Quantitative Research Module

This module will help project/program staffers better understand quantitative research.
### Contents
(Direct links clickable below)

<table>
<thead>
<tr>
<th>Interactive Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i.e. Worksheets) will help you...</td>
</tr>
<tr>
<td>✓ What is Quantitative Research?</td>
</tr>
<tr>
<td>✓ What is the use of Quantitative Research?</td>
</tr>
<tr>
<td>✓ What can we use Quantitative Research for?</td>
</tr>
<tr>
<td>✓ What are advantages and disadvantages of using Quantitative Research?</td>
</tr>
<tr>
<td>✓ When should we use Quantitative Research?</td>
</tr>
<tr>
<td>✓ How should we use Quantitative Research?</td>
</tr>
<tr>
<td>✓ Tools, Templates, and Examples</td>
</tr>
</tbody>
</table>
TOOLS IN THIS MODULE

(You can click on the underlined tool to go directly to the location of the tool in this module.)

**TOOL 1: Types & Examples of Survey Questions**
What is it?

Quantitative research is a study involving the use and analyses of numerical data using statistical techniques. They pose questions of **who, what, when, where, how much, how many**, and **how**.

What is it for?

Quantitative research methods are designed to produce statistically reliable data that tells us how many people do or think something. Quantitative data typically is in numerical form such as averages, ratios or ranges.

What can we use it for?

Quantitative research is especially useful when carrying out a large scale needs assessment or baseline survey. It is independent of the researcher and one should get similar results no matter who carries out the research. It can also be used to measure trends. For example, the Talking Drum Studio Evaluation conducted in 1999 discovered that a larger percentage of the uneducated or less educated Liberian population listened to the TDS than the educated elite. Approximately 82.5 % of people with no or low levels of education and 89.4% with some education listened to TDS compared to 76.8% of the people with high levels of education.

Advantages & Disadvantages

**Advantages**

- Can be used when large quantities of data need to be collected.
- The result is usually numerical (quantifiable) and hence considered more “objective”.
- The data is considered quantifiable and usually generalizable to a larger population.
- It can allow SFCG to see changes overtime and help develop quantitative indicators.
- It can provide a clear, quantitative measure to be used for grants and proposals.
Example: Quantitative Research in Liberia

In Liberia, in order to measure the efficacy and reputation of the Talking Drum Studio (TDS) surveys were carried out which asked questions such as “Does the TDS tell the truth” with fixed responses to choose from such as “very often” “sometimes” and “never”. Since none of the participants selected “never” it could be stated that all participants believed that TDS spoke the truth “very often” or “sometimes.”

Disadvantages

- Results need to be calculated using Excel, Access, or data analysis software (such as SPSS), which may not always be accessible to a country program.
- Time consuming, as the researcher or SFCG team member needs to enter, clean and then analyse the data.
- The larger the sample, the more time it takes to analyse the data and analyse results.
- The larger the sample the more time it takes to collect data.
- The quantitative data ignores a very important human element.

When should it be used?

Quantitative research should be used under the following circumstances:

- When trying to measure a trend such as ‘do youth talk to their parents about issues important to them?’
- When data can be obtained in numerical forms such as ‘number of children under 15 who participate in peacebuilding activities’.
- When simple objective responses can be received such as yes and no questions.
- There is no uncertainty about the concepts being measured, and there is only one way to measure each concept.
- You are trying to collect data in ratios, percentages and averages.

Mixed Method Approach

A research model does not need to be just one single model. In most cases the most appropriate methodology in the field of conflict transformation is a mixed method approach where quantitative methods like surveys are combined with in-depth interviews and storytelling. This accommodates the need for both “objective data” (breadth of an issue) and the “human element” (depth of an issue).
How do we use it?

Quantitative research can be conducted by using a variety of methods of numerical data collection. They are:

**Surveys** are a quantitative method involving the use of questionnaires and aim to generalize from a representative sample population to a larger population of interest. (Refer to module on Surveys for more information and relevant tools)

**Mini surveys** or informal surveys are a quantitative method for collecting program information quickly. They involve relatively small population samples using brief questionnaires that focus on a limited numbers of variables. Mini-surveys are very useful for organizations that have projects of relatively short duration and are carrying out interventions with well-defined expectations.

**Mixed Method Approach**
Quantitative research is usually independent of the researcher and would generally reveal the same results, irrespective of the researcher, provided that the methodologies are the same.

Tools, Templates and Examples

Important Questions to ask before deciding on what type of research to use
1) What is the information that is required?
2) How will you use this information?
3) From which stakeholders will you get this information?
4) What is the most appropriate tools for collecting the information?
5) What are the specific questions?

**TOOL 1: Types & Examples of Survey Questions**
**Tip: Consent Forms**

- All interviewees must give their agreement to participate.
- Interviewers should make sure that interviewees know they can refuse to respond to questions (that is why we always include “no response” in the list of possible responses) or stop the interview at any time.
- Investigators must provide interviewees with information about the activity in a manner appropriate to their culture and education.
- Consent forms and informational tools should be developed with community members and field-tested.

For more information on consent forms, refer to the Ethics module and the Children and Youth module.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes/No answers</td>
<td>These may be used to measure attitudes or responses that have a clear yes and no answer</td>
<td>Should information about ADR be made available to the general Moroccan population? Yes\No</td>
</tr>
<tr>
<td>Likert style format</td>
<td>List attitude statements and ask participants to respond on a five-point scale (e.g. Strongly agree, agree, neutral, disagree, strongly disagree)</td>
<td>The Moroccan population should be provided with information on ADR Strongly</td>
</tr>
<tr>
<td>Lists</td>
<td>These ask the participant to tick all statements that apply</td>
<td>What aspects of SFCGM’s ADR work do you think would be useful for the future?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Training sessions for judges</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Training sessions for lawyers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Training sessions for CSOs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Other training sessions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Follow-up activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- General media work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Other ---------</td>
</tr>
</tbody>
</table>
| Ranking | These ask the respondents to Rank order their responses. This shows the importance assigned by the respondent to a special attitude/object | How have you learnt about ADR?  
  a. through SCGM activities  
  b. through colleagues  
  c. through newspapers  
  d. through books  
  e. through work  
  f. Other -------------- |
|---------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Numerical | When numerical data is needed, list numbers as responses | What is your current age (select one)  
  • Less then 18  
  • 19-29  
  • 30-29  
  • 40-49  
  • 50 and above |

**Additional Resources**

Audience Dialogue. Qualitative or quantitative Research?  
http://www.audiencedialogue.org/qualiquant.html
Cheyanne Church and Mark Rogers. Designing for results. SFCG. Chapter 12.
http://www.sfcg.org/programmes/ilr/ilt_manualpage.html

OTI. Conflict Evaluation Toolkit. Part III

http://www.unr.edu/bench/chap04.pdf