

There are two broad categories of social research methods and data that can be collected: **quantitative** and **qualitative**.

### **Quantitative**

Quantitative methods deal with numerical data (eg. number of people recycling, number of energy efficient lights).

Quantitative methods can reach large number of people, and generally involve a short interaction. The popularity of collecting quantitative data reflects the old adage “*that you can't manage what you can't measure*”.

### **Qualitative**

Qualitative methods deal with words or communication (whether that is text, voice, or visual). Qualitative research seeks, amongst other, to find out what people are doing and why they are doing it, or what stops them from changing, the meaning people construct for their actions, and how they see their role and actions in the wider scheme of things.

Qualitative methods generally involve a longer personal interaction, and reach a lower number of people.

Qualitative evaluation is founded on the belief that meaningful information and evaluation requires an understanding of the context in which change occurs. As such, qualitative evaluation trades in quantity of respondents (eg. information gathered from questionnaires or other types of survey) for the fewer respondents, but more in-depth and quality information. This includes gaining an understanding of how people make sense of their lives and experiences, including the particular intervention that is the focus of the research, how people have coped with the change, and what has occurred as a result of their involvement.

In qualitative evaluation, the researcher or evaluator is central to the data gathering process, rather than the questionnaire or other instrument. The evaluator is involved in developing a

relationship with the respondent, asking questions, eliciting responses, probing for more information, and making observations. The information gathered in qualitative evaluation is descriptive, focussing on change and processes, and their meaning.

### Why undertake qualitative research?

The [United Nations Development Program \(UNDP\) Guidebook on Participation](#) notes that it is important to move beyond traditional evaluation approaches (eg. change in resource use) in order to evaluate the process of change. The benefit of qualitative evaluation is that it takes evaluation 'beyond the numbers game' (UNDP Guide, p3), and provides a story behind any numbers that are collected. This is particularly relevant for behaviour change projects, as these interventions are about people participating in a change process. Traditional quantitative approaches are noted to be inadequate for understanding the outcomes and effect of participatory development projects. This entails moving from a focus on measurements (quantitative) to describing the process of change and the change that has taken place (qualitative). The key elements proposed by the [UNDP Guidebook](#) are outlined below.

### Key principles in monitoring and evaluating participation

Qualitative as well as quantitative dimension of participation must be included in the evaluation in order to capture the dynamic as opposed to static nature of participation. The evaluation of participation demands that the entire process over a period of time is monitored. Central importance of monitoring the responses into the data collection template. Responses can be entered into the template. Participatory evaluation In the entire evaluation process, the people involved in the project have a part to play.

It is good practice where possible to use both quantitative and qualitative in designing your evaluation.

Both quantitative and qualitative data have strengths and weaknesses, and the use of one type of data set is not exclusive to using the other. In fact, combining both provides a way to provide a measurement of change, as well as providing context for the change. For example, conducting quantitative survey research using questionnaires can inform further enquiry into particular areas of interest using qualitative methods.

### Points to consider:

- Measuring social phenomena is not always easy. It may be possible to count how many people recycle, or take short showers, but it is not easy to find out why they do so.
- It may be possible to establish relationships between certain variables (eg. demographics) and behaviours, but relationships explained by aggregates do not necessarily relate to why specific individuals undertake particular behaviours.

There are different survey designs you may want to consider in collecting data for your evaluation. The three main designs are:

**Summative or post-test designs:** this is where you undertake data collection after you have undertaken your intervention (eg. post-workshop or post-project questionnaire). This is the simplest and easiest design for evaluation.

**Pre-test, post test designs:** this is where you undertake measurements before and after an intervention.

**Quasi-experimental designs:** this is where multiple measurements are taken over time, and when control groups are introduced. Quasi-experimental designs are used when you want to know with some confidence whether a project or particular intervention has caused a change.

It is important to note that control groups need to have similar demographic characteristics as the participant groups. This is very hard to achieve when interventions involve the self-selection of participants.

If you want to know whether the intervention was **statistically significant** in determining changes in behaviour, you need to add a control group.

The level of research design and statistical analyses should be guided by the amount of time and resources, and the level of the skills you have or are able to obtain. For many community engagement programs, a simple research design using descriptive statistics may be sufficient.

Some definitions to consider

Survey	Surveys are the most common quantitative research method, and involve
Questionnaire	The questionnaire is the most common tool to gather survey information. A
Statistics	

Statistical analysis provides a means to analyse quantitative data. Statistics seeks to describe patterns a

Descriptive statistics are the simplest form and consists primarily of describing the data (Eg. how many r

Post-test design	Post-test designs involve a one-off survey and are useful where the evaluati
Pre-test – post-test design	Pre-test - post-test designs measure change resulting from interventions by
Quasi-experimental design	Where multiple measurements are taken over time, and when control group
Control Group	A control group is made up of similar demographics to the target group but i
Population	Population refers to the complete set of research subjects relevant to the qu
Sample	A sample refers to a group that comprises the population. The aim is to get
Probability Sampling	This is where every member of the population has an equal chance to be se
Non-probability sampling	This is where individuals from the population are targeted based on some cr

**Lastly, some parting thoughts on the use of quantitative data and statistics:**

Torture numbers, and they'll confess to anything (Gregg Easterbrook)

98% of all statistics are made up (Author Unknown)

Statistics are like bikinis. What they reveal is suggestive, but what they conceal is vital (Aaron Levenstein).

Source: [Quotegarden](#)