

# Honors Bioethics Seminar Survey Design

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# Steps to a survey project

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1. Establish the goals of the project
  - What do you want to learn?
2. Conduct a detailed literature search
  - What is already known about the topic?
3. Determine your sample
  - Who will you survey?
4. Choose interviewing methodology
  - How you will survey them?



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## 5. Develop your questionnaire

- What will you ask?

## 6. Pre-test the questionnaire

- Test the questions?

## 7. Conduct the interview, enter data, analyze the data



# Establish the goals of the project

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- What is the purpose of your study?
- What do you want to find out?
- Is a survey the best way to find it?



# Quick tips

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- ❑ Explain the survey purpose
- ❑ Keep your questions short and clear
- ❑ Use simple language
- ❑ Avoid asking two questions in one
- ❑ Avoid leading questions
- ❑ Avoid jargon, vague generalizations
- ❑ Tell the respondents how long the survey is expected to take
- ❑ Pilot test your survey

# Two questions in one

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□ How helpful was the booklet in advising children and parents on ways to prevent childhood obesity?

□ Replace with:

How helpful was the booklet in advising children on ways to prevent childhood obesity?

How helpful was the booklet in advising parents on ways to prevent childhood obesity?

# Two questions in one

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□ How often do you a eat healthy diet and exercise?

□ Replace with:

How often do you eat a healthy diet?

How often do you exercise?

# Two questions in one

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□ How healthy do you find the café salad bar and grill station,

□ Replace with:

How healthy do you find the café salad bar?

How healthy do you find the café grill station?

# Leading question

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❑ “A lot of people are frustrated with the café food. Are you one of them?”

❑ Replace with:

Tell me what you think about the café food?



# Leading question

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- ❑ We have recently upgraded the café food to become more healthy. What are your thoughts on the new choices?
  
- ❑ Replace with:

What are your thoughts on the new food choices?



# Open-ended question

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- open-ended question

Responses that are sharing feelings, attitudes, intentions, opinions e.g. what, why, how, describe

# Open-ended question

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- How healthy do you find the café salad bar?
- How healthy do you find the café grill station?



# Closed-ended questions

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- Closed-ended question

Responses can be answered with a simple "Yes," "No," or other very simple answer



# Closed ended question

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- The café food is healthy?
  - Strongly agree
  - Agree
  - Somewhat agree
  - Disagree
  - Strongly disagree



Which is open-ended and which is closed-ended?

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1. *What will you do on spring break?*
2. *Will you go on spring break?*



# Multiple Choice

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- How many times in the last week have you exercised
  - Zero
  - Once
  - Twice
  - More than 3 times

# Ranking

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- The food in the café is healthy
  - Strongly disagree
  - Disagree
  - Somewhat agree
  - Agree
  - Strongly agree



# Dichotomus

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- YES or NO

# Conduct a literature review

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## Purpose

- What we already know
  - in terms of theory & clinical practice
- What is lacking
- Why study the problem
  - Rationale / Relevance of study
- What methods to use

## Steps

- define a research question
- identify the main topics
- identify the details
- Revise topic and question



# Guides to Literature Search

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- ❑ <http://www.libraries.psu.edu/instruction/infolibt/lst301h/condlitsearchrev.htm>
- ❑ <http://www.nlm.nih.gov/bsd/disted/pubmedtutorial/>

## Sources

- ❑ PubMed
- ❑ Google scholar
- ❑ Ask research librarian



# Defining study goals and objectives

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- What do you already know?
- What do you think is going?
- What do you want to understand?



# Determine your sample

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- Who is the target audience?
- Sample size (statistician help, power calculation, sample size estimate)
- Avoid bias sample (inauguration crowd, vaccinated girls)

# Survey database

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Is survey already available?

- Health and Psychosocial Instruments (HaPI)
- Pubmed, Ovid
- National Center for Health Statistics, CDC
  - <http://www.cdc.gov/nchs/about.htm>



# Choose interviewing methods

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- Personal interviews
- Telephone surveys
- Mail surveys
- Email surveys
- Internet/webpage surveys



# Create your questionnaire

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- ❑ KISS – keep it short and simple
- ❑ Provide a don't know or not applicable response
- ❑ Include other or none when possible
- ❑ Allow 15 minutes to complete
- ❑ Avoid jargon, vague, generalizations



# Survey Design Time Line

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- Pre-planning 1 month
- Literature review 2 months
- Survey outline 1 month
- Survey drafts 1-3 month
- Survey feedback 1 month

# Resources

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- Survey Design

- [http://lap.umd.edu/survey\\_design/examples.html](http://lap.umd.edu/survey_design/examples.html)

- Survey Monkey

- <http://www.surveymonkey.com/>

- Survey Resources

- <http://www.srl.uic.edu/Srllink/srllink.htm>



# Question types

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## Multiple Choice

1. Where do you live?

- North
- South
- East
- West

## Numeric Open End

2. How much did you spend on groceries this week? \_\_\_\_\_

## Text Open End

3. How can our company improve its working conditions?

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# Rating scales

## Rating Scales

4. How would you rate this product?

- Excellent
- Good
- Fair
- Poor

5. On a scale where "10" means you have a great amount of interest in a subject and "1" means you have none at all, how would you rate your interest in each of the following topics?

- Domestic politics .. —
- Foreign Affairs ..... —
- Science & Health .. —
- Business ..... —

## Agreement Scale

6. How much do you agree with each of the following statements:

	Strongly Agree	Agree	Disagree	Strongly Disagree
My manager provides constructive criticism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our medical plan provides adequate coverage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would prefer to work longer hours on fewer days	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Examples: Open-ended

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- In your opinion, what is the cause of youth violence in Maywood?

# Close-ended with ordered responses

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- Listed below are three problems some people believe cause youth violence, how serious is each one?
  - Family problems                      very somewhat not at all
  - Schools problems                      very somewhat not at all
  - Economic problems                      very somewhat not at all



# Close-ended with unordered responses

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- In your opinion, what is the cause of youth violence in Maywood? (circle the number for your response.)
  1. Family environment
  2. School environment
  3. Economic environment



# Partially close-ended

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- In your opinion, what is the cause of youth violence in Maywood? (circle the number for your response.)
  1. Family problems
  2. Schools problems
  3. Economic problems
  4. Other (please specify) \_\_\_\_\_



# Pre-test your questionnaire

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