

# Questionnaire Design

BUS 230: Business Research and Communication

# Goals and Learning Objectives

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- Goals of this chapter:
  - Identify survey questions / variables needed to answer a research question.
  - Understand benefits and problems with open ended and fixed-alternative questions.
  - Be able to phrase questions to limit respondent bias.
  - Be able to order questions to limit respondent bias.
- Learning objectives:
  - LO2: Recognize and use the appropriate techniques to collect or use survey data to address a research problem.
  - LO2.C: Identify sources of respondent and administrative error and develop the ability to construct and administer a survey instrument that minimizes these errors.

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# Basic Principles

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- 2 How should questions be phrased?
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## What should be asked?

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- Get data on relevant outcome variables.
- Get data on background variables and other explanatory variables.
- Example: Living on campus and academic performance
  - Outcome variables: semester GPA, cumulative GPA, frequency using campus resources, extra curricular activities.
  - Relevant explanatory variables: high school GPA, parents' income, year in school.
- Be careful not to ask too many questions! This can decrease response rate.

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# Open-ended Questions

- **Open-ended questions** can serve uses that fixed alternative questions cannot:
  - How can service be improved?
  - Viterbo might want to ask: What Viterbo community events are you aware of?
- Can get deeper answers, reasoning behind answers.
- Useful for exploratory research, though not exclusively.
- Responses can be grouped together into categories after data has been collected.
- Might be useful to even count number of responses to a particular question.

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## Problems with Open-Ended Questions

- Greater chance for respondent biases.
  - *Average person effect*: individual may not want to give a response he or she may expect is unusual.
  - *Social desirability effect*: individual may give untrue responses to demonstrate he or she cares about an issue.
  - *Acquiescence bias*: individual may give a response to placate the interviewer.
- Questions and/or expectations for answers may be unclear.
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# Fixed Alternative Questions

- **Fixed-alternative questions:** questions where the interviewer provides only a limited number of answers to choose from.
- Simple dichotomous questions: respondent must pick one and only one of two possible alternatives.
  - Have you attended any UW-L varsity athletic sporting events in the last year? Yes  No
- Determinant-choice questions: respondent chooses one and only one choice from 3 or more options.
- What is your current academic status?
  - Freshman (undergraduate degree seeking / less than 30 credits accumulated)
  - Sophomore (undergraduate degree seeking / 30 or more credits and less than 60 credits accumulated)
  - Junior (undergraduate degree seeking / 60 or more credits and less than 90 credits accumulated)
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# Avoid Problems with Determinant Choice Questions 7/17

- Don't force invalid responses: make sure your choices are **totally exhaustive**.
- Make sure the correct choice is clear:
  - Make sure wording is sufficient and appropriate (notice definitions about college year)
  - Make sure choices are **mutually exclusive**.
- Impossible for respondents to explain, clarify, or qualify an answer:
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## Frequency Determination Questions

- **Frequency determination questions:** Questions which ask for how often some occurrence generally happens.
- How often do you study for your classes, besides completing homework assignments?
  - One or more times every day.
  - 4-6 times per week
  - 2-3 times per week
  - Once per week
  - One or two times per month.
  - Less than one time per month.
- Look out for:
  - Should you expect frequency to be constant, or does it change by season, semester, etc?
  - Is it reasonable to suppose respondent can accurately recall frequency, according to your scale?
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# Checklist Questions

- **Checklist question:** fixed-alternative question that allows respondent to provide multiple answers to a question.
- Please check which of the following sources of media you use at least twice per week, if any:
  - Facebook.
  - Network television.
  - Cable television.
  - La Crosse Tribune*.
- Offers more flexibility than other fixed-alternative questions.

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# Questionnaire Accuracy

- Write questions that generate accurate answers.
- Questions should have answers that are easy to recall.
- Be careful with questions regarding quantity or frequencies: make sure it is reasonable for respondents to accurately report these.
- Do the following questions have accuracy problems? How would you fix it?
  - How many hours per week do you usually study?
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## Ordinal Scales

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- **Ordinal scales:** Responses to a question that have a natural order/ranking.
- Common attitude scales:
  - Strongly agree, Agree, Disagree, Strongly disagree.
  - Very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied.
- Common quality scale:
  - Excellent, Very Good, Fair, Poor
- Avoid ambiguous frequency scales:
  - Always, Often, Occasionally, Rarely, Never

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# Using Ordinal Scales

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- Use no-answer responses if appropriate: no opinion / don't know.
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## Phrasing questions

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- Avoid **leading questions**: questions that lead the respondent to a particular conclusion.
- Avoid **loaded questions**: questions that suggest a socially desirable answer, or questions or answers that are emotionally charged.
- Examples:
  - Should foreign-born terrorists caught and held in United States detention facilities be given the same legal rights as U.S. citizens?
  - Do you believe it is acceptable for the United States to detain potentially innocent battlefield detainees without legal representation and interrogate them by means that violate the Geneva Convention against torture?
  - Do you believe the presumption of innocence should apply to suspected enemy combatants.

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  - Should foreign-born terrorists caught and held in United States detention facilities be given the same legal rights as U.S. citizens?
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  - Should General Electric continue to pay its stockholders its outstanding quarterly dividends? Yes/No
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- **Filter question:** To eliminate bias caused by lack of knowledge or prior opinion, first ask questions that reveal the respondent's background on the topic, then proceed only if there is sufficient background.
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