

# Conducting Surveys



This project is made possible by a grant from the U.S. Institute of Museum and Library Services.

# Conducting Surveys

## **Surveys**

Question Types

Design

# Surveys

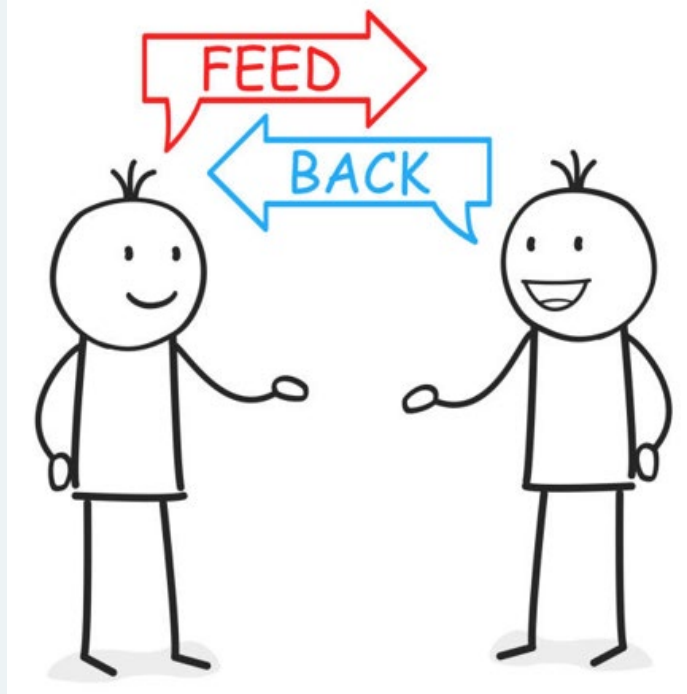
- Can **estimate** the present status of a phenomenon
- Can **inform inferences (and generalizations)** about large groups of people by studying smaller groups
- Susceptible to **bias**, especially if sample of individuals studied is not representative of the population, the instrument does not accurately measure the characteristics intended, or bias is introduced by the instrument design/wording and/or researcher assumptions, etc.
- Cannot establish or test causal relationships, but can demonstrate correlations that may point the way to (or strengthen the case for) causation. Correlations could also be affected by characteristics not examined by the survey.
- Intended to **describe characteristics of a group, test associational relationships, make predictions**, etc.



# Types of Surveys

- **Exploratory**—increase familiarity with a phenomenon to inform future research, help clarify concepts, identify problems (e.g., literature surveys, experience surveys)
- **Cross-sectional**—designed to measure one phenomenon across a representative sample of a population
- **Trend**—conducted over time to capture trends (longitudinal)
- **Panel**—conducted with same subjects over time (longitudinal)
- **Critical incident**—in-depth examination of a specific event (rather than broad survey about a longer time period)

# Advantages



- May encourage **honest responses** due in part to perception of anonymity or confidentiality and **distance from researcher**.
- **If well designed, may mitigate researcher bias** that can impact other methods where the researcher is present in close proximity.
- Because questions are fixed, **may avoid variability** present in other methods.
- Can make quantitative data easy to collect and analyze.
- Often less expensive and less time intensive than other method options.

# Disadvantages

- **Eliminates contact** between researcher and participant.
- **Doesn't allow participants to clarify** or point out ambiguous questions.
- Susceptible to **bias** in what participants respond (often those with extreme positions) and omits those who do not, introducing sampling error.
- May pose **barriers** (e.g., technological, cultural, intellectual).
- **Response rates** are often low.

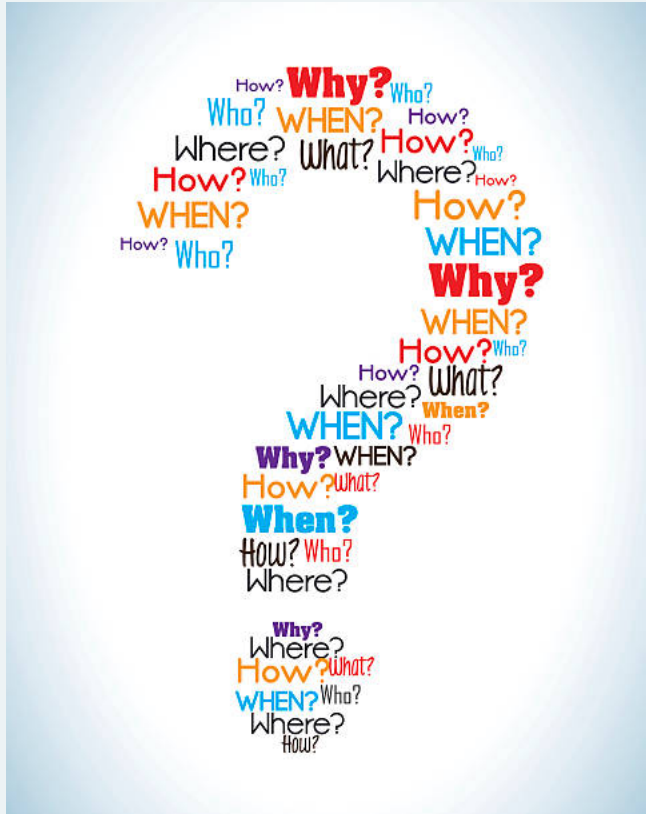
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# Question Types



- Factual
- Opinion and attitude
- Information (knowledge about a topic)
- Self-perception
- Standards of action (how one would act given a particular situation)
- Actual past/present behavior



# Question Formats

- Open-ended (free response, take longer, analyzed differently)
- Fixed-choice (closed options, yes/no, scale, checklist, easier to code and analyze, less variation, but can force inaccurate responses, frustrate responders, introduce bias by pre-setting options)
- A mix of open and closed questions is often the best choice.



# Checklists



List of points for users to indicate agreement, or describe their views or activities.

- *Have you participated in these activities [list]*
- *How many times have you visited the library [list, mark all that apply]*

# Response Scales

- Offering a **range** of possible answers can guide users, rather than allowing open responses
- Can be a **continuum** or reactions to or identifications with options
- Typically allow users to **opt out** with a “don’t know” or “other” response
- Formats:
  - **nominal** scale (categories not based on a continuum, e.g., academic department)
  - **ordinal** scale (series of statements or items without even distribution over a continuum, not possible to make conclusions about the exact amount of differences expressed, Likert scale is a common ordinal scale and generally not considered interval data)
  - **interval** scale (series of statements or items with equal distances between them, can be hard to design)
  - ratio scale (an interval scale where there is a true zero, e.g., income)
  - numeric scale
  - descriptive scale
  - semantic differential scale (antonym pairs with 5–7 step scales between)

Powell, R. R., & Connaway, L. S. (2004). *Basic research methods for librarians*. Libraries Unlimited.

Brophy, P. (2008). *Measuring library performance: Principles and techniques*. London: Facet Publishing.

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# Overall Survey Design

- **Cover letter or request** for participation, from an individual with authority/influence if appropriate.
- **Header** with organization name, title, and purpose for the instrument. Emphasize how the results will be used. Consider including a way for respondents to gain access to the results. Explain how confidentiality will be protected (if it will be) and any IRB processes that are applicable.
- Clear **instructions** for the user; keep as brief as possible.
- Any **questions necessary to identify the demographic groups** of the respondent. (If not a requirement for completing the survey, this is **often moved to the end.**)
- Write the questions in a **logical order**; use skip-logic as needed to shorten and focus the instrument for individual respondents.
- Ask an **open question** or leave room for respondents to write in comments.
- If desired, leave space for **contact information**, and for respondents to **opt in or out of future contact.**
- If not obvious, provide instructions on how instrument should be returned.
- Express appreciation.

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# Question Scope, Order, & Grouping

- Generally, questions are all on one topic or specific parts of a broader topic; **check the need for each question.**
  - Ask: **Will this question be useful? Specifically, how will it be used? Imagine the resulting data and what actions or decisions it would inform. Is it sufficient? Is it necessary?**
- Ensure questions are **within the answering power of the intended respondents.** Will your anticipated respondents have the information they need to respond in an informed way?
- Question order can produce “context errors” and skewed responses. Check to see if **individual questions might be influenced by surrounding questions.**
- Questions on like topics should be **grouped together** and move from **general to specific.** Any questions that may influence responses to other questions, if they are essential to include, should be placed at or near the end of the instrument.
- First questions should be **on topic, easy to answer, and interesting** as they set the tone and can influence completion of the entire instrument.

# Question Content & Phrasing

- Check questions for **bias**; ensure they are not imbued with **assumptions**, have anticipated implications, use **loaded/emotional/biasing** words/phrasing, or other possible harms.
- Be sure that **each question asks only one question**, rather than tying multiple questions or concepts together.
- Remove **jargon, technical terms, profession-specific terms**, etc. Strive for clarity for the target audience. Define terms, if needed.
- Be clear and succinct—the **shorter** a question is the more likely people are to read, fully understand, and complete it. Same is true for overall instrument.
- **Pilot test** all items with sample participants like those for the actual study. Follow up with open-response items or interviews to gain insights into the survey experience, problematic items, etc. **Revise based on feedback.**

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# Examples of Bias Types

- **Selection** bias—the individuals in a sample (e.g, respondents to a survey) differ systematically from the population of interest
- **Researcher** bias—instrument designed (consciously or unconsciously) to produce the results that the researcher hopes to find
- **Sponsorship** bias—instrument designed to produce the results that the sponsor/funder/originating organization hopes to find
- **Design** bias—weaknesses in instrument design result in biased or inaccurate responses (e.g., influencing language, improper sequencing, inadequate instructions)
- **Respondent interpretations**—unclear language in instructions or instrument items can influence responses to provide inaccurate information
- **Response** bias—low response rates cause final sample to not be representative of the population/topic the study intends to understand

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<https://catalogofbias.org/biases/>



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