

## Questionnaire Design

To create a questionnaire that best captures the constructs you are trying to measure, keep in mind the following points of advice.

### 1. *What are you measuring?*

As you create items for your questionnaire, stay focused on the construct you are attempting to measure. Make sure your items are specific to your construct and could not be interpreted as referring to related constructs (the **discriminant validity** problem). Also make sure that there are not important qualities of your construct that are omitted by your questionnaire. This is a concern with the **content validity** of your measure: the degree to which your measure captures the full range of your construct. Criticisms of content validity are criticisms about what has been left out of a measure.

### 2. *Use clear and unambiguous language.*

*Directions.* You should provide directions for your questionnaire, but expect that a large percentage of your sample will either not read them or will read them only cursorily. To accommodate this tendency, you should make the responses to the items in your questionnaire as simple and straightforward as possible. For example, it's more intuitive for participants to judge attractiveness on a 1-7 Likert scale if 7 = attractive and 1 = unattractive than if 7 = unattractive and 1 = attractive. Assign higher response scores to higher levels of the concept you're measuring. If you are concerned that participants may not respond appropriately despite efforts to simplify your questionnaire, consider reading the instructions to participants and giving an example before they begin.

*Avoid jargon.* Do not use terms that might be easily misunderstood. This is especially important for psychological jargon (e.g., the words *stereotype* and *prejudice* have very distinct meanings in social psychology but are often used interchangeably by non-specialists). Write in everyday language and use short, simple sentences. The word "if" is often a red flag indicating that a questionnaire item is too complex.

### 3. *Avoid leading questions.*

**Leading questions** are questions that suggest a particular response. For example, "What did you think of our delicious buffet?" suggests that a positive answer is appropriate. In general, do not use adjectives to modify the stimulus you want participants to evaluate. Instead, present the stimulus in a neutral way and allow participants to tell you how they feel about it.

### 4. *Avoid "double-barreled" questions.*

**Double-barreled questions** are questions that ask about two separate issues but permit only one response. For example, "Did you find our sales staff to be courteous and punctual?" does not allow the respondent to distinguish between these two qualities. What if a respondent believed the staff were courteous but not punctual? The word "and" in an item can be a red flag that the item is double-barreled.

### 5. *Phrase some items in the reverse.*

When you phrase an item in the reverse, you write it so that participants who strongly agreed with earlier items will strongly disagree with this one. For example, a scale measuring chivalry might include the item, "Women should not be given more protection than men in dangerous circumstances." Phrasing some items in the reverse does two things for you: 1) it enables you to detect **acquiescence bias** (also known as the **yea-saying bias**), the tendency to respond in an indiscriminately positive way. 2) it improves your understanding of your construct by forcing you to think about its opposite.

### 6. *Be consistent in response options*

The **response options** in your questionnaire are the ways that your participants can respond to the prompts you provide. Perhaps the most common response option in psychological questionnaires is a Likert (pronounced LICK-ert) scale, which asks participants to indicate the degree to which they agree or disagree with a statement using a scale that typically contains five to seven response points. If possible, keep the same response options throughout your questionnaire. If you use a 1-5 scale on page 1 and a 1-9 scale on page 2, some of your participants are likely to keep using the 1-5 scale on page 2.

### 7. Use two forms of your questionnaire with items in different orders

**Order effects** occur when responses to earlier items influence responses to later items. For example, compare the following two sets of items:

<i>Order 1</i>	<i>Order 2</i>
1. For democracies to function, citizens must have information about their governments.	1. Enemy countries gain confidence when they learn about divisions within our country.
2. Citizens should be permitted to express their opinions about their government.	2. Citizens should be permitted to express their opinions about their government.

Both sets of items have the same second item, but it is likely to be interpreted differently because of the item that came before it. In the first ordering of items, thoughts of democracy are likely to make participants sympathetic to free speech issues, making the average response to the second question more positive. In the second ordering, concerns about lending comfort to the enemy may make participants question the limits of free speech, reducing their positive feelings toward the second question. To reduce order effects, create two versions of your questionnaire with different orders of questions. You may reverse the order of items or simply scramble them randomly.

### 8. Using hypothetical scenarios

A great deal of research in psychology has involved presenting hypothetical scenarios to participants and asking them how they would respond. However, there are some good reasons to be suspicious that the responses participants provide would correspond to their actual behavior in those situations. In addition to potential problems with participants wanting to present themselves in a socially desirable way, there are some well-documented biases in human reasoning that would lead to systematic errors in prediction. For example, people tend to underestimate the degree to which their behavior is influenced by situational factors. Psychiatrists' expectations of the rate of obedience in Stanley Milgram's experiments were 650 times lower than the actual rate (0.1% versus 65%). We often do not know exactly how we would respond. The best way to find out how people would respond is to use a laboratory or field experiment.

### 9. Asking why

You can ask participants why they acted the way they did, and they may give you an answer, but their explanations are often inaccurate (Nisbett & Wilson, 1977). If you want to test a hypothesis about *why* participants acted a particular way, a better approach to asking is to systematically manipulate that factor and test whether it influenced responses. For example, if you want to find out if people's moral judgments are based in part on the emotion of disgust, you could a) ask people if that is the case or b) prime some people with disgust and see if their moral judgments differ from a non-primed group. The latter approach would yield a more credible answer.

### 10. Pretest

Before you give your questionnaire to participants, have one or two friends who are unfamiliar with your project take the questionnaire. Time how long it takes them so you will know what to tell participants. When they are finished, ask them if any of the items were unclear or potentially problematic and make the necessary changes.