DEVELOPING EFFECTIVE SURVEYS

Institutional Effectiveness

Office of Analytics and Institutional Effectiveness

aie.vt.edu

OVERVIEW

- Evaluation & Assessment Methods
- Survey Types
- Survey Process
- Design Considerations
- Question Design
- Tips for using surveys
- Resources

EVALUATION & ASSESSMENT METHODS

- Counting – cost data, activity records, etc.
- Observation – individuals or groups
- Documents/Records – logs, texts
- Interviews – individual, oral history
- Case studies – portfolios, critical incidents
- Focus Groups – user panels, peer group assessments
- Questionnaires/Surveys
- Visual Techniques – photos, drawings

EVALUATION & ASSESSMENT METHODS

Surveys are an approach to gathering opinion-based data that rely on respondents answering questions and responding to statements that have been developed in advance.

EVALUATION & ASSESSMENT METHODS

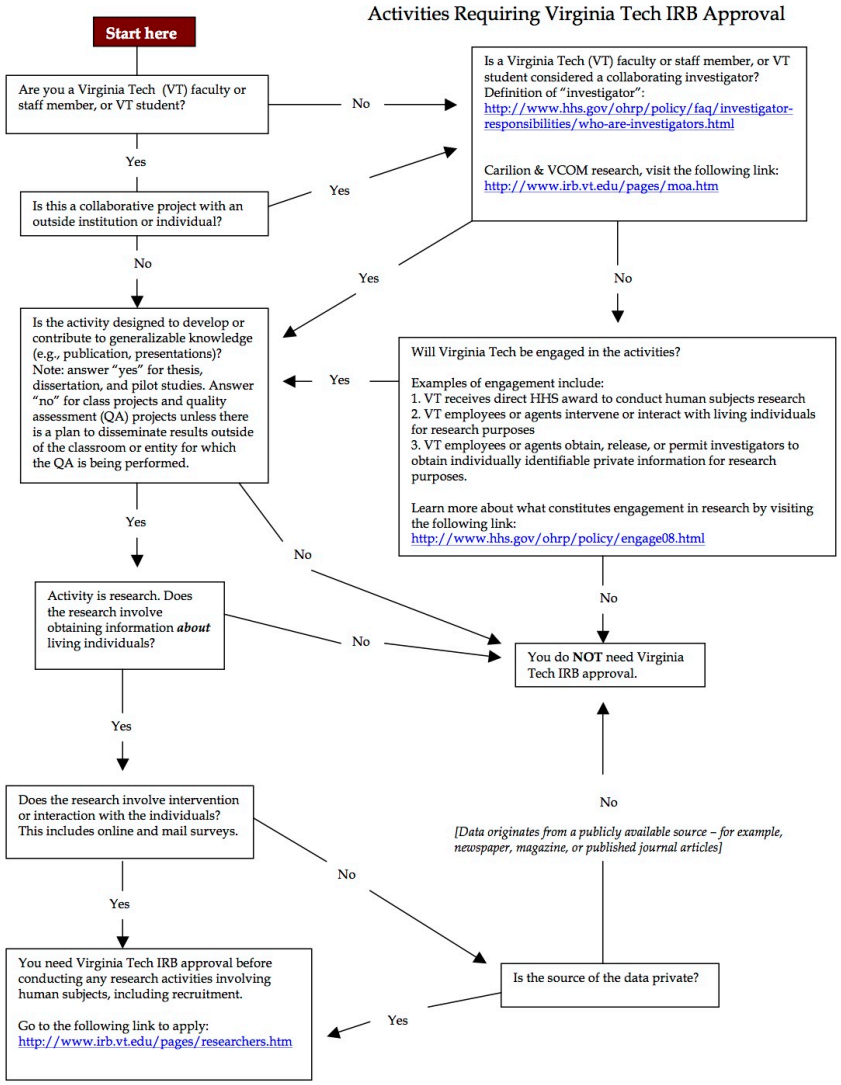
So….is a survey the best method?

- What data do you want to collect?
- What other methods might be useful?
- Does relevant data already exist?
  - If so, can you access/utilize it?

SURVEY TYPES

- Face to Face
  - Costly
- Telephone
  - Time consuming
  - Can be costly
- Mail
  - Most time consuming
- Web
  - Distributed electronically
  - Response rates tend to be lower

IRB APPROVAL

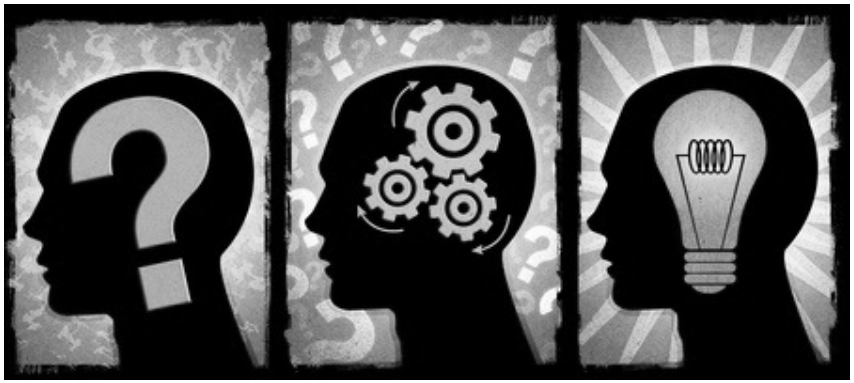


- Institutional Review Board (IRB) must approve all research
- Anything that may be used for external dissemination should be approved
- For more information, visit http://irb.vt.edu

SURVEY PROCESS

- Guiding Questions:
  - What do I want to know?
  - Who should I ask? Why?
  - How many questions are needed to get the information I want to obtain?

- Process:
  - Design
  - Pilot
  - Distribute
  - Analyze
  - Report



WHAT DO I WANT TO KNOW?

- Define exactly what information you want to obtain
- Draft as few questions as necessary to acquire that information
- You should be able to easily justify the purpose for having each question
- Ensure that questions relate back to the bigger picture

WHO SHOULD I ASK?

- Do these questions apply to a wide variety or a specific group of people?
- What is their interest in the topic?
- What is their educational level?
- What other characteristics of this group relate to your study? How do you know?

WHO SHOULD I ASK?

- Need to identify participants who :
  - Are accessible for your survey to reach
  - Can meet the study objectives
  - Can provide reliable information

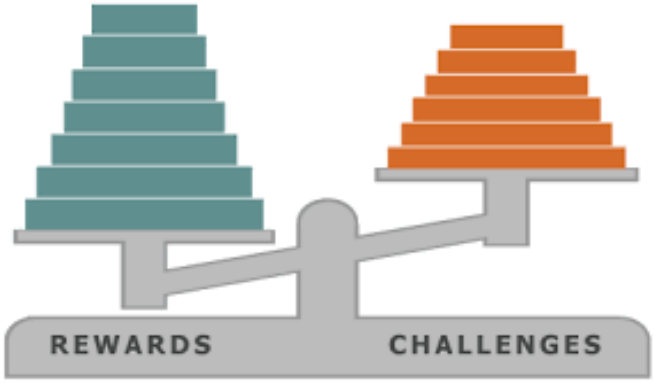
- Sampling Methods:
  - Random – completely by chance
  - Systematic – fixed sampling interval
  - Stratified – random sampling from subgroups
  - Convenience – readily available

WHY SHOULD THEY CARE?

- Establish Trust
  - Convey the survey's importance
  - Provide a sense of legitimate authority
  - Explain how collected data will be used

- Increase Rewards
  - Pique their interest
  - Value their responses
  - Convey appreciation

- Decrease Challenges
  - Quick & painless
  - No subordinating language
  - Don't embarrass or devalue



WHY SHOULD THEY CARE?

- Expanding on how data will be used:
  - Gives individuals a sense of transparency
  - Influences their decision to participate
  - Best practice of the informed consent process

- Use consistent and clear language:
  - Confidentiality:
    - Responses could be identified, but the data is protected and only accessible by specific individuals.
  - Anonymity:
    - Responses are not identifiable or trackable in any way, by anyone.

SURVEY DESIGN

- Your introduction is important
- Maintain simplicity and avoid clutter
- Provide item numbers
- Be consistent in wording and fonts
- Use *italics* and **bold** only if there is a purpose
- Limit the use of color and graphics

SURVEY DESIGN

- Especially when designing electronic surveys:
  - Create intentional sections
  - Use a progress indicator
  - Limit to 20 minutes
  - Determine if respondents should be able to re-enter survey or forced to complete in one session

SURVEY DESIGN

- Begin with interesting & easy
- Progress to interesting & more difficult
- Personal/confidential questions should follow content
- Maintain logical groupings and flow
- Keep scales consistent & group items using the same scale together
- Provide clear and concise directions

QUESTION DESIGN

- Open-ended vs. Closed-ended
  - Open-ended are easier to write & draw people in
  - Closed-ended are easier to standardize & analyze
- Single vs. Multiple Response
  - Choose one vs. all that apply
- Ranked Responses
  - Order of importance; generate a list
- Rated Responses
  - Likert/Agreement Scales

QUESTION DESIGN

- Reliability (Consistency):
  - Will respondents interpret the question in the same way on a different day?
  - Will the item mean the same thing to everyone in your sample?
- Validity (Accuracy):
  - Does the item address your research/guiding questions?
  - Will the item provide accurate and relevant data?

QUESTION DESIGN

- **Don't leave room for interpretation**
  - Where is your favorite place to shop?
- **Avoid double-barreled questions**
  - Is Verizon the fastest and most economical service for you?
- **No leading questions or assumptions**
  - Why do you prefer restaurant X more than restaurant Y?
- **Avoid using negative statements**
  - Are you against a ban on smoking?
- **Be precise**
  - How old were you on January 1st, 2021?

QUESTION DESIGN

- When using response scales:
  - Allow for variability
  - Ensure consistency between roots & stems
  - Balance positive & negative points
  - Order response categories in a logical way
  - Use “neutral” or “no opinion” vs” I don’t know”
  - May want to include a non-response option

TIPS FOR USING SURVEYS

- Keep it short and simple
- Be mindful that you are using someone else's time
- Surveys are a process, not just an instrument
- Be careful of extending your results to make them mean more than they do
- Don't expect a normal distribution

REFERENCES

Dillman, D. A. (1978). Mail and telephone surveys: The total design method. NY: Wiley.

Kasunic, M. (2005). Designing an Effective Survey. Carnegie Mellon, Software Engineering Institute.

Porter, S. (2004). Pros and cons of paper and electronic surveys, overcoming survey research problems new Directions for Institutional Research, 121, 91-99.

Frary, R. B. (1996). Brief guide to questionnaire development. Washington, DC: ERIC Clearinghouse on Assessment and Evaluation.

QUESTIONS?

Thank you for your time!

For more information, visit our website at aie.vt.edu