

03 Introduction to Quantitative Data for Youth Practitioners

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Adapted by Rammiza Akhtar from a training by Claire Moyes of [Shephard & Moyes](#), delivered for the Cornerstone project

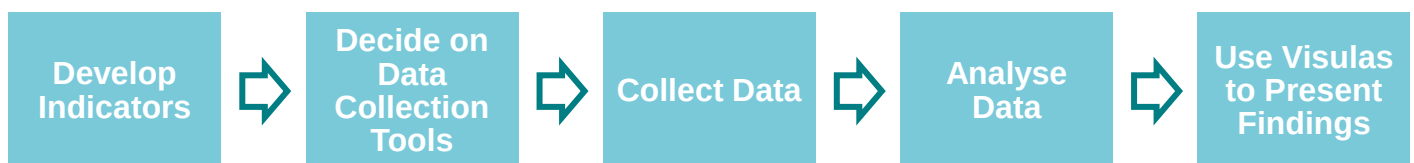
Youth organisations are increasingly interested in demonstrating the effectiveness of their practice because of funders' requirements and their own desire to understand the impact they're making.

Embedding research practices within youth work is possible as youth workers possess many of the skills required to be good researchers. This resource aims to highlight the ways in which quantitative data be collected, analysed and used by youth workers, in order to improve the organisation's work and as evidence of the benefit that youth work has on the lives of young people.

Why quantitative data?

- Its structured and conclusive
- It tells you 'what' - how much, how often, how many
- It allows for greater objectivity of results

Key stages in data collection and analysis



Developing Indicators

Before you collect data, it is important to reflect on what you are trying to find out about a particular project and what data you need. This in turn will inform the types of tools you will use to collect your data.

Broadly speaking the types of quantitative data you may need to collect in youth work projects falls into three categories:

1. **Reach** – Data that helps determine who you are engaging
2. **Delivery** – Data that helps determine what is being delivered
3. **Impact** – Data that helps determine what difference are you making

Once you have these broad questions you can turn them into quantitative indicators.



An indicator is a specific, measurable piece of information that shows changes or progress towards achieving change. It can be expressed as numbers, percentages, increase/decrease, averages



Quantitative indicators are not questions you ask in a survey, rather they are a way of telling if your project is effective in terms of who its engaging, what its delivering and what is the impact its having.

Examples of indicators for a physical activity project:

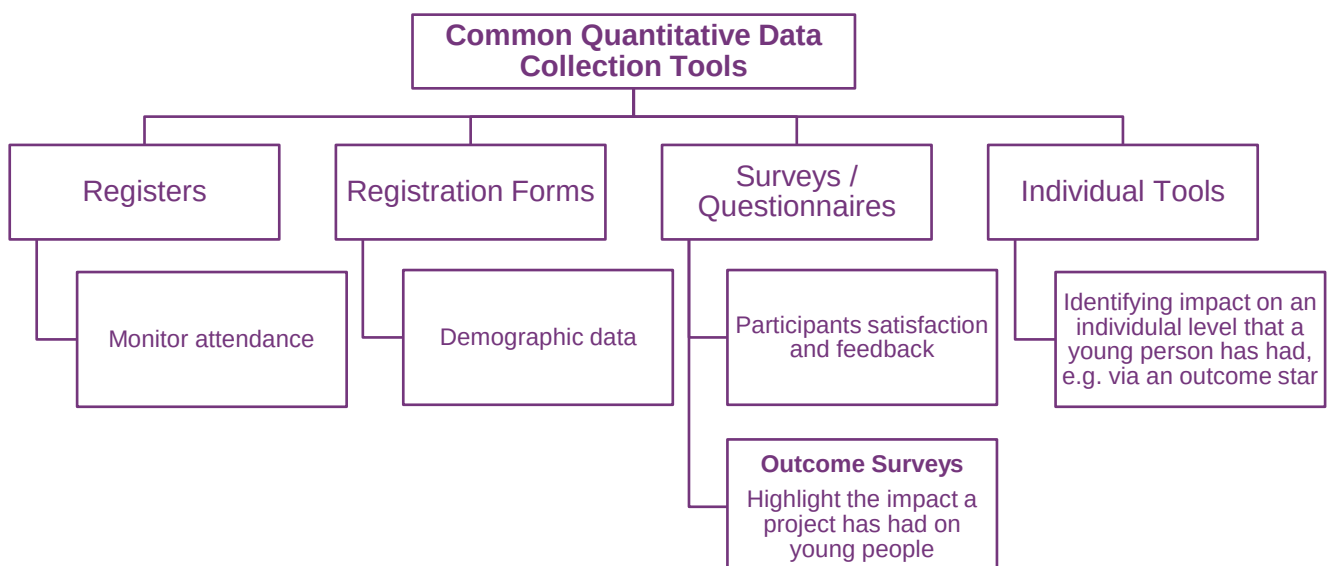
Reach	• Number of young people • Percentage from target population • Percentage who were inactive before taking part
Delivery	• Number of sessions delivered/ hours of support received • Average number of sessions attended/ hours of support received • % of young people who attended 1, 5, 10 sessions • % of young people satisfied with the project • % of young people who have tried something new
Impact	• % of young people who are more active • % of young people who feel more confident • % of young people whose wellbeing has improved • % of youth workers who developed new skills

Tools for Data Collection

Generally, when designing or determining your tools for data collection you will need to make a trade-off between: The quality of the data collected vs. how easy it is to collect it.

Example: deciding between using a session register or making a rough estimate about the participants involved in your project.

The trade-offs you decide to make depends on what is important to your evaluation, what you want to know and why that is important. So, if you are targeting a certain gender you will need to collect accurate information about your target audience. In this case, roughly guessing will not be useful. Instead, a session register will be more appropriate.



Designing Outcome Surveys

Outcome surveys enable you to quantify 'subjective' measures, e.g. 90% of young people feel more confident as a result of the project.

These types of surveys can be used to measure any of your outcomes. The type of outcome survey you use will depend on your project.

Reflective Baseline	Point in Time	Baseline and Follow-Up
• Asked once, usually near the end of the project • Type of question would ask participant to think about their experience before the start of the project and at the end of the project • Will show distant travelled	• Asked once, typically near the end of project • Generally asks if things have improved or not • Shows status and not distance travelled	• Asked twice, usually before starting and near the end of a project • Will show distance travelled

When deciding which outcome survey to use,

- Think about the purpose of your survey
- Think about your audience, e.g. some tools may not be suitable for a younger audience
- What is the context? What is the project, what are you delivering?
- What works best for you? You might need to test this!

Standard or Validated Measures are questionnaires or scales that have been developed, tested and validated by academic researchers. Therefore, in theory the data collected is very reliable. They must be administered exactly as designed, without any changes.

A benefit of using a validated scale is that that data can be aggregated and compared across projects or years, since exactly the same methodology has been used. Therefore, it could be beneficial for large funders or policy makers. However, they can be challenging to administer as they may have many questions, and/or the language used isn't engaging for young people.

Data Collection Considerations

- Get informed consent from participants
- Be transparent about subject and purpose of research/evaluation
- Respect confidentiality
- Think of safeguarding - ensure no one is harmed or adversely affected
- Conduct the collection by people with appropriate training

Tips for designing your survey

- Only ask what you need to know
- Avoid repetition
- If you can, pilot your survey to make sure the questions make sense to your audience and to see how long it will take to conduct
- Think about scale you will use for survey
- E.g. yes/no, strongly agree – strongly disagree, a numerical scale (1-10). This will depend on the type of evaluation you need to do.
- Use appropriate wording and avoid jargon
- Consider GDPR when asking personally identifiable questions
- Your survey may include a small number of qualitative data questions, which can be used to back up your quantitative data

Data Analysis and Presentation

The quantitative data collected can easily be analysed and manipulated using MS Excel. It can be presented in several visual ways, for example bar charts, pie charts, or comparing change in a table. There are many free/paid for courses (see resources below), and Google is a great way to get answers to specific data manipulation questions (e.g. what formula to use in Excel).

Once analysed, reflect on what your results tell you about your project and what they don't tell you. Quantitative data is great at telling you the 'what' but it doesn't tell you the 'why'. Quantitative and qualitative data go hand in hand to tell you the whole story.

Glossary

Methodology	The component of a project or study that sets out how data will be collected and analysed
Quantitative Indicators	A measurable quantity that indicates change, success, the impact of a project
Standard / Validated Measures	A scale, usually developed by academics that has undergone testing amongst the target group to ensure its reliability and validity

Additional Resources

Excel for data: bite-sized series – self study

<https://datawise.london/training/excel/>

Quantitative analysis using excel

<https://evallab.unm.edu/learning-center/summer-institute-materials1/day-4-materials/step-by-step-guide-to-quantitative-analysis-using-excel.pdf>

A step-by-step guide to developing effective questionnaires and survey procedures for program evaluation & research

<http://fs.cahnrs.wsu.edu/wp-content/uploads/2015/09/A-Step-By-Step-Guide-to-Developing-Effective-Questionnaires.pdf>

How to analyse quantitative data for evaluation

<https://knowhow.ncvo.org.uk/how-to/how-to-analyse-quantitative-data-for-evaluation>

Checklist

- **Think** about the broad questions regarding the reach, delivery and impact of your project before data collection
- **Trade-offs** are inevitable. To decide, consider what is important to your evaluation, what your overall aims are and who you are targeting
- **Reflect** on the type of outcome survey you want to use. This will depend on the purpose of your study
- **Data analysis** can be conducted using Excel. Remember to use visuals who can help clarify findings