McMaster University | Family Medicine
David Braley Primary Care Research Collaborative

Piloting surveys

You should always pilot your surveys before starting your data collection for your study. There are two types of surveys you may have (standardized or not). Regardless of the type, you should always pilot! This document will help you start to think through some questions to ensure quality piloting, and therefore quality data for your study.

Standardized surveys

A standardized survey has been developed in a particular way and validated with a particular population/sample. Psychometric properties have been rigorously evaluated so that we know the survey measures the intended concept and responses (or scores) perform in a predicted way. It is critical to go to the original publication/resource to read the description of the development, administration, and psychometric testing of the survey so that you can replicate everything – mode of administration, survey instructions, survey questions, order of questions, answer options, scoring of answers, subscale structure, and so on.

For some standardized surveys you need permission to use them (and sometimes pay for them), for others, you simply need to appropriately cite the original reference. Surprisingly, some articles do not do a great job at describing survey instructions, item wording, item order, response options, and scoring instructions – it leaves you guessing at how to exactly replicate the survey. Sometimes you must read the article (including the tables!) to get your answers or close to your answers. For example, to find the original self-efficacy for appropriate medication use scale, you have to go to Table 4 of the paper and also sift through the article to figure out the rating scale (Risser et al., 2007). You won't always a nice word file to simply lift from a paper or the internet.

Piloting standardized surveys means having people complete the survey, and then scoring the survey according to the scoring instructions for the survey (again, go to the original source). Then you will want to make sure all the scores are within what is possible for the survey.

It is not recommended to make changes to the survey since data quality and the psychometric properties of the survey rely on how the survey was originally developed, administered, and tested. In some cases, minor tweaks like increasing font size, and administering online versus in-person, might be okay and should be described in the write-up of your study. Just because a survey is standardized, does not necessarily mean it appropriate for your study, or 'good,' but it might be the only one 'out there.' There are examples of standardized surveys with double-direct questions (i.e., a question asking about two separate topics), or other poor qualities that sneak into standardized surveys. Sometimes, what is 'out there' does not do what you need it to do, and so you want to develop your own survey.

Unstandardized surveys

Unstandardized surveys are those that you make specifically for your study. Some common examples are open-ended surveys to gather feedback on your intervention from participants, ratings of satisfaction, quality of care, or other self-reported outcomes. Piloting a survey you made for your study generally involves:

1. Getting a small group of people from your target sample to complete the survey
2. Watching how they complete the survey
    a. This can involve a think aloud method (i.e., verbalize their thoughts as they are working through the survey)
3. Asking for their feedback about the survey
4. Making changes based on the feedback

For basic advice for piloting a basic, unstandardized survey, check out this article.

For some guidelines on making surveys, check out this article.

References

Risser, J., Jacobson, T. A., & Kripalani, S. (2007). Development and psychometric evaluation of the Self-efficacy for Appropriate Medication Use Scale (SEAMS) in low-literacy patients with chronic disease. Journal of nursing measurement, 15(3), 203-219