Wilder Research

Effectively using qualitative data

Tips from the Wilder Research program evaluation workshop series

To get the most benefit from your evaluation, you should focus on collecting and analyzing information that can answer questions that are most central to its purpose.

The data you collect may be *quantitative*, information collected in numerical form such as rating scales or frequency of specific behaviors, or *qualitative*, non-numerical information such as responses gathered through interviews, focus groups, case notes, and observation.

Quantitative data can help to understand what happened, while qualitative data can describe why or how it happened and can provide a powerful way to portray the stories behind the data.

This tip sheet provides pointers for processing, analyzing, and interpreting qualitative data to get the highest-quality and most useful information.

Processing qualitative data

Organizing your data

There are a number of ways to organize your data. The simplest is to work from copies of your original documents. To give you more capabilities for processing and analysis, you can transcribe your data into word processing software, or enter it in a spreadsheet. There are also dedicated software packages (such as Atlas.ti or NVivo) which provide unique and complex processing capabilities.

Identifying important elements

When you process your data, you identify important elements to examine further so you can determine themes and patterns. The most basic method of doing this is highlighting and noting important content. Another way is segmenting and sorting data by separating (physically or digitally) significant sub-sections of documents or content, and rearranging them into logical order or groupings.

A more sophisticated approach is to code your data, categorizing and labeling it, which allows you to explore themes systematically, determining their relationship to each other, and finding patterns in those relationships.

The two basic methods of coding are:

- **Open coding.** You assign codes as you read your data and see what ideas emerge.
- **Closed coding.** Codes are pre-determined based on theories or hypotheses you have about how your program works.

Often coding methods combine both approaches. You begin with pre-determined categories and then apply and modify codes as you work, taking care to be open to what the data tells you.

As part of the coding process, you will develop a code book, which is a list of your codes to apply to the data. How you develop your code book will depend on your coding method, but, with any method, you need to pay particular attention to how codes relate to each other in terms of hierarchy and scope. You will also want to review and update your code book throughout the process.

To produce high-quality data, you need to ensure coding is consistent and reliable. Three useful practices include:

- **Code definitions.** Short identifying labels that clearly describe the meaning of a code.
- **Decision rules.** Clear and commonly understood parameters for applying codes, including rules governing how much content to include in a coded segment, when to use specific codes, and how codes may relate to each other.
- **Code checking.** Cross-checking work of others (and vice-versa).

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These have increased importance when multiple coders are working on a single project because they improve the inter-rater reliability by ensuring that the coders are all "on the same page."

Understanding qualitative data

Once you have processed your data, you are ready to begin to figure out its meaning. What are the key ideas expressed? What are similarities and differences? How are these things related and what does it mean for your program?

Methods

The following are common methods used to help you analyze and interpret your data. They are presented in order of increasing sophistication. The complexity of the data and the depth and scope of your research questions will determine the most appropriate methods to use.

- **Reduction.** Analyzing a piece of qualitative data in a way that summarizes and synthesizes the content to make it more manageable to understand and use.
- **Quantify.** Counting the frequency of themes or code occurrences to more accurately understand the key elements or findings in the data.
- **Content analysis.** Reducing and quantifying elements in the data to focus on larger themes, patterns, and categories to get a more complete picture of the data.
- **Model.** Using reduction, quantifying, and content analysis to build typologies, taxonomies, or archetypes for understanding phenomena or groupings in the data.
- **Theorize.** As models emerge the analyst uses them and other relevant knowledge to build and test hypotheses and establish casual links or relationships.

Validation

Without tests for statistical significance, how do you know if your evidence is meaningful? There are several ways to determine whether you can draw meaningful conclusions from qualitative data. These include:

- **Strength.** The data point (e.g., interview respondent) provides descriptive and thoughtful detail and context and is an appropriate and reliable source.
- **Internal verification.** Data are consistent within a single source. (e.g., a respondent provides consistent information in different parts of an interview).
- **Inter-source verification.** Data are confirmed by multiple quality sources in your data (e.g., multiple interview respondents provide the same or consistent information from different points of view).
- **External verification.** The qualitative data are consistent with other data including quantitative data collected, existing literature, or other research on the topic.

Reporting findings

Qualitative reporting cannot include everything. Choices about what content to include and how to convince your audience about the strength of your findings are critical to successful qualitative reporting. Some tips for doing this include:

- **Revisit research questions**. These will help you to frame your message and keep your reporting focused on the important messages.
- **Focus on the meaningful.** Use your analysis and interpretation to help decide the most important, substantial, and relevant findings. What is "meaningful" can depend greatly on what you are looking to get out of the data.
- **Balance analysis and description.** Detailed description and quoting are necessary, but do not rely on them entirely. They must be balanced with analysis to make a report interesting and convincing. Also be sure to be transparent in how you arrived at your findings.

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This tip sheet is part of a series developed for our evaluation workshops. Find others at www.wilder.org/report.html?q=tips2008

MARCH 2011