Creating Surveys

In a good survey, your goal should be to extract the maximum amount of information that you can from each item.

Categories

Sometimes you want to use categories to avoid free-form text. Consider this item and some of the (actual) responses. How on earth do you make sense of the results?

What is your religion?

- Catholic?
- cathlic
- Catholicism
- Roman Catholic
- CATHOLICISM, SOMETIMES
- Catechism
- I do not really practice, but I fall in Roman Catholic.

- buddism
- im Buddhist
- buddisum
- Buddist

Instead, you would be better off using categories for this particular item.

When you do use categories, make sure the categories cover all the cases. This item is obviously missing some possibilities:

What is your highest level of education?

○ High School
○ B.A.
○ M.A.

Whereas this covers all the possibilities:

What is your highest level of education?

○ No High School diploma / GED
○ High School or GED
○ A.A. or A.S.
○ B.A. or B.S.
○ M.A. or M.S.
○ Ph.D or other postgraduate

If you must use categories, make sure they don't overlap. If you eat chocolate eight times a week, how will you answer this question? The solution to this problem is to make sure that no number appears in two categories.

How many times do you eat chocolate per week?
○ 0-4   ○ 4-8   ○ 8-12   ○ 12 or more

All of this being said, don't make everything a category. For example, instead of making an item like this:

How many years old are you?
○ < 18   ○ 18-20   ○ 21-30   ○ 31-40
○ 41-50   ○ 51-60   ○ > 60

Just ask for the age as a number. You can always sort the ages into categories later. If you start with categories, you can never recover the actual age.

How many years old are you? _____

Side note: gender is not automatically a category with just Male/Female as choices. See these links:
http://www.sarahdopp.com/blog/2008/genders-and-drop-down-menus/
http://www.sarahdopp.com/blog/2010/designing-a-better-drop-down-menu-for-gender/

Items to Avoid

Impossible Questions

Don't ask questions that are impossible for a rational person to answer. Could *you* answer this question accurately on a health survey?

How many times did you sneeze last month? _____

Unless you have an eidetic memory or are anal-retentive in the extreme, you can't answer that question. Here's a version that you probably can answer:

How many allergy attacks did you have in the past month? _____

Statements of fact

If you're doing a survey about personal versus government responsibility, the following item is useless, because it's a fact. Everyone will agree with it, no matter whose responsibility they think it is to take care of the problem:

Tree branches overhanging power lines are a hazard.

This rephrase asks what you are trying to find out, because it calls for an opinion :

Individual homeowners should be responsible for making sure their tree branches don't overhang power lines.

Double negatives

If you can figure out what this item is asking, you are probably an English major or a master of logic!

> Drunk drivers should not be able to avoid having no bad points on their driving record.

Phrase the item as a positive, or with only one negative:

> Drunk drivers should always get bad points on their driving record.

Emotional items

Now here's a nice, unbiased item for you:

> Scum-sucking liberals are destroying this great nation.

That's what you'd expect to find on a political fund-raising "survey." Instead, state it in a less inflammatory way.

> Liberal policies are bad for this country.

This doesn't mean you can't ask about things that are emotionally charged, such as the death penalty; it just means that you shouldn't use emotionally charged language when asking the question.

Leading Questions

Closely related to emotional items are leading questions: questions phrased in a way that elicit the answer you want. Here's an example.

> Don't you think student fees should be abolished?

And here's the rephrase that doesn't presuppose an answer.

> Should student fees be abolished?

To avoid items like this, just ask yourself if someone on Law and Order would jump up and say, "Leading the witness, Your Honor!" in response.

Technical terms (jargon)

Avoid technical terms that you have learned, but would be mystifying to the people taking your survey. Remember that you've studied psychology for several semesters, but the people taking your survey haven't. Don't use fancy words, either. Unless you happen to be connected to the entertainment industry, this item will mystify you entirely.

> Actors with high Q scores deserve larger emoluments.

Here it is, rephrased in plain language that everyone can understand:

> Actors who have more appeal as celebrities deserve larger salaries.

Double-barreled items

Make sure each item asks only one question. This is a bad item.

> Drunk drivers should pay large fines and be put in jail.

If you think they should pay large fines, but should *not* be put in jail, how do you answer this item? Instead, split it into two separate questions.

> Drunk drivers should pay large fines.
> Drunk drivers should be put in jail.

Whenever you see the words *and* or *or* in a question, check carefully to see that you haven't created a double-barreled item. This is the most common error when creating survey items.

Using Yes/No Items

Items like the following one can only be answered "yes" or "no." Either you have been to Egypt, or you haven't. There's no middle ground.

> Have you ever been to Egypt?
> ○ Yes
> ○ No

You can ask the following question as a simple yes/no item, but it doesn't give you the maximum information.

> Would you like to go to Egypt?
> ○ Yes
> ○ No

This version of the item will tell you a lot more about people's enthusiasm for visiting Egypt.

> Would you like to go to Egypt?
> ○ Absolutely yes   ○ No, not much
> ○ Yes   ○ No
> ○ Yes, a little   ○ Absolutely not

By the way, that first item could give more information if it were asked as "How many times have you been to Egypt? (enter zero if you have never been there)"

Sometimes, a yes/no item won't give you all the information you want. This is a really difficult item to answer, because a simple yes or no isn't adequate.

> Do you eat vegetables with your dinner?
> ○ Yes
> ○ No

You'll get much better data with this item:

> How often do you eat vegetables with your dinner?
> ○ Always ○ Not very often
> ○ Most of the time ○ Rarely
> ○ Some of the time ○ Never

Likert Items

The previous few items are Likert items. The most normal wording for a Likert item is "Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree." The name is pronounced Lĭkert, with a short "i"; it's named after the psychologist who developed it: Rensis Likert.

Odd or Even?

Should you use an odd number of choices or an even number of choices for your Likert items?

> ○ Strongly agree | ○ Strongly agree
> ○ Agree | ○ Agree
> ○ Neither agree nor disagree | ○ Disagree
> ○ Disagree | ○ Strongly disagree
> ○ Strongly disagree |

The problem with adding a "neutral" choice is that people are drawn to that choice like moths to a flame. When you have an even number of choices, the person taking the survey is forced to make a decision. One way to avoid the "neutral" problem is to provide six choices instead of four.

The real question is what "neutral" means. Does it mean you really have no opinion on the item, or that you don't have enough knowledge to make a meaningful response? Here's how one psychologist approaches this problem.

> Here's how I write my surveys and teach research classes. So far it works fine.
>
> I believe that you either have an opinion or you don't. If you don't, I give you an option of "no basis for judgment." I never gave a neutral option simply because when people check that, it normally means that they don't have enough information to make the judgment.
>
> When analyzing the data,..."no basis for judgment" will be included in the percentage calculation to see how many people have no idea about the statement, but the mean will reflect the average of those who have opinions.
>
> David Cheng
> http://www.ocair.org/files/KnowledgeBase/Statistics/TheOptionOfNeutral.asp

Balancing Items

Let's say you are doing a survey about people's attitudes toward environmental noise. If all your items are written such that "strongly agree" means that you are in favor of stronger laws against environmental noise, then your items aren't balanced. This may lead to people mindlessly responding "strongly agree" (or "strongly disagree") to all the items without reading them carefully. Here is a set of unbalanced items:

> I think that the sound level at discos, dances, rock concerts, and sporting events, in general, is too loud
>
> I think it is necessary to use earplugs when I am at a disco, rock concert, dance, or sporting event.
>
> I am prepared to give up activities where the sound level is too loud.
>
> I think it should be calm and quiet in the classroom.

Here are the same items, with the second and third items "reversed" in order to balance them.

> I think that the sound level at discos, dances, rock concerts, and sporting events, in general, is too loud
>
> I think it is unnecessary to use earplugs when I am at a disco, rock concert, dance, or sporting event.
>
> I am willing to attend activities where the sound level is very loud.
>
> I think it should be calm and quiet in the classroom.

Advanced topic: Scoring Likert Items

You won't need to know about this until you start putting the survey online; I'm including it here for the sake of completeness.

When you balance your items, you must do "reverse scoring" on some of them. Let's use the items from the preceding example, where you are trying to measure people's attitudes towards noise, and presume that you have four choices (Strongly Agree|Agree|Disagree|Strongly Disagree).

Make a decision about what a "high score" means. In this example, you might decide that a high score means, "I hate noise." You could also decide that a high score means, "I like noise." It doesn't matter which one you pick. ***The important thing is to stick with your decision.*** In this case, let's decide that a high score means "I hate noise." That's the decision, and we are going to stick with it.

Look at the first item. An answer of "strongly agree" would score four points towards hating noise; an answer of "strongly disagree" would score only one point towards hating noise.

Now look at the second item. In this case, if someone answers "strongly agree," that person does *not* hate noise, so that response scores only one point towards hating noise.

Take a look at the third and the fourth item. How would you score an answer of "strongly agree" for these items? The question to ask yourself is: "Does a 'strongly agree' mean that the person hates noise? If so, it scores four points. If it means that the person likes noise, it's worth only one point."