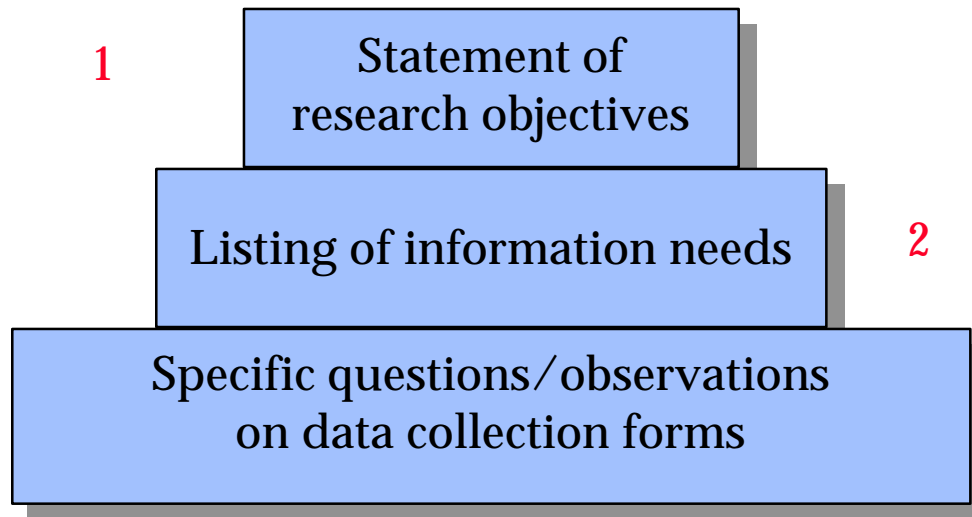


Pyramid of Research Objectives and Information Needs



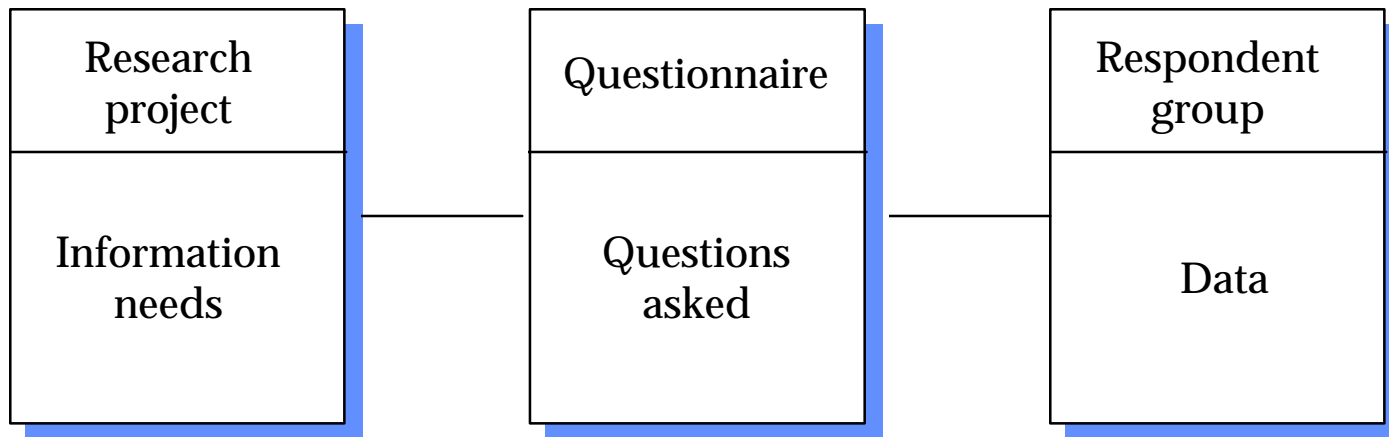
Important Note: Both “connections” must be perfectly aligned (i.e., “waterproof,” “tamper resistant,” etc...

Questionnaire Design

Important Ideas →

(A) Requires skill

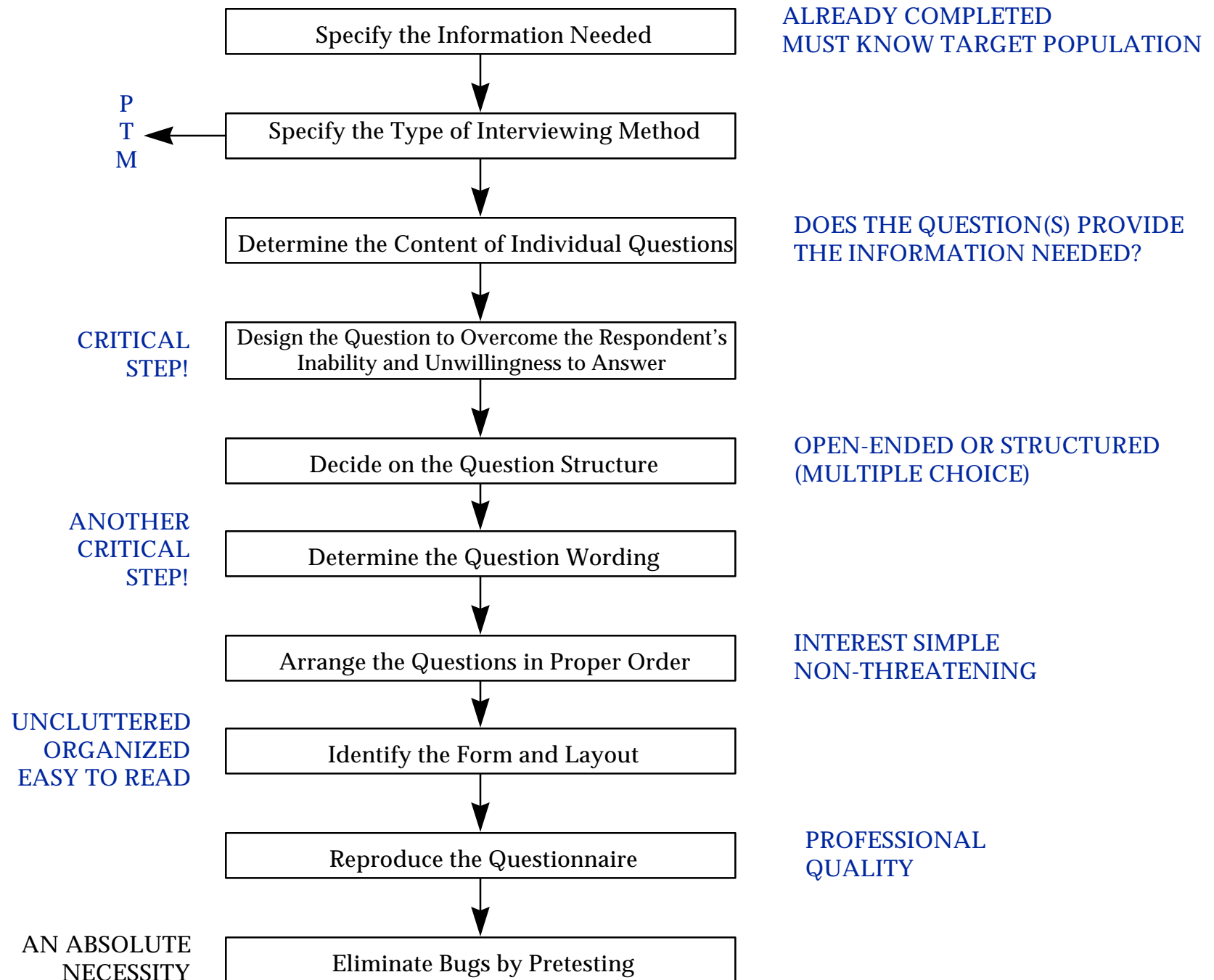
(B) Survey data are “created”



Information needs--data linkage

The questionnaire is the key link between the information needs and the data...hence its importance

Figure 12.1 Questionnaire Design Process



The Two “Golden Rules” of Questionnaire Design

1. Overcome respondent inability to answer
 - Does not know/never knew
 - Cannot remember
 - Cannot articulate or estimate

2. Overcome respondent unwillingness to answer
 - Interviewing context is not appropriate for questionnaire
 - Information is sensitive
 - Legitimate purpose for the information?

This questionnaire asks how many gallons of soft drinks I consumed this past year as well as how many pounds of sugar!

Why don't they just ask how much weight you have gained instead!



THE EIGHT “GUIDELINES” FOR CHOOSING QUESTION WORDING

1. Define the issue
2. Use ordinary words
3. Avoid ambiguous words
4. Avoid leading questions
5. Avoid implicit alternatives
6. Avoid implicit assumptions
7. Avoid generalizations and estimates
8. Use positive and negative statements

(Will show examples of these in a moment)

How a Questionnaire Should be Organized

LOCATION	TYPE	EXAMPLES	RATIONALE
Screeners	INTEREST Q'S Qualifying questions	“Have you been snow skiing in the past twelve months?”	To identify target respondents. Survey of ski owners who have skied in the past year.
First few questions	Warm-ups	“What brand of skis do you own?”	Easy to answer shows respondent that survey is simple
First third of questions	Transitions	“What features do you like best about the skis?”	Relate to research objectives, slightly more effort needed to answer.
Middle half to second third	Difficult and complicated	“Following are ten characteristics of snow skis. Please rate your skis on each characteristic using the scale below.”	Respondent has committed to completing questionnaire and can see that just a few questions are left.
Last section	Classification and demographic	“What is the highest level of education you have attained?”	Some questions may be considered “personal” and respondent may leave them blank, but they are at the end of the survey.

A Questionnaire Skip Pattern

4a. Do you usually use a cream rinse or a hair conditioner on your child's hair, or not?

No (Skip to 5)

Yes (Ask Q 4b)

4b. About how often do you use a cream rinse or a hair conditioner on your child's hair? Would you say less than once a week, once a week, or more than once a week?

A. Less than once a week

B. Once a week

C. More than once a week

5. Thinking of the texture of your child's hair, is it (READ LIST)

A. Fine

B. Course

C. Regular

Example of a Precoded Survey

Sample Survey

THE AMERICAN LAWYER A Confidential Survey of Our Subscribers

(5-1)

(Please ignore the numbers alongside the answers. They are only to help us in data processing.)

1. Considering all the times you pick it up, about how much time, in total, do you spend in reading or looking through a typical issue of THE AMERICAN LAWYER?

(6)

- | | | | |
|----------------------------------|-----------------------------|--------------------------------------|-----------------------------|
| Less than 30 minutes..... | <input type="checkbox"/> -1 | 1 1/2 hours to 1 hour 59 minutes ... | <input type="checkbox"/> -4 |
| 30 to 59 minutes..... | <input type="checkbox"/> -2 | 2 hours to 2 hours 59 minutes | <input type="checkbox"/> -5 |
| 1 hour to 1 hour 59 minutes..... | <input type="checkbox"/> -3 | 3 hours or more | <input type="checkbox"/> -6 |

2. After you have finished reading an issue of THE AMERICAN LAWYER, what do you usually do with it?

(7)

- | | | | |
|--|-----------------------------|--------------------------------|-----------------------------|
| Save entire issue for firm library.. | <input type="checkbox"/> -1 | Place in a waiting room/public | |
| Save entire issue for home use..... | <input type="checkbox"/> -2 | area..... | <input type="checkbox"/> -5 |
| Pass it along (route it) to others.... | <input type="checkbox"/> -3 | Discard it..... | <input type="checkbox"/> -6 |
| Clip and save items of interest..... | <input type="checkbox"/> -4 | Other _____ | |
| | | (Please specify) | <input type="checkbox"/> -7 |

3. Not including yourself, how many other people, on the average, would you estimate read or look through your personal copy (not the office copy) of THE AMERICAN LAWYER?

(8)

TABLE 12.2**A Questionnaire Designed for Simplified Data Processing**

Now I have just a few more questions for classification purposes.

		Col.
16. Are you employed outside your home? (CIRCLE)		57-
	CONTINUE WITH Q.17	Yes 1
	SKIP TO Q. 21	No 2
17. If you were to purchase this new communications service, where would you be most likely to use it, in your home, office, or both? (CHECK ONE)		
	_____ Home	1
	_____ Office	2
	_____ Both	3
18. What is your occupation? (TYPE OF WORK, NOT PLACE OF EMPLOYMENT)		
<hr/>		
19. Are you in a management related position? (CIRCLE)		
	CONTINUE WITH Q. 20	Yes 1
	SKIP TO Q. 21	No 2
20. Is that upper, middle, or lower management? (CHECK ONE)		
	_____ Upper	1
	_____ Middle	2
	_____ Lower	3
21. What was the last grade of school you completed? (HAND CARD C TO RESPONDENT: CIRCLE RESPONSE.)		
	A. Some high school or less	1
	B. Completed high school	2
	C. Some college	3
	D. Completed college	4
	E. Graduate school	5
	F. Other education beyond high school (business, nursing, etc.)	6

Six Additional “Principles”

Principle 1: Be Clear and Precise

A. How many cups of coffee do you drink in a typical work day?

(WRITE IN NUMBER)

B. How frequently do you drink coffee? *(Record choice below.)*

Extremely often	1
Very often	2
Not too often	3
Never	4

Principle 2: Response Choices Should Not Overlap

Which of the following categories best describes your total household income before taxes in 1986? *(Circle one answer only.)*

- | | |
|---------------------|---|
| Less than \$10,000 | 1 |
| \$10,000 - \$15,000 | 2 |
| \$15,000 - \$25,000 | 3 |
| \$25,000 or higher | 4 |

Principle 3: Use Natural and Familiar Language

EXAMPLE

The standard question for intoxication read:

In the past year, how often did you become **intoxicated** while drinking any kind of alcoholic beverage?

Respondents were handed a card containing the following response categories:

- Never
- Once a year or less
- Every few months
- Once a month
- Every few weeks
- Once a week
- Several times a week
- Daily

The alternative procedure allowed respondents to first provide their own word for intoxication through the following question:

Sometimes people drink a little too much beer, wine, or whiskey so that they act different from usual. What word do you think we should use to describe people when they get that way, so that you will know what we mean and feel comfortable talking about it?

The intoxication question then read:

Occasionally, people drink on an empty stomach or drink a little too much and become **(respondent's word)**. In the past year, how often did you become **(respondent's word)** while drinking any kind of alcoholic beverage?

No response categories were offered for either item.

Principle 4: Do Not Use Words or Phrases that Show Bias

Leading questions can take a variety of forms. Consider the question:

What did you dislike about the product you just tried?

The respondent is not given a “way out” if he or she found nothing to dislike. A more suitable way to ask this question would be to first ask:

Did you dislike any aspects of the product you just tried?

_____ Yes _____ No

Certain words and phrases can also induce bias. For example:

Do you think Johnson and Johnson did everything possible in its handling of the Tylenol poisoning situation?

This is a leading question since the use of the phrase *everything possible* can produce biased responses. The issue is whether Johnson and Johnson acted *reasonably* in its handling of the Tylenol poisoning situation.

Principle 5: Avoid Double-Barreled Questions

**Do you believe that McDonald's has
fast and courteous service?**

Principle 6: State Explicit Alternatives

Version A: Would you buy pasta-in-a-jar if available in a store where you normally shop?

Version B: If pasta-in-a-jar and the canned pasta product that you are currently using were both available in the store where you normally shop, would you

- (a) buy only the canned pasta product?
- (b) buy only the pasta-in-a-jar product?
- (c) buy both products?

**Examples (Good and Bad) Of
Questions/Questionnaires
To Illustrate the Important
Concepts in Questionnaire Design**

PROBLEM	SAMPLE QUESTION	EXPLANATION
Leading question	Why do you like Wendy's fresh meat hamburgers better than those of competitors made with frozen meat?	Consumer is led to make statement favoring Wendy's hamburgers.
Ambiguous question	Do you eat at fast food restaurants regularly? <input type="checkbox"/> Yes <input type="checkbox"/> No	What is meant by word <i>regularly</i> --once a day, once a month, or what?
Unanswerable question	What was the occasion for your eating your first hamburger?	Who can remember the answer? Does it matter?
Two questions in one	Do you eat Wendy's hamburgers and chili? <input type="checkbox"/> Yes <input type="checkbox"/> No	How do you answer if you eat Wendy's hamburgers but not chili?
Nonexhaustive question	Where do you live? <input type="checkbox"/> At home <input type="checkbox"/> In dormitory	What do you check if you live in an apartment?
Nonmutually exclusive answers	What is your age? <input type="checkbox"/> Under 20 <input type="checkbox"/> 20 to 40 <input type="checkbox"/> 40 and over	What answer does a 40-year-old check?

6. Check the box below that describes the extent to which you agree or disagree with the statement.

STATEMENT	STRONGLY AGREE	AGREE	DON'T KNOW	DISAGREE	STRONGLY DISAGREE
a. Adults like to take their families to fast food restaurants.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Children in our household have a say where the family eats.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. How important are each of the following as sources of information about fast food restaurants?

SOURCE OF INFORMATION	VERY IMPORTANT SOURCE	SOMEWHAT IMPORTANT SOURCE	NOT AN IMPORTANT SOURCE
a. Television	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Newspapers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Billboards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Mail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. In the past 3 months, how often have you eaten at each of these three fast food restaurants?

RESTAURANT	ONCE A WEEK OR MORE	TWO OR THREE TIMES A MONTH	ONCE A MONTH OR LESS
a. Burger King	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. McDonald's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Wendy's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you think the United States should allow public speeches against democracy?

Should allow	21%
Should not allow	62
No opinion	17

Do you think the United States should forbid public speeches against democracy?

Should not forbid	39%
Should forbid	46
No opinion	15

Do you own a car?

Do you happen to own a car at present?

(A) Do you plan to buy a television set in the next six months?

(B) Are you almost sure to buy one in the next month?

Are there any people in the junk business who make more money than they should?

Of course there are! Every business probably includes some people who make more money than they should.

Do you think there are people in the pickle business who would cheat you if they could?

Of course! Cheats are everywhere, except in research.

Could the mayor do a better job of running the city, or not?

Of course he could! Only a few of us are perfect.

Do you think most manufacturing companies that lay off workers during slack periods could arrange things to avoid layoffs and give steady work right through the year?

63% said companies could avoid layoffs,
22% said they couldn't, and
15% had no opinion.

Do you think most manufacturing companies that lay off workers in slack periods could avoid layoffs and provide steady work right through the year, or do you think layoffs are unavoidable?

35% said companies could avoid layoffs,
41% said layoffs are unavoidable, and
24% expressed no choice.

Do you think anything should be done to make it easier for people to pay doctor or hospital bills?

82%

Do you think anything could be done to make it easier for people to pay doctor or hospital bills?

77% → 74%

Do you think anything might be done to make it easier for people to pay doctor or hospital bills?

63%

Do you prefer pumpkin pie or mince pie?

Mince pie	60%
Pumpkin pie	30
No opinion	10

Do you mean that you prefer mince pie cold or hot, or that you prefer it only when it is hot? Asked only of the 60% who say they prefer mince pie.

Either cold or hot	40%
Only when hot	10
Undecided	10

Do you really prefer mince pie hot or cold or would you just as soon have pumpkin pie? Asked only of the 40% who say they prefer mince pie hot or cold.

Really prefer mince	15%
Just as soon have pumpkin	15
No opinion	10

-
1. *Will you tell me what a “filibuster in Congress” means to you?* (Free-answer knowledge)
 2. *What, if anything, should Congress do about filibusters?* (Free-answer attitude)
 3. *It has been suggested that the Senate change its rules so that a simple majority can call for an end to discussion instead of a two-thirds majority as is now the case. Do you approve or disapprove of this change?* (Two-way choice)
 4. *Why do you feel this way?* (Reason-why)
 5. *How strongly do you feel about this--very strongly, fairly strongly, or not at all strongly?* (Intensity)
-

- (1) Does it mean what we intend?
- (2) Does it have any other meanings?
- (3) If so, does the context make the intended meaning clear?
- (4) Does the word have more than one pronunciation?
- (5) Is there any word of similar pronunciation that might be confused?
- (6) Is a simpler word or phrase suggested (either in the dictionary or in a thesaurus)?