Designing Reliable and Valid Surveys
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Introduction

- **Most surveys are designed for a specific project**
- **Goal of survey design is to maximize response rate**
- **Survey items come from project mission and goals AND research questions**
- **Survey design developed along with sampling methods to facilitate collecting minimal but sufficient data to generalize from sample to population**
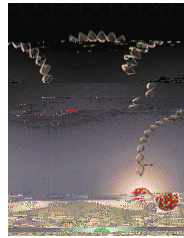- **Many of the following recommendations apply to designing all instruments including interviews**

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Tasks for Survey Design

1. **Develop goals and research questions**
2. **Choose data collection method –** *Is surveying the best method?*
3. **Outline topics and draft items**
4. **Choose response formats**
5. **Write and edit items**
6. **Determine sequence of items**
7. **Determine physical characteristics of the survey**
8. **Review and revise the survey**
9. **Pilot test and revise the survey**
10. **Administer the survey**
11. **Analyze the data and report the results**

4 -3

Task #2
Choose Data Collection Method

Choose Data Collection Method

- **Is surveying the most appropriate method to answer your research questions?**
- **Would interviews or focus groups be better?**
- **If surveying is the best method, will it be a mailed survey, telephone survey, e-mail survey, or Web-based survey?**

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Task #3
Outline Topics and
Draft Items

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- **What top**

Outline Topics and Draft Items

- **Draft reliable items**
  - Will respondents interpret the item in the same way on another day?
  - Will the item be interpreted in the same way by all respondents?
  - Will the item be interpreted by the respondents in the way you have intended?
- **Draft valid items**
  - Will the item elicit the information you want?
  - Will the item elicit accurate and relevant data?
  - When you know the answers to these items will you know the answers to your research questions?

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Draft Reliable and Valid Items

- **Work in small groups to draft questions for a retention survey to answer the research questions previously developed**
- **No need to think about response formats yet**
- **Use tips for drafting reliable and valid items on the following 3 slides**

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Task #4
Choose Response
Formats

Choose Response Formats

- **Will the responses be open-ended or closed?**
- **How will the data be loaded into the computer?**
- **How will the data be analyzed?**

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Choose Response Formats

- **Open-ended response formats:**
  - **Allow respondents to express their own views in their own ways**
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Add Response Formats to Previously Drafted Questions

- **Work in small groups to add formats to the questions you drafted**
- **Refer to the tips for designing closed question formats on the following 4 slides**
- **You may have to edit some of your questions to match your response formats**

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Choose Response Formats

- **Closed Question Formats:**
  - **Tips for designing closed question formats:**
    - **Use 3-5 categories on a rating scale (SA --- SD)**
    - **Write mutually exclusive response options**
    - **Supply enough categories for every conceivable response**
    - **Use "don't know" when some respondents will not know**
    - **Balance scales between positive and negative responses**
    - **Label midpoint accurately (neutral; neither agree not disagree) or do not use midpoint (forced choice)**
    - **Arrange responses vertically**
    - **Repeat response formats at the top of each page**
    - **Do not change response formats too frequently but do change occasionally**

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Choose Response Formats

- **Closed Question Formats:**
    - **Tips for designing closed question formats:**
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