Doing

Read time: 14 minutes

This section focuses on how to identify the data required for evaluation. It also provides an overview of the main methods that are often used and some of the overarching considerations to bear in mind as you plan your data collection activities.

It is divided into two stages:

A. Designing your evaluation questions
B. Useful information on research methods

Designing your evaluation questions

An evaluation question should:

- test an outcome or impact which is directly attributable to the project; and
- be framed, if possible, to establish the difference between the outcomes for those who participated in the project, against those who did not.

In effect, you are flipping your hypotheses as laid out in your evaluation framework (e.g. what you believe your initiative can do), to become a question, or questions, to focus the evaluation to ensure it is addressing the most relevant issues. You do this by looking at the activities and outcomes in your evaluation framework, and the assumptions that need to be true in order to reach your stated impact, and re-frame this information as questions. (This is likely to be a long list, and it is often not practical to address every question).

Fictional Example – Digital Sleuth Club

ACTIVITIES

Digital Sleuth Club will deliver a series of standalone two-hour workshops in youth clubs/centres and public libraries, in areas identified using indices of multiple deprivation. The project staff will:

- deliver workshops to young people.
- develop workshop resources.
- hire and train specialists to produce supporting campaign materials for social media.
- ensure programme sustainability by sharing resources or training youth leaders.
- use their partnership with the youth club association to secure workshop venues and to find participants for the workshops.

OUTCOMES

- improvement in ability to detect misinformation (assessed through a quiz at the beginning and end of the workshop).
- increased comprehension of how the digital media ecosystem works.
- understanding how verified online content is produced and how to identify it, and how to spot advertising content online.

EVALUATION QUESTIONS

1. Did project staff successfully build workshop resources that were effective?
2. Did the specialist facilitators successfully deliver the workshops?
3. Were enough participants from the target group recruited for the workshops?
4. Did participants at the end of the workshop have an improved ability to detect misinformation?
5. Did participants at the end of the workshop have an increased comprehension of how the digital media ecosystem works?
6. Did participants at the end of the workshop understand how verified online content is produced, and know how to identify it online alongside advertising content?
7. Next steps for developing and delivering this project. Is the project sustainable?

Once you have your long list of evaluation questions, you should prioritise, in collaboration with your stakeholders, the most important evaluation questions to focus on.

The **causal effect** of a project is the effect that the outputs of the initiative have had on its outcomes. In practice, these are the changes in the project participants that can be attributed to the outputs of the project.

Causal effect

The causal effect of an intervention is the effect (change) that it is shown to have on its participants. It can be described as the difference between the outcomes for the participants who have taken part in an intervention, compared to those who have not, or the outcomes of participants after an intervention, as opposed to before it.

Indicators

Outcome and impact **indicators** are the measurable pieces of evidence that allow you to track the change that has taken place as a result of your intervention – the ways of knowing whether a change is occurring.

For example, for a media literacy project, an outcome indicator might be the change in score between a pre- and post-intervention knowledge quiz carried out by participants. Consistent, significant improvements in scores, especially if they are sustained over time, would indicate a positive outcome for the intervention.

Definition: Indicators

Impact indicators and outcome indicators are the measurable pieces of evidence that allow you to track the change that has taken place as a result of your intervention.

For example, for a media literacy project, an outcome indicator might be the change in score between a pre- and post-intervention knowledge quiz carried out by participants. Consistent, significant improvements in scores would indicate a positive outcome for the intervention.

Research methods

Gathering your data

Carrying out an evaluation will involve gathering and analysing data about the **effect** that the intervention had on your target group, and/or about their experience of it. There are various methods that can be used, and there are some common concepts and practices to be aware of, which we outline below. The two main methods for gathering data are:

Surveys and quizzes: these can be useful for capturing facts and figures (**quantitative data**) to inform your evaluation. Questions are asked in a systematic way so that comparison between respondents is possible. Such questions may involve closed questions (i.e. ones with pre-designed answer codes). These result in quantitative data, which enables comparisons and trends over time to be made.

Definition: Surveys

Surveys consist of forms or lists of questions and can generate both quantitative and qualitative data, depending on the kind of questions asked.

For a media literacy intervention, you might want to survey your participants before and after the intervention, or straight after and then several months later.

The type of survey you create depends both on your target audience, and what you want to find out.

Definition: Quantitative data

Quantitative data is information that can be counted. For a media literacy intervention, this might include collating the responses to questions or statements with limited answers.

It is usually collected through surveys or questionnaires, and can include results from quizzes.

It can be used to understand what people think about something (from a limited range of options), and whether something has changed in their attitudes. Quantitative data can be gathered over time to produce longitudinal evidence which can add further proof of the effectiveness of your intervention.

It can be combined with qualitative data for deeper understanding.

Interviews and focus groups: these can be useful for capturing the 'why' and the 'so what' (**qualitative data**). The approach is tailored to capture individual stories which can bring your evaluation to life. They tend to involve open questions (i.e. ones where the participant can answer using their own words). These result in qualitative data, including quotations that can be used to illustrate the impact of the intervention.

For more detailed information and resources, the Top Tips documents on our website provide an overview of the methods, the key issues, and an annotated example.

Definition: Interviews

Interviews are a research method that involve conversations between a researcher and a participant, often with questions or a discussion guide that is defined in advance. They allow you to ask detailed questions and gain a more in-depth understanding of how an intervention might have changed a participant's attitude and behaviour.

Definition: Focus groups

A focus group is a research method that involves bringing together a group of people with particular characteristics or experiences to discuss a topic. As a qualitative research method, this can be used to understand how and why people think or behave in a certain way.

In terms of media literacy initiatives, focus groups within your target audience could be used to help develop aspects of the intervention, or focus groups of participants could be used to determine what they have learnt and how it has changed their behaviour, or what they think could be improved about the project's activities.

Legal, ethical and safeguarding considerations

Before starting any research, it is important to think carefully through the legal, ethical and safeguarding considerations. A good place to start is the Market Research Society Code of Conduct which sets out how a professional researcher should behave. For information about how data protection may be relevant to your research, you might want to look at the Information Commissioner's Office guidance on the UK General Data Protection Regulation. You may also want to consider seeking independent legal advice or expert advice on issues such as how to safeguard children or vulnerable adults from harm (if relevant to your project).

Don't forget the wellbeing of your own team when making plans and ensure that appropriate safeguards and escalation procedures are in place, especially if your intervention is focusing on sensitive topic areas.

Minimising bias

A challenge faced by all evaluators is how to understand potential bias and minimise or mitigate for it. We all want our projects to perform well, but if data capture and analysis are biased, the credibility of the evaluation will be undermined and the opportunity for learning will be lost.

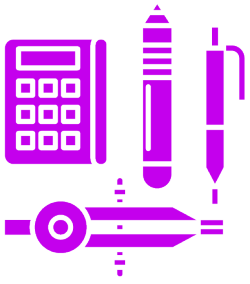
Who to include in your evaluation (sampling)

Depending on how many people participate in your project overall, you might not need to do research with all of them to get the information you need. Choosing a **sample** can reduce the burden on your team (in terms of data collection and analysis) and on your participants. But in general, a larger sample size is preferable and means you can be more confident that any small changes you observe are significant. However this isn't always the case so we would recommend reading more about sampling in the Digital Inclusion Evaluation Toolkit on GOV.UK (pages 16-18).

Definition: Sample

When conducting an evaluation, you might be able to collect some data only from a selection of participants: this would be your sample. The sample size in relation to the overall group is important, as the statistical significance of your findings (which allows you to conclude whether or not something actually made a difference) is partially dependent on the sample size.

One option to consider is using evaluation tools as part of the project delivery. For example, people like to see that they have made progress, so if a comparison of the before and after scores of a quiz or survey are built into the programme delivery this will be both useful for the evaluation and interesting for the participants.



If you can't ask everyone involved in your initiative, you should try to speak to a representative sample that reflects the range of characteristics of the overall group; for example, by generating a random sample, or by deliberately choosing people who are best placed to help with your specific evaluation questions. For example, if your **hypothesis** is that older people are particularly likely to prefer an intervention, you should ensure that you have older and younger people in your sample, so that you can compare them.

Definition: Hypothesis

A hypothesis is a tentative statement or proposed explanation for a phenomenon or event, based on available evidence. It often predicts that there will be or won't be a correlation between two variables, one of which could be a media literacy intervention. A testable hypothesis is one which can be proved or disproved through experimentation. An evaluation should test whether or not a hypothesis seems to be true: for example, your hypothesis might be that your intervention will improve participants' knowledge or skills in a particular area, and your evaluation will determine whether it actually does.

Consider how to evidence the counterfactual

When assessing the impact of a specific intervention, it is important to be able to compare any change detected with what would have likely happened without the intervention: this is called the **counterfactual**. The counterfactual helps you to attribute any impact detected to your intervention, rather than something that might have happened anyway (e.g. someone getting better at a test over time, even without an intervention, if they can see their results straight away).

There is no way of directly observing what would have happened had you not carried out your intervention, so researchers use various approaches to estimate the counterfactual, including:

Definition: Counterfactual

When assessing the impact of a specific intervention, it is important to be able to compare any change detected with what would have probably happened without the intervention: this is the counterfactual scenario. This can be done by using a control group (an audience with similar characteristics to your target, without access to the intervention) or by using a baseline, i.e. comparing the skill or knowledge levels of your target audience before and after the intervention.

- using a control group (an audience with similar characteristics to the target, without access to the intervention); and/or
- using a baseline for comparison, (i.e., comparing skill or knowledge levels of the target audience before and after the intervention).

If you can detect a change in the intervention group that didn't occur in the control group, it is likely that it was a result of your intervention.

A **randomised control trial (RCT)** is considered one of the most robust ways to design a control group. An RCT involves people with similar characteristics (e.g. applicants to a course) being randomly assigned to one of two groups: one which receives the intervention (treatment group), one which doesn't (control group). Both groups are asked the same evaluation questions to establish whether the intervention had an impact.

When it is not possible to run a full RCT, evaluators can use quasi-experimental methods to identify a control group. You can find more information in this UK government resource, or from UNICEF: quasi-experimental design and methods.

It can be challenging and resource-intensive to set up an RCT or find a reliable counterfactual, so often evaluations will rely on comparing participants' results against baseline data. This can be supplemented by using open-ended questions to ask participants to reflect on why their scores have improved. Another option is to include questions that do not relate directly to the skills the intervention aims to target, i.e. to monitor whether these remain stable while those skills that have been targeted improve.

Analysing data

How you analyse your data will depend on what you have collected. However, there are some rules of thumb that you should always follow:

Refer back to your theory of change. The data you have collected should help you evidence each of the steps.

For quantitative data (eg data collected through surveys or quizzes) you can use statistics such as the number or percentage of people who performed better in a quiz after the intervention, or methods such as impacts compared with comparator group (see above on counterfactuals and RCTs).

For qualitative data (eg interview or focus group data) it can be harder to decide what to include, and you can be at risk of 'cherry-picking' the best quotes to demonstrate success. It can be helpful to put all the qualitative data into a large grid with the analysis questions so you can identify the common themes.

Further reading

For those who want to read more about issues relating to gathering and analysing data, we find these sites useful:

Code of Conduct | Market Research Society (mrs.org.uk)

Guide to the UK General Data Protection Regulation (UK GDPR) | ICO

Digital Inclusion Evaluation Toolki (publishing.service.gov.uk)

Simple Random Sampling - Research-Methodology

Collect and/ or retrieve data - Rainbow Framework (betterevaluation.org)

Choosing your collection methods | NCVO