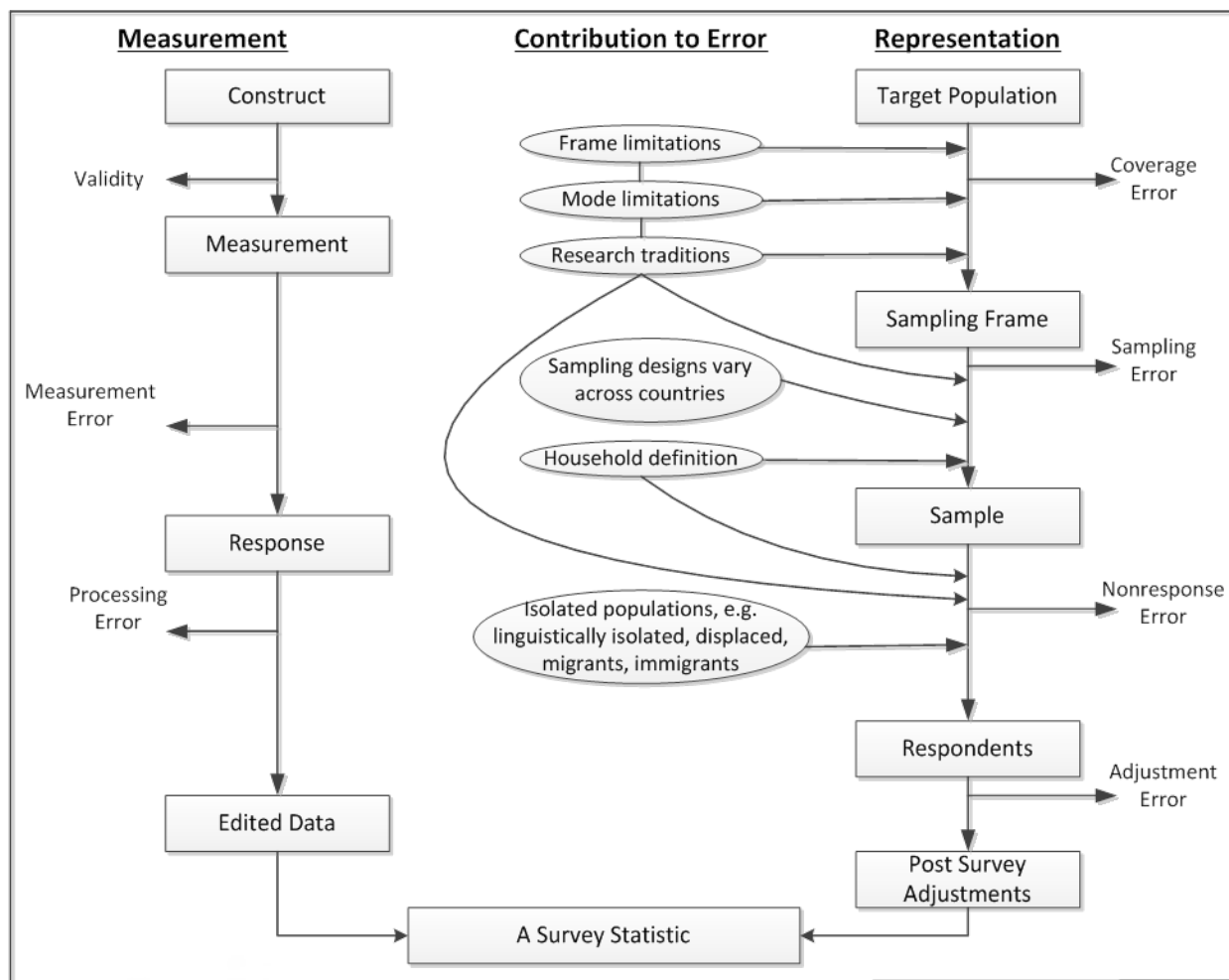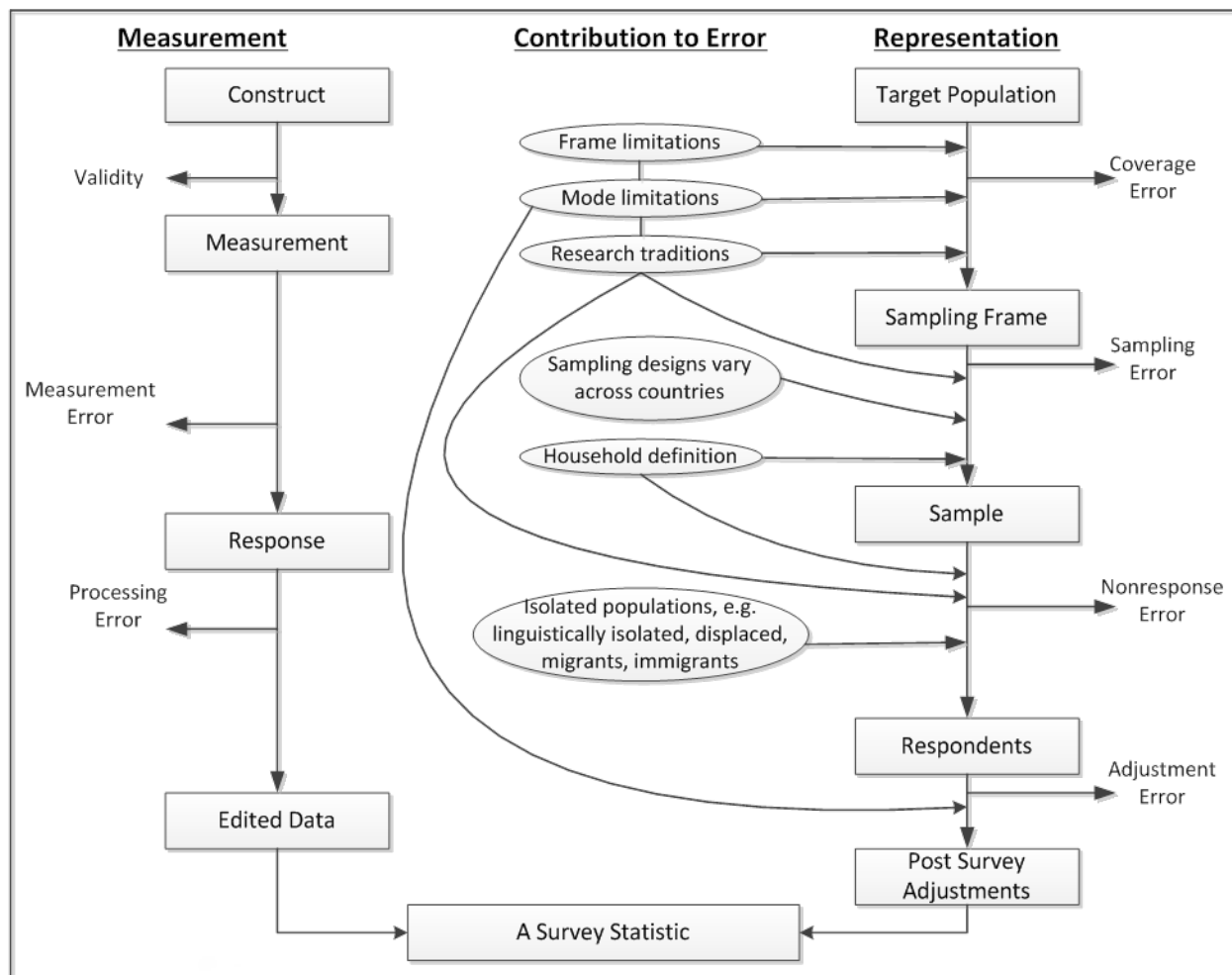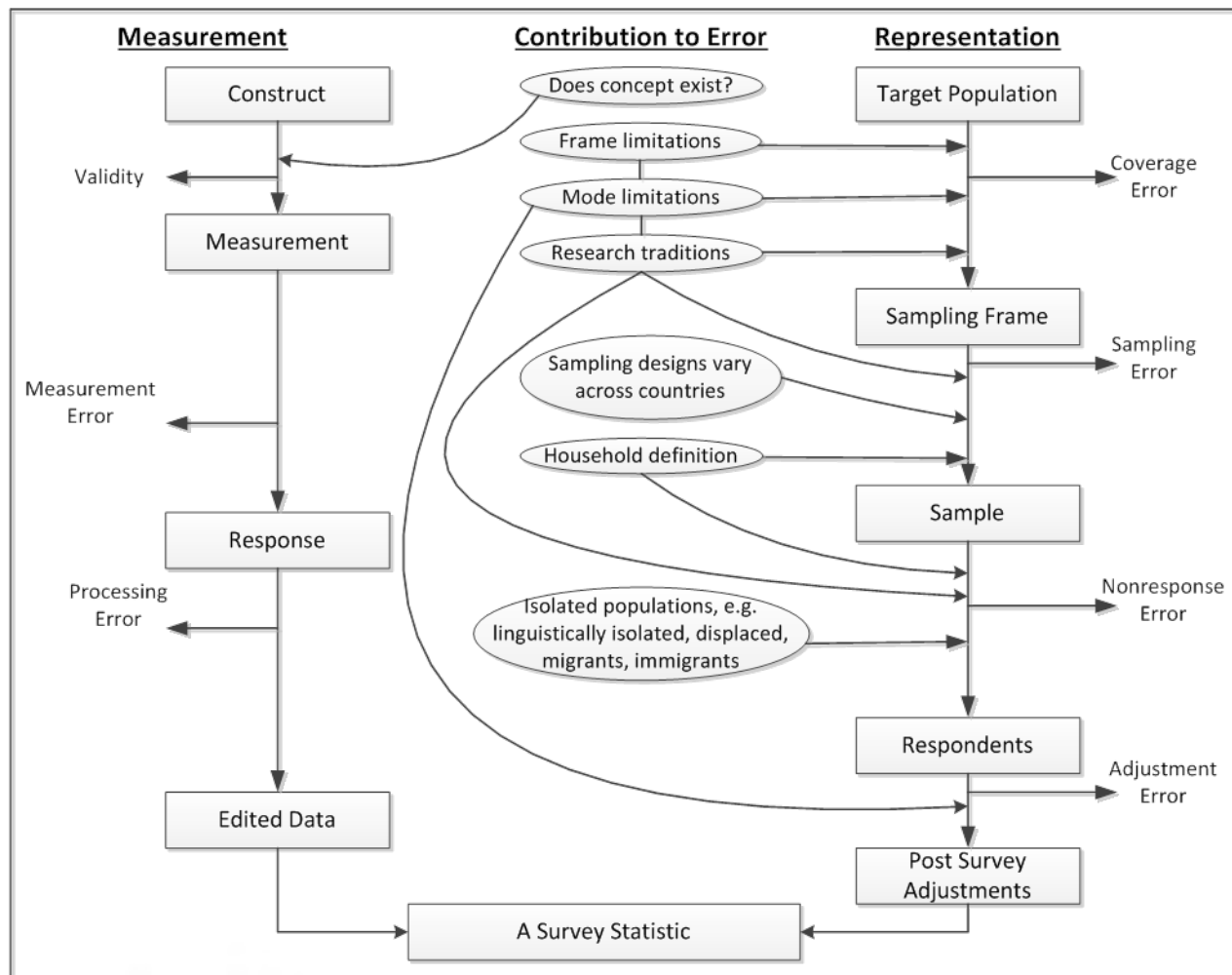Modified from Groves et al. (2004)

An Integrated TSE Model: Measurement Error
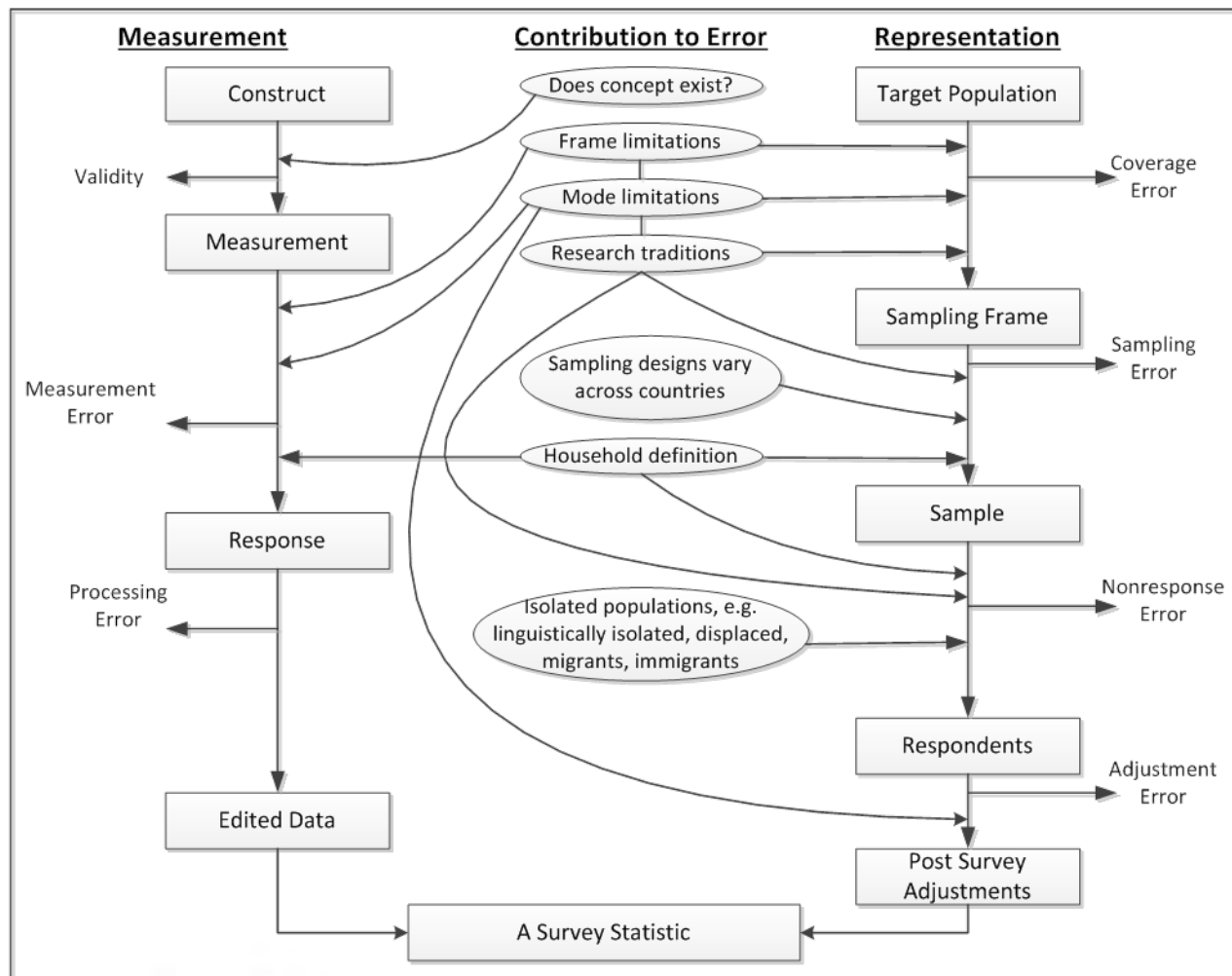
Modified from Groves et al. (2004)

An Integrated TSE Model
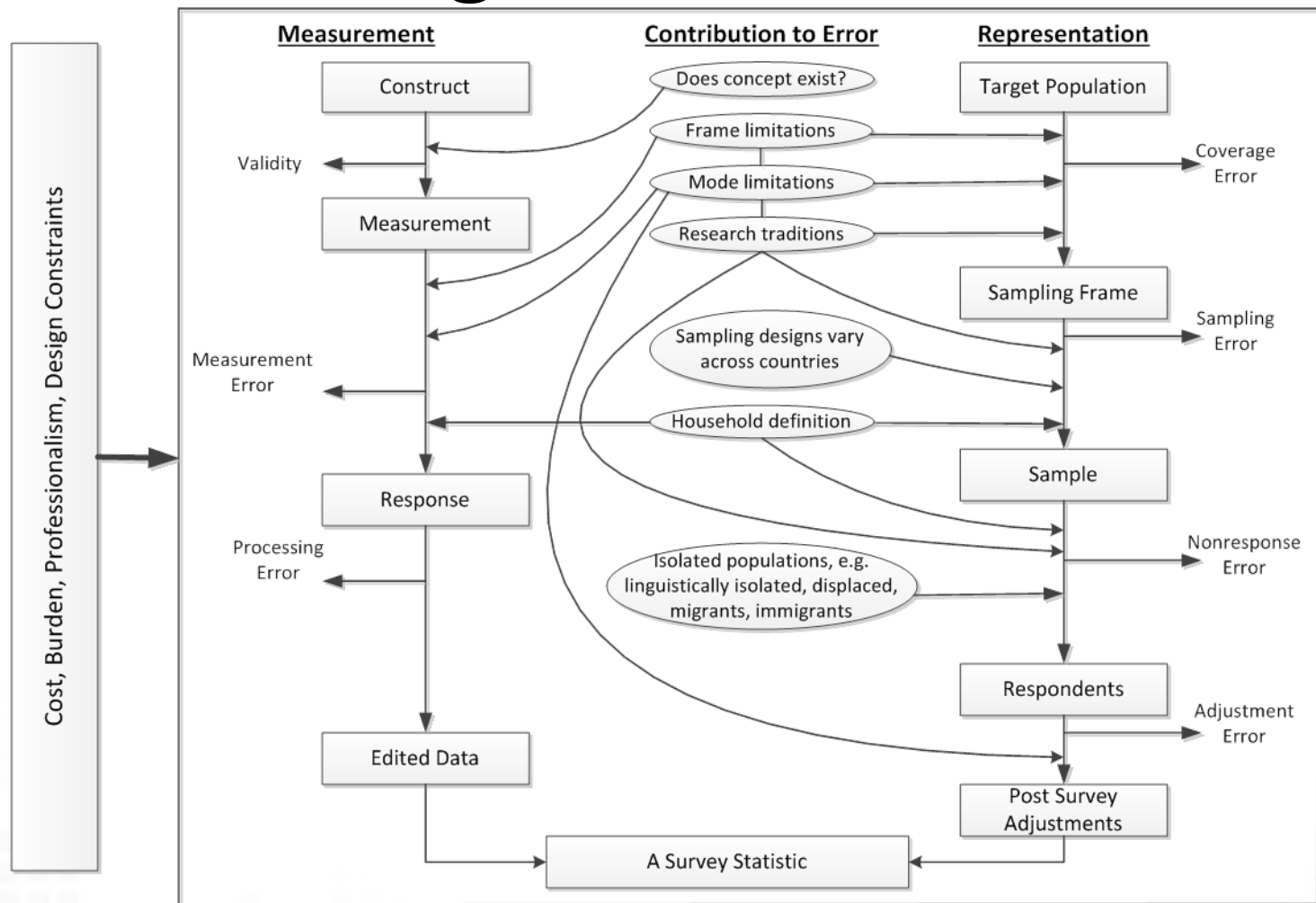
Modified from Groves et al. (2004)

Measurement Error: Expanded View
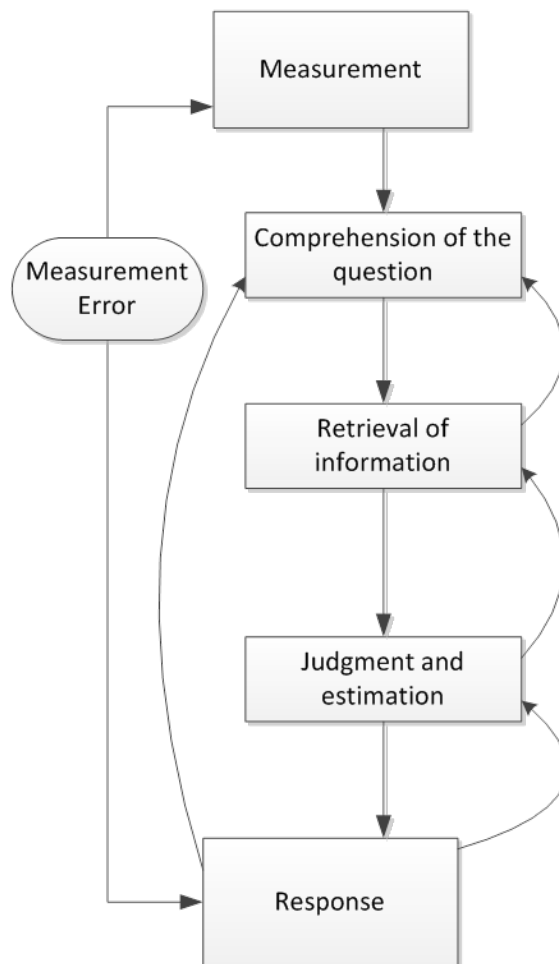
Modified from Groves et al. (2004) and Tourangeau et al. (2000)

Error Sources: Comprehension
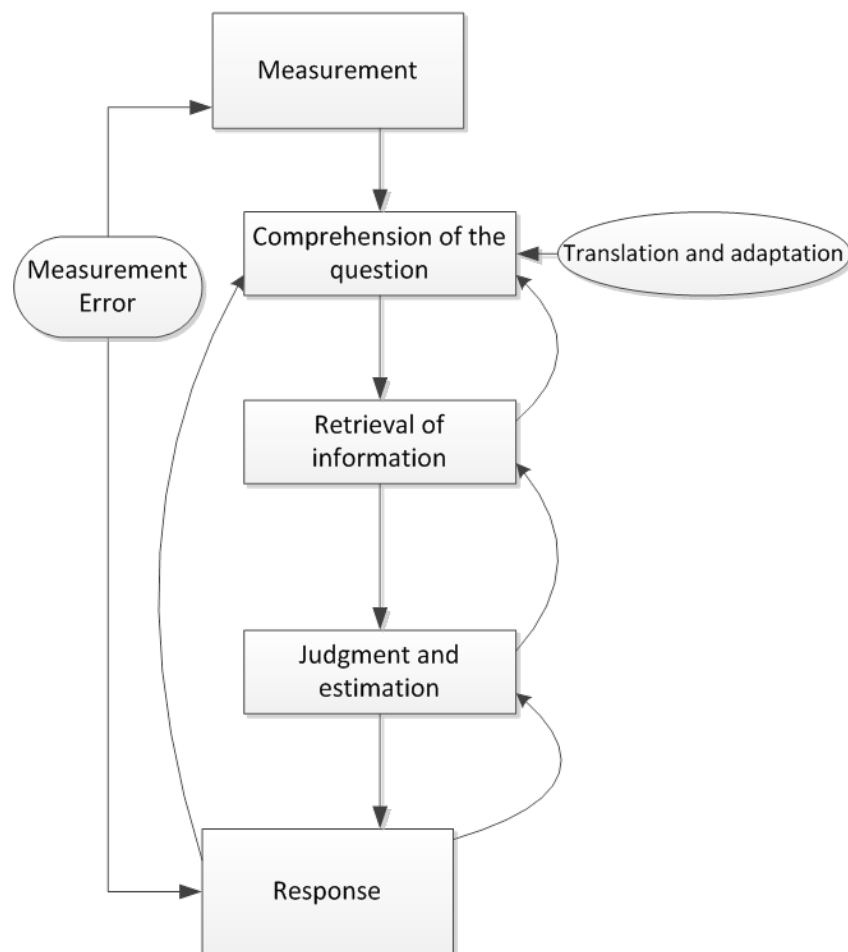
Modified from Groves et al. (2004) and Tourangeau et al. (2000)

Error Sources: Retrieval
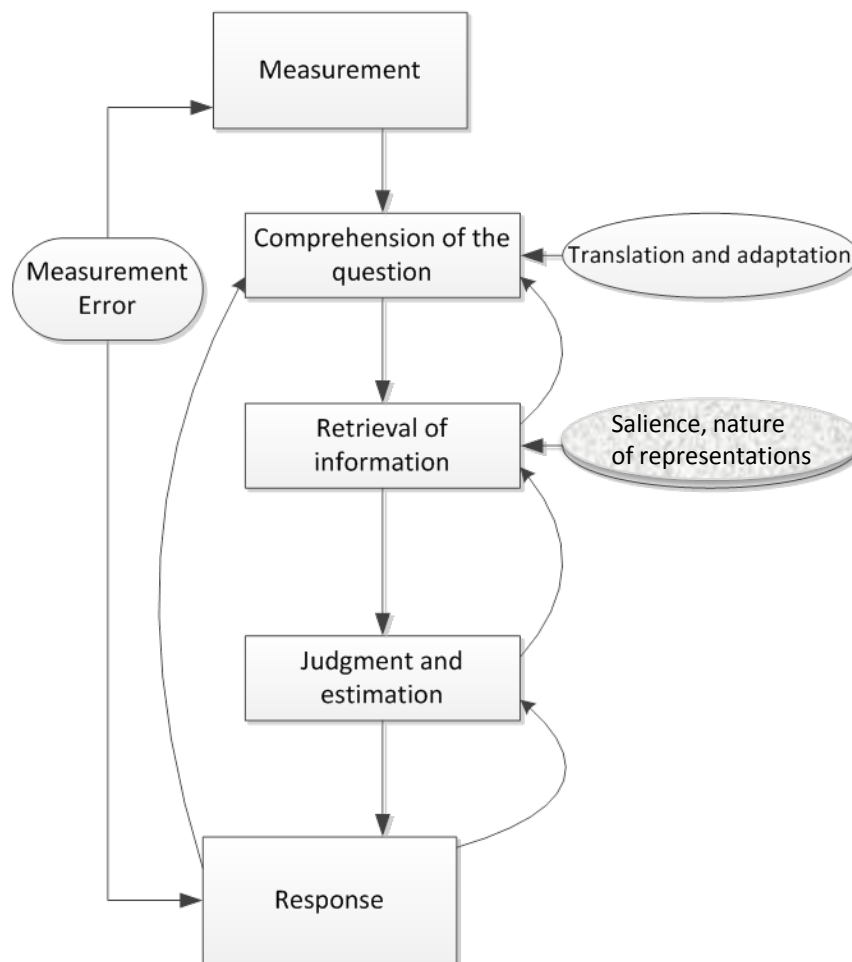
Modified from Groves et al. (2004) and Tourangeau et al. (2000)

Error Sources: Judgment and Estimation
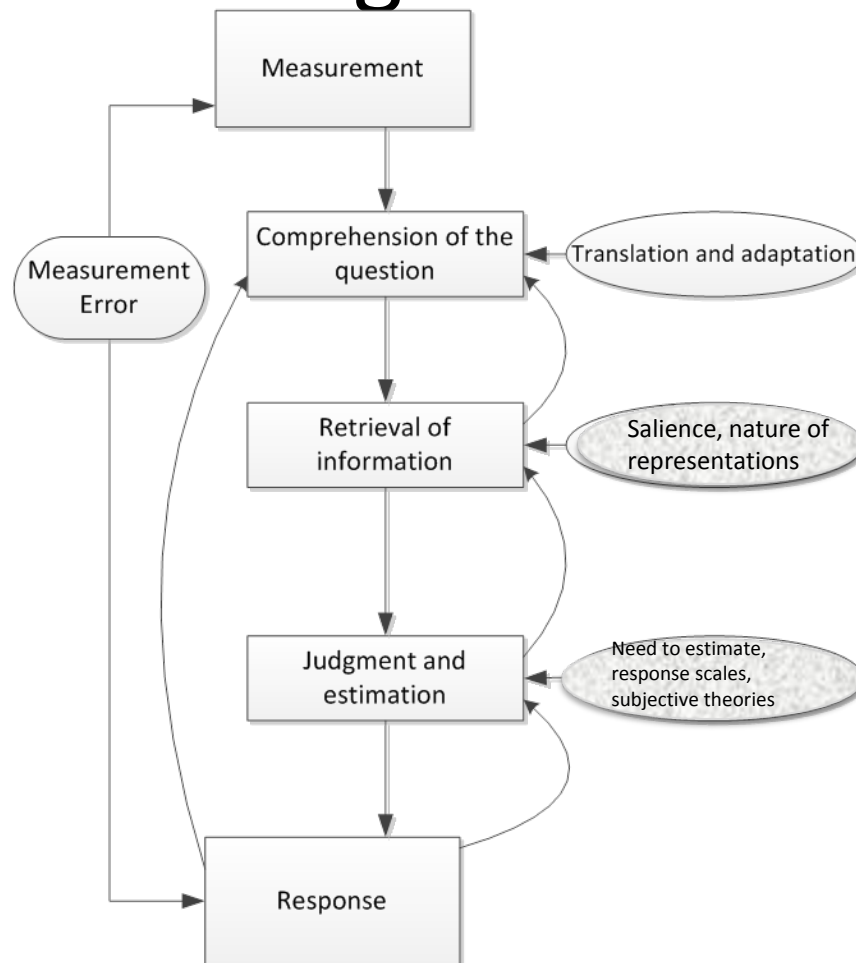
Modified from Groves et al. (2004) and Tourangeau et al. (2000)

Error Sources: Response
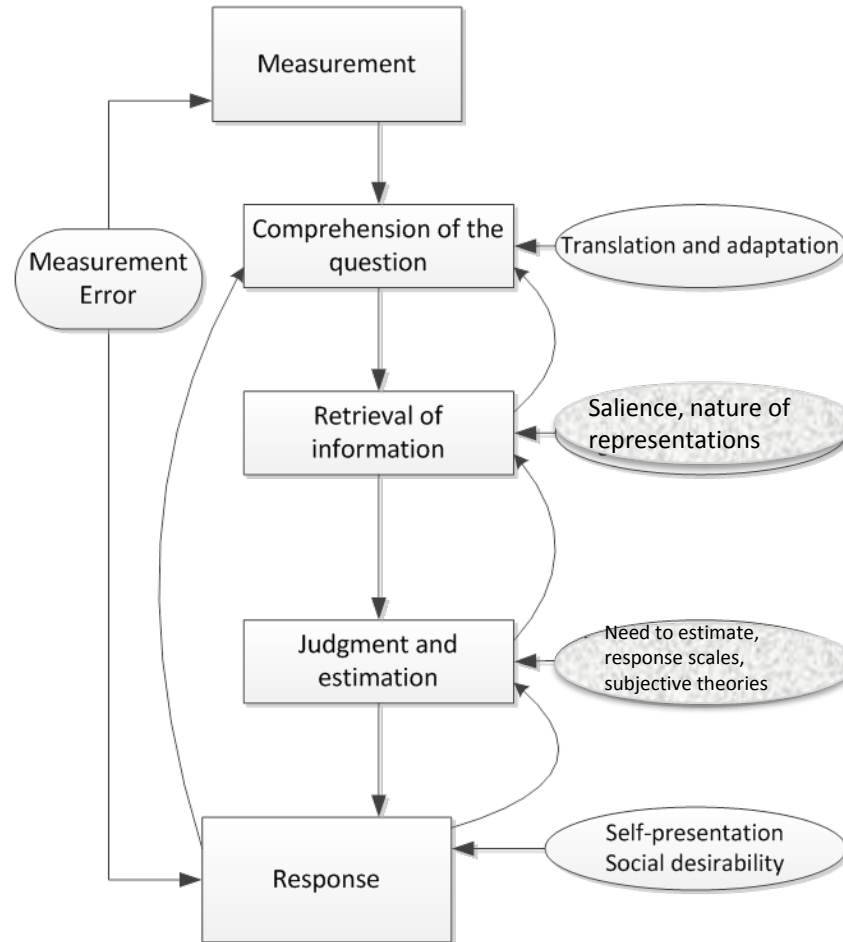
Modified from Groves et al. (2004) and Tourangeau et al. (2000)

Error Sources: Cultural Syndromes

CULTURAL SYNDROMES

- Individualism/Collectivism (Hofstede, 1980)
- Power distance (Hofstede, 2001)
- Independence/Interdependence (Markus &Kitayama, 1991)
- Masculinity/Femininity (Nelson, et al, 2006)
- Horizontal/Vertical Individualism and Collectivism (Triandis & Gelfand, 1998)
- Survival values/Self expression values (Inglehart, 1997)
- Honor-modesty/Shame (Nisbett & Cohen, 1996)
- Tightness/Looseness (Triandis, 1995)
- Multi-syndrome (Oyserman & Sorensen, 2009)

Measurement

Measurement Error

Comprehension of the question — Translation and adaptation

Retrieval of information — Salience, nature of representations

Judgment and estimation — Need to estimate, response scales, subjective theories

Response — Self-presentation Social desirability

Modified from Groves et al. (2004) and Tourangeau et al. (2000)

Error Sources: Structural Aspects

CULTURAL SYNDROMES

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- Multi-syndrome (Oyserman & Sorensen, 2009)

Measurement

Measurement Error

Comprehension of the question

Translation and adaptation

STRUCTURAL ASPECTS
- Frame Limitations
- Mode Limitations
- Interviewer/Respondent
- Third party presence
- Respondent Burden

Retrieval of information

Salience, nature of representations

Judgment and estimation

Declarative knowledge
Need to estimate, response scales, subjective theories

Self-presentation
Social desirability

Response

Modified from Groves et al. (2004) and Tourangeau et al. (2000)

Conclusion

Questions/Possible discussion points:

• Is it important to have an adapted TSE framework for 3M surveys?
• Missing contributions to error that you think should be highlighted?
• Thoughts on the expanded measurement error component?

Thank you very much!

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