



Practical guide

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# How to conduct a qualitative/ quantitative study? From planning to using findings

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Operations and Technical Resources Division  
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## Preface

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Our activity frequently involves the production, aggregation, sharing and use of reliable data, or evidence. This data supports the decision-making that steers our field activities, and provides both substance to strengthen our advocacy activities and evidence to demonstrate the relevance and impact of our interventions. The studies (of various types: surveys, assessments, diagnoses, etc.) and research which produce such data contribute to Handicap International's recognition as a credible, legitimate and robust organisation.

Rigour is required in the approaches and methods used to generate such reliable, relevant and high-quality data.

This practical guide presents the principles to observe when planning, collecting, analysing, sharing and using primary or secondary, quantitative or qualitative data. It also provides a Toolbox for the practical implementation of these principles by field teams. The breadth of material covered makes this a lengthy and detailed guide. However, it should not be read linearly. Keep in mind the context of your projected study, as well as your teams' skills and knowledge. In other words, let your needs guide you and be a proactive reader!

What makes this guide valuable is its wealth of practical material. Indeed, several sources were drawn upon for its elaboration: the guide was shaped by the feedback and experiences of different Handicap International stakeholders<sup>1</sup>, as well as by fruitful collaboration with *Terre des Hommes* Lausanne, whose Operations and Technical Resources Division's Quality and Accountability Unit made precious contributions.

The resulting guide is pragmatic and practical in intent. As well as laying down basic methodological principles, it also includes specific tools that support the nature of our interventions, such as our gender, age and disability sensitive activities, in contexts of both development and crisis.

Handicap International's head office and field teams, partners and even collaborating consultants, now have an exhaustive practical guide to refer to when planning and implementing studies. We hope that this guide will serve you well on a daily basis!

May you enjoy reading and especially applying it!

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Director, Operations and Technical Resources Division  
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<sup>1</sup> Innovation & Knowledge Management Unit, Impact, Monitoring & Evaluation Unit, Operations and Technical Resources Division – head office and field, Handicap International Foundation, Operational Advocacy Unit.

# Foreword

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## 1- Why such an interest in data?

Data, data creation modalities, data use and data management are becoming increasingly prevalent in development and humanitarian debates and discussions.

Indeed, a number of both internal and external initiatives are converging towards this issue. The “data revolution”’s contributions are addressed by the Sustainable Development Goals (SDGs), with particular focus upon the need for precise, reliable and actualised monitoring of SDGs<sup>2</sup>. The data revolution uses today's information technologies to capitalise upon the present proliferation of data, focusing upon the collection, analysis, storage, and sharing of large volumes of data from multiple sources.

International conventions, such as the Convention on the Rights of Persons with Disabilities<sup>3</sup>, prescribe and emphasise the need for gathering the appropriate information for formulation, application and evaluation of adapted policies. They emphasise the need for information disaggregation (e.g. by gender, age or disability) in order to access information that remains invisible in the collective mass. Information disaggregation notably enables the most vulnerable groups to be identified and the specific needs of defined groups to be analysed.

In the past few years, the development and humanitarian sector has emphasised the need for implementation of action performance monitoring and evaluation mechanisms, in order to measure and demonstrate intervention quality<sup>4</sup>. This approach is completely integrated into Handicap International's federal 2016-2025 strategy, which addresses the reinforcement of accountability mechanisms and the implementation of effective, efficient and quality interventions<sup>5</sup>. The organisation's revision of the project Planning, Monitoring and Evaluation Policy is also a result of this desire that quality remain at the heart of the aid offered<sup>6</sup>. Donors are also an integral part of this evolution, with increasingly rigorous accountability requirements for funded interventions results.

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<sup>2</sup> United Nations. **A World That Counts: Mobilising a Data Revolution for Sustainable Development**. 2014: <http://www.undatarevolution.org/report/>

<sup>3</sup> United Nations. Article 31 “**Statistics and data collection**” of the **Convention on the Rights of Persons with Disabilities**, 2005: <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html>

<sup>4</sup> Paris Declaration on Aid Effectiveness (2005), Accra Agenda for Action (2008), Busan Partnership Agreement for Effective Development Co-operation (2011).

For further information: <http://www.oecd.org/dac/effectiveness/>

<sup>5</sup> Handicap International. **2016-2025 Strategy: For more solidarity and inclusion in the world** (p. 15): [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/HI\\_Strategy\\_2016-2025\\_EN.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/HI_Strategy_2016-2025_EN.pdf)

<sup>6</sup> Handicap International. **Project Planning, Monitoring and Evaluation Policy**. 2015: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/IP06\\_PME.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/IP06_PME.pdf)

The PME Policy divides the notion of quality into three constituent parts:

- **Quality of processes** of implementation, support, steering system and measurement. This level of quality helps to implement a project's various constituent activities in a fluid and coherent manner.
- **Technical quality**, which primarily concerns a project's products and/or services, with reference to the standards and norms specific to each domain or sector of activity.
- **Quality of responses** to identified needs, which examines the way in which Handicap International helps to introduce positive changes for the benefit of target populations.

However, to demonstrate effects or an impact, situations must be precisely described. Therefore information must be produced and managed.

At the programme and project scale, beyond effects or impact measurement, the requirement for reliable data production is also:

- useful for guiding decision-makers in their decision-making,
- essential for steering or course-correcting operational activities,
- valuable for proposing relevant and high-quality actions,
- efficient and capital for strengthening both institutional and more local advocacy.

In this context, *evidence* and *evidence-based approach* are terms that are increasingly in use. An *evidence-based approach* is "the conscientious, explicit, and judicious use of current best 'evidence' in making decisions"<sup>7</sup>. The objective is therefore to select the most reliable and effective data to support what is being said. Such data will be hard to put into doubt.

Therefore, producing high-quality data to satisfy this multiplicity of objectives is no longer only the role of researchers and the scientific sector. Of course, humanitarian actors are first and foremost geared for action. However, they too must adopt quality procedures for the production and management of reliable and relevant data. This informs and supports decision-making, helps design and provide adapted interventions and account for intervention effects and impact. This is a true organisation-wide challenge for a structure such as Handicap International!

## 2- Why a practical guide?

This practical guide provides the guidance needed by Handicap International's head office and field teams, who are involved, directly or indirectly, in information production and management for the execution of studies and/or research (see following sidebar).

Management of qualitative and quantitative, primary (=new) or secondary (=pre-existing) data is already a widely conducted activity within the organisation, in various contexts, and in response to various project and/or programme level objectives. However, studies, and especially research, are very often ill-perceived by teams, who consider them overly complex, technical, expensive and time-consuming activities, which produce information that is hard to use operationally. Changing preconceived ideas and improving team awareness regarding study feasibility and execution conditions is therefore essential, and will encourage teams to plan for high-quality studies.

Finally, although all members of staff collect, analyse, and use data, no methodological framework exists within the organisation. Some documents partially address certain aspects of data management, but these documents are sometimes hard to find<sup>8</sup>.

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<sup>7</sup> David L Sackett, William M C Rosenberg, J A Muir Gray, R Brian Haynes, W Scott Richardson. **Evidence-based medicine: what it is and what it isn't**, in BMJ, 1996, 312:

<https://www.cebma.org/wp-content/uploads/Sackett-Evidence-Based-Medicine.pdf>

<sup>8</sup> For example, data collection recommendations are given in a number of Handicap International practical guides:

- "Using testimony: supporting our denunciation and advocacy actions" (2012) includes a section on types of qualitative interviews (p. 25) and provides interview grid examples in its Toolbox (p. 58): [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PP07Testimony.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PP07Testimony.pdf)

## **A|z Definitions: Study and Research<sup>9</sup>**

**Study [survey]:** Generic term referring to an activity whose objective it is to collect, analyse, disseminate, and use data, in order to provide additional, objective information on a population, a situation, a context or a practice. Studies are not destined to create new approaches or methodologies.

At Handicap International, studies [and surveys] take various forms (Knowledge Attitudes and Practices studies, service user satisfaction surveys, etc.), and can come into play at various times in the project cycle. Indeed, studies have two main objectives: to provide information about and improve understanding of a situation (e.g. initial project diagnosis phase or situational diagnosis for advocacy purposes), or to assess the beneficiary effects/impacts of an intervention (project monitoring & evaluation phase).

**Research:** Activity whose objective it is to collect, analyse, disseminate, and use new knowledge obtained using rigorous, reliable and reproducible methodologies. When it comes to research, the notions of novelty, creation and innovation are essential.

Handicap International conducts what is called applied research, which means that research findings are used and transposed into concrete actions. At Handicap International, research is a multi-actor process, in which the following actors must be involved: programme experts (Operational Action Divisions – field and head office), technical experts (Technical Resources Division) and research experts (Innovation & Knowledge Management Unit, Handicap International Foundation, Impact, Monitoring & Evaluation Unit and external academic actors). Research can be a stand-alone project or, like a study, come into play at various times in the project cycle, depending upon the objective that it is given.

In this guide, **we will refer to “studies” much more than to “research”**, because:

- Methodologies, methods and tools mobilised are identical in both cases,
- Studies are performed more frequently, so they are more tangible for teams,
- Research projects generally employ academic partners who are themselves responsible for the methodological conception of the activity.

### **3- What is the purpose of this guide?**

This guide invites its readers to better plan, execute and monitor the collection, analysis and use of data generated by studies. The invitation applies to all types of projects, contexts (emergency response, chronic crisis, development) and technical sectors (education, health care, arms-related risk reduction, emergencies, etc.). It offers effective and practical guidance for study design, implementation, monitoring and use of study findings. In particular, it provides implementation modality recommendations for the collection and analysis of primary and secondary, quantitative

- 
- **“Mental health and psychosocial support interventions in emergency and post-crisis settings”** (2013) provides a guideline sheet on focus groups (p. 48): [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PG10Psychosocial.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PG10Psychosocial.pdf)
  - **“Making it Work: Good practices for disability-inclusive development and humanitarian action”** (2015) provides practical advice on the execution of qualitative interviews (p. 48, and tool 11 p. 79): [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/MIWGuidelines\\_PG17.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/MIWGuidelines_PG17.pdf)

<sup>9</sup> Handicap International. **Research at Handicap International**. 2014: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/Research\\_GN01.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/Research_GN01.pdf)

and qualitative data. This guide dispels popular misconceptions, clarifies the advantages and disadvantages of various methods and will reduce a number of biases susceptible of reducing the quality of produced information. This guide is also original as it integrates so-called cross-cutting themes, such as disability, age, gender and participation.

It reflects our commitment to the improvement of the practices and information that serve to increase the effectiveness and relevance of our actions, and to reduce the loss of resources (budget and time), without neglecting the potentially sensitive ethical aspects inherent to data and information management (in particular, team and beneficiary/participant risk prevention).

## 4- When should this guide be used?

As data production is a cross-cutting (potentially concerning all sectors of activity and all operational divisions) and multifunctional (addressing various objectives) activity, this guide's application perimeter has been discussed with various Handicap International stakeholders, representing various activity sectors, various positions and all the technical and operational divisions<sup>10</sup>.

### **This guide will be of assistance for...**

- Studies that measure intervention effects/impacts, and that compare reference situations (baseline) and final situations (endline), in order to verify an indicator [e.g. Knowledge, Attitudes and Practices studies, service user satisfaction surveys or ScoPeO surveys<sup>11</sup>],
- Studies that enable a situation to be documented and/or needs to be analysed<sup>12</sup>,
- Analyses of databases created during projects [e.g.: analyses of data collected on rehabilitation service users],
- Studies that seek to document a situation in order to inform, raise awareness and conduct advocacy activities,
- And more generally, research.

### **Certain parts of this guide may be useful, but this document does not specifically address...**

- Project monitoring<sup>13</sup>, although some information will be useful for initial diagnosis and project effects/impact assessment,
- Exploratory missions<sup>14</sup>,

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<sup>10</sup> Actors consulted: Technical Resources Division representatives (Health & Prevention Unit, Rehabilitation Services Unit, Emergency Unit, Conventional Weapons Risk Reduction Unit); Humanitarian and Development Action Division (head office and field) representatives; Finance Division, Innovation & Knowledge Management Unit and Impact, Monitoring & Evaluation Unit representatives.

<sup>11</sup> Score of Perceived Outcomes (ScoPeO) surveys enable the evaluation of intervention beneficiaries' quality of life. For further information: <http://www.hiproweb.org/en/home/projects-management-and-quality/quality-of-life-scopeo.html>

<sup>12</sup> For information, at the time of this guide's publication, a practical guide devoted to the initial project diagnosis phase is in the process of being written (expected later in 2017). While the guide on initial project diagnosis will focus upon the diagnosis process, this guide addresses the data collection and analysis methodology used to document the situation under observation.

<sup>13</sup> Handicap International. **Project planning, monitoring and evaluation: Improving the quality, learning and accountability of Handicap International's interventions.** 2017: [http://www.hiproweb.org/uploads/tx\\_hidrt docs/PME\\_Guide\\_PG21.pdf](http://www.hiproweb.org/uploads/tx_hidrt docs/PME_Guide_PG21.pdf)

- Beneficiary data collection<sup>15</sup>,
- Mapping (stakeholders or services),
- Project lesson learning<sup>16</sup>,
- Denunciation testimony collection<sup>17</sup>,
- Project evaluation<sup>18</sup>,
- Accessibility diagnosis<sup>19</sup>.

Finally, issues related to data production and management will be mentioned but not developed. These issues include data collection involving new technologies, data storage modalities, and partner capacity-building.

## 5- Who is this guide for?

This guide is designed for stakeholders involved in data production and management at project level, which in practice involves implication in study design and field implementation.

Three priority audiences have been identified:

- **Project managers**, who, in concertation with their own managers and staff members, conduct projects (involving project phase-by-phase planification, project implementation and project monitoring) and oversee project quality in terms of execution and impact<sup>20</sup>; and who may be required to participate in studies, which they themselves, their team or a third party (e.g. Handicap International actor from another unit, consultant or partner) conduct,
- **Technical and/or operational coordinators**, who participate in project elaboration and monitoring, and ensure project quality in the field, in particular by developing their team's technical competencies and mobilising adequate resources<sup>21</sup>,
- **Technical Advisers**, who are responsible for the quality of technical expertise in their fields, contribute to project elaboration and monitoring, and often conduct studies, assessments and/or research within their professional field<sup>22</sup>.

Certain sections of this guide may also be useful to other less directly involved actors, such as project officers, heads of technical coordination units, or Operational Advocacy Unit (UnOP), Impact, Monitoring & Evaluation Unit and Innovation and Knowledge Management Unit members of staff.

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<sup>14</sup> Handicap International. **Needs assessment to develop diabetes control and prevention projects in limited-resource countries: A guide for international non-governmental organisations**. 2009:

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/ExploDiabeteEN.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/ExploDiabeteEN.pdf)

<sup>15</sup> A practical guide devoted to beneficiary data collection is being prepared for 2017.

<sup>16</sup> Handicap International. **Learning lessons from experience**. 2014:

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/LearningLessonsFromExperience.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/LearningLessonsFromExperience.pdf)

<sup>17</sup> Handicap International. **Using testimony: supporting our denunciation and advocacy actions**. 2012:

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PP07Testimony.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PP07Testimony.pdf)

<sup>18</sup> The **PME toolbox, for project monitoring and evaluation** is available on [GRAASP](#) (ask access to Impact, Monitoring & Evaluation Unit).

<sup>19</sup> Handicap International. **Conduct an accessibility audit in low- and middle-income countries**. 2015:

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/AccessibilityAudit\\_PG13.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/AccessibilityAudit_PG13.pdf)

<sup>20</sup> Please refer to the “**Project Manager**” job description on the [intranet](#).

<sup>21</sup> Please refer to the “**Technical Programme Coordinator**” job description on the [intranet](#).

<sup>22</sup> Please refer to the “**Technical adviser**” job description on the [intranet](#).



## Can anyone conduct a study?

Conducting a study cannot be improvised and requires specific skills. This guide provides practical tools for determining what to expect from a study and what standard procedure to follow to ultimately obtain reliable, valid, relevant, useful and ethical data.

In practice, two situations present themselves in the field:

- **Handicap International's team conducts a study:** its role is therefore to plan, collect, analyse, and exploit the data itself. For such situations, this guide provides methodological recommendations that will assist study preparation and execution. However, do not hesitate to call upon those with greater expertise in order to obtain technical support (internally – e.g. Innovation, Knowledge and Management Unit – or externally – e.g. academic actors).
- **Handicap International's team commissions a study:** its role is therefore to supervise/monitor study design and execution. For such situations, this guide addresses some of the pertinent issues to consider in order to establish a conducive working environment (drafting of terms of reference, clear expectations, available resources, etc.) and properly monitor work conducted. It is important to emphasise here that the HI team remains entirely responsible for ensuring that study findings are disseminated and used.

## 6- How was this guide prepared?

This guide was initiated by the Innovation & Knowledge Management Unit and Operations and Technical Resources Division.

Its content was born from the marriage between a number of sources of expertise and experiences:

- **External written resources:** A great number of manuals have already been developed on data collection and analysis. Indeed, the bedrock of knowledge is always the same, whether it is being used by researchers, humanitarian workers or consultants. Therefore, the methodologies, methods and tools presented draw upon a selection of foundational writings<sup>23</sup>.
- **Internal written resources:** Guides from our Professional Publications collection, as well as more informal guides addressing certain of the themes developed in this guide, contributed substance and depth, as well as a Handicap International feel and identity.
- **Internal expertise and experiences:** Unit expertise, combined with the knowledge and experiences of various technical and operational stakeholders, both in head office and in the field, contributed to creating a more practical and field-adapted guide.
- **External expertise:** This guide also benefited from the contribution of external stakeholders. The *Terre des hommes* NGO contributed actively by reviewing the entire document<sup>24</sup>.

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<sup>23</sup> References are presented in the bibliography.

<sup>24</sup> Participation of the Quality & Accountability Unit of *Terre des hommes*' Operational Division.

## 7- How should this guide be used?

This guide must not be used in a linear fashion or read in one go. The intent is that readers find answers to their questions and resources to adapt and improve their practices. Furthermore, there is no unique information generation model, but there are a multitude of possibilities. Teams therefore have a certain degree of freedom in how to use this guide, and will need to adapt the methodologies to defined objectives, available resources and intervention context.

This guide has four sections:

- **The first section, Principles and Benchmarks**, presents the data management cycle, as adapted to studies and to the activities associated with each phase, defines principles of action and introduces existing data types.
- **The second section, the Practical Guide**, is built around a clear logic of “how” things are done. The chapters in this section address primary and secondary, quantitative and qualitative data, study use-of-findings strategy, as well as the resources required for implementation.
- **The third section, the Toolbox**, provides a set of tools to complete and assist implementation of certain sections of the guide.
- A **Bibliography** for those who wish to look deeper into certain aspects.



### Look out for thematic symbols!

The following symbols have been included in this guide, to highlight focus points and practical recommendations.



This symbol highlights elements relating to target group **participation**.



This symbol highlights recommendations for ensuring that the study is **gender, age and/or disability sensitive**.



This symbol draws the reader’s attention to issues that are more specific to **emergency response/crisis contexts** (conflict, natural disaster, chronic crisis).



This symbol draws the reader’s attention to issues that pertain to collective interviews, and most specifically to **focus groups**.

# Principles and Benchmarks

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## 1- Data management in studies and research

Studies and research are activities whose goal it is to produce, analyse, disseminate and use knowledge. They are therefore specific dimensions of the broad field of data management, which is a process characterised by key phases.

This process can be broken down into 6 phases (Figure 1):

- **Identify and decide:** First of all, a need is identified in information and knowledge terms, and the study's<sup>25</sup> framework – in terms of issue(s) and objective(s) – is delineated. Therefore, the subject and the specific dimensions of the subject that will be addressed by the study must be chosen. The study's goal, in other words, the way in which its findings will be used, must also be identified at this stage.
- **Plan and initiate:** A study activity must be programmed just like a full-blown project. The preparation phase includes methodological design, tool development and adaptation, planning of resources (human, time and budget) and planning of implementation and quality control logistical requirements.
- **Collect:** In accordance with the methodological choices made during the preparation phase, data collection techniques are mobilised and rigorously selected data is collected.
- **Process and clean:** In order to ensure that raw data can become exploitable matter, it must be “transformed/converted”. To this end, raw data may be entered into a database (quantitative data) or transcribed into textual data (qualitative data). The resulting body of data must be cleaned prior to beginning analyses.
- **Analyse and interpret:** Raw data is not in itself informative, but constitutes a body of information that must be analysed, explained and commented in the light of the study's local and/or national and/or international context.
- **Share and use:** The information produced must be useful and used. It may, for example, serve as an operational decision-making aid, contribute to project accountability, or reinforce, support and/or contribute to a change in practices and policies. Ensuring that information is shared with the appropriate people, through adapted information media and channels, is an integral part of a study's implementation.
- **Archive and pool:** Finally, it is essential that records of past activities and experiences be preserved and made available to the organisation's teams in order to contribute to institutional learning.

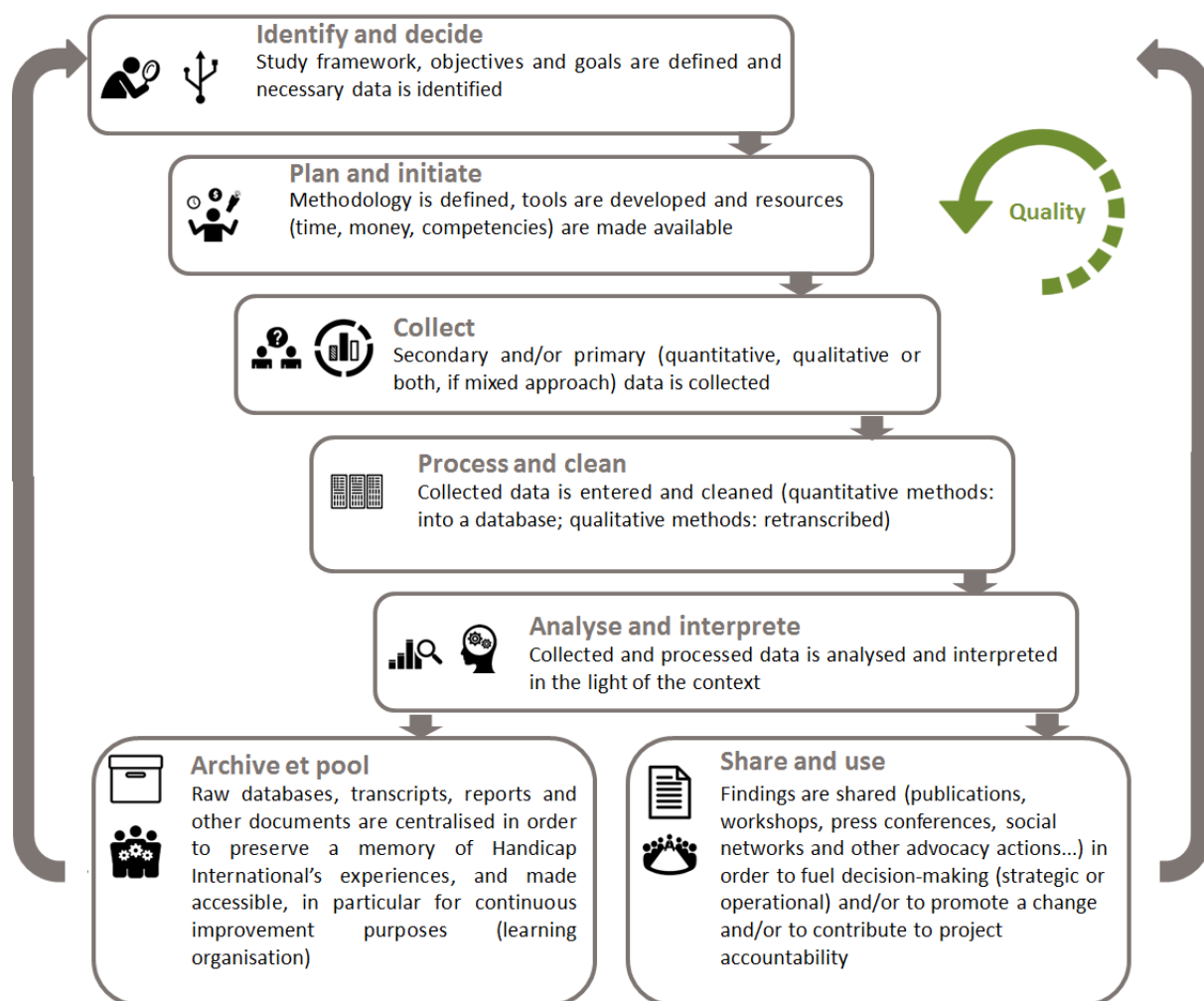
**Study quality** requires that the consecutive phases of this process be respected. However, quality is also cross-cutting, and at play within each phase.

Finally, this process may become cyclical, when study and research findings raise new questions and new issues are identified.

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<sup>25</sup> To make it easier to read this guide, we will no longer refer to studies/research, and refer only to studies. Please remember that all the methodological elements presented apply to both cases.

**Figure1: The data management cycle as adapted to studies/research**



## **A|Z From data to information**

**Data:** Raw, non-interpreted material, produced from collection.

**Information:** Data that has been processed, analysed, and interpreted in light of the context.

## 2- Cycle and quality

The execution of a study must ensure the production of objective, reliable, valid, relevant, useful and ethically obtained data (see following sidebar for definitions). Yet, within each phase of the cycle, biases<sup>26</sup> may impact the quality<sup>27</sup> of the data produced. For each phase, the following section specifies the areas requiring particular caution in order to limit these biases.

You will find additional, more practical recommendations in the Toolbox:

➡ See [Guideline Sheet 5](#): “Ensuring data management process quality: A few practical examples.”

### Data must be...

**Objective:** Objectivity requires the clear and precise definition of the study’s focus (issue under scrutiny and dimensions of the issue that must be addressed; targets – i.e. study population and spatial and temporal contexts) and of the study’s intent (goals: i.e. the study’s defined purpose). Objectivity also requires that the data presented be trustworthy and free from any manipulation or orientation.

**Reliable:** Reliability is directly related to the methodology developed and used to obtain the information. It includes the issue of method reproducibility (and therefore information falsifiability). Indeed, the same results must be obtained if a new team applies the same methodology. Therefore, transparency in methodological approach is capital. Indeed, a methodological approach must always be presented, clearly and precisely, in order for others to reproduce it, if they desire. Reliability concerns all types of data, both quantitative and qualitative.

**Valid:** Validity is a result of proper matching between methods, tools used and objectives. Adequate approaches must be selected based upon the information required, and the methods and tools used must truly measure what they are supposed to measure.

**Relevant:** Relevance has a variety of requirements: information that is timely with respect to a more global agenda, information that is recent and that adequately satisfies the study’s objectives.

**Useful:** Usefulness requires that the study satisfy preliminarily identified needs. Study findings and outputs are informative and adapted to these needs.

**Ethical:** Ethical refers to the fact that data is generated with respect for all the individuals involved in the process, be they Handicap International staff, partners or participants<sup>28</sup>.

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<sup>26</sup> A bias is a cause of error. If biases are not taken into account and controlled, the quality of generated information may suffer.

<sup>27</sup> The approach employed here to assess risks to quality integrates the PME definition. Quality has three constituent parts: process quality, technical quality and quality of response to a need.

<sup>28</sup> For further information, see section 4-1 “[An ethical study](#)” in the **Principles & Benchmarks** section of this guide, or the guidance note “**Studies and research at Handicap International: Promoting ethical data management**” (2015):

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/EthicalDataManagementGN\\_04.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/EthicalDataManagementGN_04.pdf)

## 2-1- Identify and decide

This phase must lead to the definition a framework for the projected study, specifying in particular what we want to study and know, and why we need this information. An initial feasibility analysis is also performed at this time.

This phase requires attention, as it:

- Confirms the study's value (with respect to identified/expressed needs, the social, political and/or international context, as well as to Handicap International's mandate).
- Contributes to the study's objectivity (via the definition of its subject matter, its objectives, its purpose and goals).
- Avoids the study missing its mark (incorrectly targeted population, imprecise objectives or inexistent hypotheses).
- Avoids the information bulimia that can come from excessive ambitions, number of subjects addressed or information requirements.
- Identifies how the study's findings will be used, in order to avoid ending up with unused information or information used in an in-adapted format.
- Selects the correct methodology: methods and tools, as well as data to be collected, are defined after the issue itself has been defined (and not vice versa).
- Makes a first assessment of the ethical constraints associated with the study<sup>29</sup> and of the necessary resources for its execution.

## 2-2- Plan and initiate

This phase must lead to the development of a methodological proposal, the provisioning of resources, and the creation of a conducive climate for the study's execution. This phase is also characterised by the many choices that are made (choice of data type, choice of methodologies for individual selection, data collection and data analysis, and organisational structuring of human resources, etc.), as well as by the identification of key people internally and the establishment of validation and consultation processes/bodies<sup>30</sup>.

This phase requires attention, as:

- Poor methodological choices will have direct repercussions on the reliability and validity of the study. It is not enough to reproduce a methodology that has been used before; one must first confirm that the methodology is adapted to the context and objectives.
- It is during this phase that the modalities for selection of individuals, collection (e.g. choosing hand-held, digital collection technology), data collection (e.g. questionnaires) and data entry

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<sup>29</sup> You will find further information on this subject in the section "A few action principles" in this part of the guide, in section 4-1 "[An ethical study](#)". The Ethics checklist provided in the Guidance Note "**Studies and research at Handicap International: Promoting ethical data management**" (2015, p. 33) may also be useful to you: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/EthicalDataManagementGN\\_04.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/EthicalDataManagementGN_04.pdf)

<sup>30</sup> For example, the Operational Advocacy Unit (UnOP) has developed a tool enabling all relevant actors to be associated and informed when advocacy actions on sensitive subjects or in sensitive countries are deployed. Available upon request.

(e.g. database) are considered, developed and tested. Biases can be identified from the outset and measures taken to minimise, or even remove them<sup>31</sup>.

- The challenge is in finding a balance between methodological and technical choices, and financial, time, logistical and/or security constraints. The hypotheses that might call the project into question must therefore be identified<sup>32</sup>.
- This phase can ensure that there is coherence between the following study cycle phases (e.g. coherence between data collection and data analysis methods).
- It is also during this phase that measures taken to ensure that the study is gender, age and disability sensitive are discussed and defined.<sup>33</sup>
- And, it is during this phase that the procedures to implement to ensure ethical data management must be discussed and defined.
- Based upon data and information needs, and upon intended data and information use, a research use-of-findings strategy must be formulated at the outset of the study.
- This phase supports intelligent management of financial resources. This is achieved in particular by improving the activity's efficiency, avoiding unexpected extra costs (thanks to suitable estimation of the resources required for study execution) and avoiding unpleasant last-minute surprises (e.g. absence of a study use-of-findings strategy during project design goes hand-in-hand with lack of budgeting, and therefore with lack of resources for communicating study findings).
- The budget for interview transcription and/or for sharing and using findings has not been foreseen.
- During this phase, human resources are identified and planned (technical profiles, training requirements, etc.) in order to ensure proper technical implementation of the study, and to guarantee the expertise and professionalism of all the actors involved in the process.
- The discussions during which the project is elaborated are an arena of concertation between actors. Thanks to this concertation, each actor's roles and expectations are clarified, and concerted action is possible (execution, support, steering).

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<sup>31</sup> If you consult [Guideline Sheet 5](#) “Ensuring data management process quality: A few practical examples”, you will see that the two most critical phases in terms of biases are the planification/initiation phase and data collection phase.

<sup>32</sup> An often neglected risk is the impact of project execution itself. Indeed, the very fact that a study is being conducted changes the social environment, and can have effects upon individuals and communities.

<sup>33</sup> You will find further information on this subject in the section “A few action principles” of this part of the guide, in section 4-3 “[A disability, gender and age sensitive study](#)”.



## 2-3- Collect

This phase must lead to the constitution of a body of data that can subsequently be processed and analysed.

This phase requires attention, as:

- From a technical point of view, many biases may occur during collection. Issues that must be considered include: overly subjective study coordinator attitude, interview conditions that are non-conducive to free and confidential exchange, methods that do not respect local social norms (in particular, relative to gender or age) or are not adapted to the specific needs of the targets (e.g. persons with mental disabilities), lack of fluency in the local language, fragmented data recording and significant inter-surveyor variability in the way information is recorded.
- Field actor awareness-raising and training are key milestones in both technical and ethical terms. Indeed, study presentation and information shared about the study, obtention of free and informed consent, the way methods are applied (e.g. selection of individuals or data collection), the use of supporting media, approaches to adopt in relation to specific audiences (e.g. people with limited education, with disabilities or youth), crisis management, etc. are all themes that must be addressed during training, in order to ensure team expertise, and the protection of both teams and participants in the face of physical, psychosocial or other types of risks.
- However, biases can also be related to contextual factors (no access to certain populations for security or meteorological reasons, or due to political, social or traditional constraints).
- If data is biased from the start, analyses will be affected. The risk is then one of analysing and communicating partially erroneous information.

## 2-4- Process and clean

This phase must result in the transformation of what has been said and shared between interviewee and interviewer (or what has been seen and reported by an observer) into written or coded form.

This phase requires attention, as:

- It is during this phase that the body of data is cleaned/checked in order to eliminate errors and artefacts, and thus ensure the quality of the material that will be analysed.
- If data is incorrectly entered into a database (data entry error, aberrant values, etc.) or if discourses are poorly re-transcribed, analyses will be affected since they will be based upon erroneous and disputable data.
- This phase is also important from an ethical point of view. Consideration must be given to whether the collected information should be used or not (e.g. data relative to race, sexual orientation, political or religious persuasion that might needlessly endanger people) and, if the decision is taken to use the information, consideration must also be given to the risk reduction measures to implement. It is also during this phase that collected data safeguarding procedures (e.g. data anonymisation) are applied.

## 2-5- Analyse and interpret

This phase must lead to production of information, of new knowledge, from the processed data.

This phase requires attention, as:

- If analyses are not adapted to collected data or to study objectives, the information generated will not be valid (e.g. if incorrect statistical tests are applied).
- It is sometimes easy (voluntarily or involuntarily) to push conclusions through, use averages without truly analysing the specifics of a situation or take explanatory shortcuts that reinforce prejudices or false truths. Therefore, it is essential to share and discuss findings with key stakeholders, as well as to triangulate and confirm trends and observations regularly.
- This phase is essential as the analysis takes the notions of disability, gender and age into account (data is disaggregated according to gender, age bracket or disability type).

## 2-6- Share and use

This phase must lead to the production of supporting communication media that are adapted to targeted audiences, to available channels of communication, as well as to the study's goals.

This phase requires attention, as:

- New knowledge must be used. Indeed, data collection is not a humanitarian intervention in itself. It must serve a purpose, and must be considered as a means to reach a precise objective (whatever the nature of this objective: operational, advocacy, impact, action). Teams must therefore fully engage in this phase and participate actively in the sharing and use of study findings.
- This phase ensures that different actors are informed about the study's findings. Feel free to diversify the supporting media used and to adapt them to suit the needs of the targeted audiences<sup>34</sup>.
- This phase contributes to project accountability.
- There is always a risk of criticism, reservations or outcry on the part of third parties. It is therefore essential to be able to present arguments that demonstrate the accuracy and credibility of the information generated, both in terms of methodology employed and procedures implemented to limit/control the effects of inherent biases upon the study's execution.
- Ethical considerations may influence the selection of one communication channel over another, based upon the risks that the information brings to bear upon teams, partners or beneficiaries. In certain cases, it may even be decided to share the information anonymously.

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<sup>34</sup> You will find further information on this subject in the "Practical Guide" section, in Chapter 6 "[Chapter 6 – Sharing and using study findings](#)".

## 2-7- Archive and pool

This phase must lead to the compilation of all the documents relating to a study and to the implementation of procedures enabling these documents to be accessed if necessary.

This phase requires attention, as:

- It enables information to be made available in a perspective of continuous learning.
- It opens up new horizons for the data. Indeed, the data may be re-used in another study with another objective or other goals.
- It avoids losing reservoirs of experience/knowledge: job positions are filled by one person after another, both in the field and in head office, and despite handovers, information is lost, traces disappear, tools are recreated, errors are repeated.

## 3- Activities associated with each phase

Each phase of a study cycle involves a series of activities. The table below describes these activities, specifies whether resources are available in this guide (in either the "Practical Guide" section, or the "Toolbox" section), and provides examples of deliverables for each key phase.

The Preparation/Initiation phase is the densest in activities terms, as it corresponds to the development of the team's methodological proposal (or protocol). The **protocol** is an indispensable key document, all too often neglected, which brings together a vast array of information. Indeed, it presents the study's framework, specifies the methodological mechanism selected and describes the resources necessary for study implementation and monitoring. Its function is therefore to precisely and clearly describe what we wish to do, how we are going to do it, when and with whom<sup>35</sup>.

➡ See [Tool 1: "Study protocol template"](#).

Activities are presented linearly, but most often feed into each other. It is necessary to go back and forth, especially during the Preparation/Initiation phase. For example, we will see in this guide that the estimation of a study's duration<sup>36</sup> depends upon available technical human resources (therefore on budget), upon surveyor travel times (therefore on the study's territorial coverage), and also upon questionnaire length (therefore on the study's thematic coverage and desired level of detail). It will always be a question of reaching the right balance between what is desired and expected and the constraints (related to available resources or to the challenges resulting from the general context or the security context).

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<sup>35</sup> The "Practical Guide" section of this document was designed using the structure of a protocol as a guiding thread. In the different chapters, you will find all the necessary items to complete the protocol template provided in the Toolbox. However, you will need to select the methods and recommendations based upon your needs and upon their relevance to your study.

<sup>36</sup> You will find further information on this subject in the "Practical Guide" section, in chapter 7 "[Resources required for study implementation](#)".

Cycle phases	Associated activities	Practical Guide		Possible output(s) of this phase
		Practical guide	Tool-box	
Identify & Decide	Identify study subject	<input type="checkbox"/>		Formulated objectives and goals
	Formulate and test study framework (subject, objectives, goals)	<input type="checkbox"/>		
Plan & Initiate	Define resources			Protocol, Sections Resources
	o Evaluate time necessary for execution	<input type="checkbox"/>		
	o Evaluate budget necessary for execution	<input type="checkbox"/>	●	
	o Estimate needs in terms of profiles, competencies	<input type="checkbox"/>		
	o Define human resources organisational structure	<input type="checkbox"/>		
	- If insourcing, identify support staff available within Handicap			
	- If recruiting staff, draft job profile			Job profile
	- If recruiting a consultant, draft ToR		●	ToR
	- If working in partnership, negotiate and draft contract		●	Contract
	o Define everybody's roles and responsibilities	<input type="checkbox"/>		Protocol, Responsibilities Section
	o Sign contracts			
	Develop methodology (protocol)		●	Protocol, Methodology Section
	o Types of data and methods to mobilise	<input type="checkbox"/>	●	
	o Source/individual selection modalities	<input type="checkbox"/>		
	o Data collection modalities	<input type="checkbox"/>		
	o Data processing and analysis modalities	<input type="checkbox"/>		
	o Desired level of participation	<input type="checkbox"/>	●	
	o Adaptations for target groups	<input type="checkbox"/>	●	
	o Ethics	<input type="checkbox"/>		
	Plan study's monitoring procedures	<input type="checkbox"/>		Protocol, Monitoring Section
	Develop use-of-findings strategy	<input type="checkbox"/>	●	Strategy
	Develop, translate and test collection tools	<input type="checkbox"/>		Collection tools
	Develop annex documents (information forms, etc.)			Documents
	In certain cases, obtain authorisations			Authorisations
Collect	Ensure that human resources and equipment are available	<input type="checkbox"/>		Filled in questionnaires, interview notes (or recordings)
	Train field teams	<input type="checkbox"/>		
	Collect data	<input type="checkbox"/>		
	Ensure quality control of this phase	<input type="checkbox"/>		
Process & Clean	Ensure that human resources and equipment are available	<input type="checkbox"/>		Complete database, transcribe interviews
	Enter/Transcribe collected data	<input type="checkbox"/>		
	Clean material to be analysed	<input type="checkbox"/>		
	Ensure quality control of this phase	<input type="checkbox"/>		
Analyse & Interpret	Ensure that human resources and equipment are available	<input type="checkbox"/>		Data analysis plan, matrices or tables
	Review data analysis plan			
	Analyse data	<input type="checkbox"/>		
	Interpret results	<input type="checkbox"/>		
Share & Use	Review use-of-findings strategy			Reports, Powerpoint presentations, videos, workshops, etc.
	Ensure required competencies are available	<input type="checkbox"/>		
	Create supporting media	<input type="checkbox"/>	●	
	Implement strategy			
	Monitor the changes sought	<input type="checkbox"/>		
Archive & Pool	Gather all documents relating to the study			
	Identify resource people/platforms/sites			
	Store all documents			

## 4- A few action principles

### 4-1- An ethical study

As well as ensuring the production of high quality-data, the data management process must also ensure that all individuals involved in the process are respected, be they Handicap International members, partners or participants. The ethics of studies/research in the medical, humanitarian and other sectors are regulated by various legislative texts<sup>37</sup> and intervention guides<sup>38</sup>, and must be carefully considered by stakeholders contracting or coordinating a study.

In 2015, deliberation on the question of ethics in studies and research was initiated at Handicap International<sup>39</sup>.

Ethical principles were transposed into eight ethical recommendations (Figure 2):

- **Guarantee the security of participants, partners and teams:** Information gathering, analysis and sharing activities must not harm or endanger the actors responsible for their execution (neither the participants, households, and communities, nor the teams, organisations, and partners).
- **Ensure a person/community-centred approach:** There are three dimensions to this recommendation: the team's conduct and attitude in the field must respect the cultural environment (traditional values, social practices, beliefs and representations of the target population); methods and tools must be adapted to the specific needs of the targeted groups of individuals (e.g. adaptation to gender, age, impairments and/or literacy levels); the activity must be related to one or several of the needs identified by the targeted population and/or the aid operators. Target group participation is fundamental in this regard.
- **Obtain participants' free and informed consent:** All participants must receive clear and transparent information, understand the study's objectives and freely and actively express their consent prior to participating. Aid provided within the framework of a specific project must never be conditional upon participation (anterior or posterior) in a study. Participants may refuse to participate or interrupt their participation at any point during the study.
- **Provide referral mechanisms:** Assistance must be offered and facilitated to ensure appropriate support and/or care when necessary. That is to say, when difficulties are

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<sup>37</sup> Nuremberg Code (1947), Helsinki Declaration (1964 – rev. 1975, 1983, 1989, 1996, 2000, 2008, 2013), Belmont Report (1979), Nuffield Council Guidelines (2005).

<sup>38</sup> Internationally, there has been a multiplication in the number of guides addressing questions of ethics and violence in the last few years. These guides include:

- CP MERG. **Ethical principles, dilemmas and risks in collecting data on violence against children: A review of available literature.** Statistics and Monitoring Section/Division of Policy and Strategy, UNICEF, New York, 2012:  
[https://data.unicef.org/wp-content/uploads/2015/12/EPDRCLitReview\\_193.pdf](https://data.unicef.org/wp-content/uploads/2015/12/EPDRCLitReview_193.pdf)
- ICRC. **Professional Standards for Protection Work.** 2013:  
<https://www.icrc.org/fre/assets/files/other/icrc-001-0999.pdf>

<sup>39</sup> Handicap International. **Studies and research at Handicap International: Promoting ethical data management.** 2015: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/EthicalDataManagementGN\\_04.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/EthicalDataManagementGN_04.pdf)

identified (e.g. identification of a critical situation in which protection is required), or when complications have arisen as a consequence of the data collection activity itself<sup>40</sup>.

- **Ensure the security of personal and sensitive data at all stages of the activity:** Safeguarding of personal and sensitive data must be guaranteed in all data management phases: confidentiality during data collection, confidential data processing procedures (anonymisation, coding), safeguarding of shared reports, secure data transfer, secure data archiving and conservation.
- **Plan and guarantee the use and sharing of information:** Data collection is not in itself a humanitarian intervention. However, the information generated must fulfil clear objectives and be effectively used to pre-defined ends (action, operational purposes, advocacy and/or impact and accountability).
- **Ensure the expertise of the teams involved and the scientific validity of the activity:** This recommendation applies to the selection of applied methodologies, as well as to the professionalism of field teams, which must be trained and correctly equipped.
- **In some cases, obtain authorisation from the relevant authorities and have the proposed study/research externally reviewed:** In the case of studies using personal data or dealing with sensitive issues, an independent review by peers or by the national ethical committee is sometimes desirable.

**Figure 2: The 8 recommendations for ethical data management in the context of Handicap International studies and research**



<sup>40</sup> The referral issue becomes increasingly acute when the issues under consideration are sensitive in nature (such as maltreatment or violence), or when activities might disturb the relational, emotional or economic equilibrium in the household or community (e.g. when seropositivity is diagnosed or an impairment is identified within a household or community). It is therefore essential to consider these factors in order to seek an equilibrium between an activity's positive outcomes and its associated risks.



## Working with children: balancing rights and ethics

All our studies, just like all our field actions, must be conducted with respect for international conventions. When working with children, one must consider the questions of both rights and of ethics.

Direct participation of children is prescribed by the International Convention on the Rights of the Child (1989), which affirms children's right to participate in the decisions that concern them and to share their own opinions<sup>41</sup>.

However, actively including children in a study has ethical implications pertaining to:

- **The issue of participant protection:** the physical, mental and social well-being of the children (and close-circle) involved in the study must be protected and preserved, including via adaptations to information collection methods;
- **Obtaining children's consent:** the authorisation of a legal representative is required; however the child must be informed and must be willing to participate. This requires that information be adapted to children's age and level of maturity;
- **The issue of data security:** information confidentiality must be guaranteed, thereby respecting the privacy and ensuring the protection of participating children.

Guides are available if you wish to look deeper into this subject<sup>42</sup>.

### 4-2- A participative study

Handicap International's Planning, Monitoring & Evaluation (PME) Policy<sup>43</sup> defines participation as a project quality criterion. Involving target groups (women, sexual minorities, youth, the elderly, persons with disabilities, ethnic minorities, migrants, etc.) in a study is widely accepted as a sign of quality.

When an arena of expression is provided to communities, and in particular to those communities that are ordinarily more silent (or invisible), this enables:

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<sup>41</sup> See the **International Convention on the rights of the Child:**

<http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>

- Article 12: States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.
- Article 13: The right to freedom of expression.
- Article 23: States Parties recognise that a mentally or physically disabled child should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community.

<sup>42</sup> Examples of initiatives:

- The ERIC (Ethical Research Involving Children) website: <http://childethics.com/>
- Shaw C, Brady LM, and Davey C. **Guidelines for Research with Children and Young People**. National Children's Bureau (NCB) Research Center, 2011.  
<https://www.nfer.ac.uk/nfer/schools/developing-young-researchers/NCBguidelines.pdf>
- And the practical guide references provided in footnote 38.

<sup>43</sup> For further information: <http://www.hiproweb.org/en/home/projects-management-and-quality/pme.html>

- The definition of target group needs and perspectives (interests, interpretations, etc.), thereby ensuring study relevance,
- The adoption of a more effective and adapted, and therefore more reliable, methodology,
- Better acceptance of the data collection phase (e.g. less reluctance to participate in a study),
- A balancing of the relationships between actors involved, by returning the individual to a central position, thereby enabling more equal relationships to be created between interviewer and interviewee,
- In the longer term, the improvement of the target population's perception of aid actions.

Furthermore, mobilising populations so that they are actors of change also fosters the sharing of the new information generated. Indeed, the information can then be shared with the people most concerned (beneficiary target communities), but also potentially in more widespread diffusion and dissemination arenas. This contributes, *a minima*, to raising public awareness of the issues encountered by beneficiaries, and, *a maxima*, to changes in practices and/or policies.

This mobilisation may take various forms, depending upon desired mobilisation level and study phase<sup>44</sup> – the target groups may be:

- **Sources:** the group participates by responding to questions asked by surveyors. The group cannot influence the process.
- **Consultants:** Target group representatives are invited to participate in study execution. Their points of view and recommendations are listened to and processed, and certain suggestions may, for example, contribute to the methodology or enrich the final report. Final decisions are made by the team.
- **Collaborators:** Target group representatives become active collaborators in the study. Each party makes a commitment to the process, provides its expertise, and decisions are taken together (e.g. participatory research).
- **Study leaders:** Target group representatives have control over the study. The team of researchers advises, supports, and facilitates. However, it is the group that decides and takes action (e.g. emancipatory research).

A participatory approach therefore requires prior stakeholder analysis and identification of the key persons able to act as sources, consultants, collaborators or leaders. It also requires an analysis of the risks that their participation might generate.

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<sup>44</sup> There exist different classifications of target group participation. For example, participation can also be divided into the following four categories:

- Nominal participation: community members are consulted for the sole purpose of providing legitimacy to the actions undertaken by the initiating institution/NGO;
- Instrumental participation: some community member competencies are mobilised for project implementation;
- Representative participation: community members are listened to and participate in the decision-making required for project implementation. This increases the chances of project sustainability;
- Transformative participation: this type of participation empowers the people involved. The (institutional and/or political) change required to reduce marginalisation and exclusion becomes more probable.

Source: White SC, 1996. **Depoliticising Development: The Uses and Abuses of Participation**, in *Development in Practice*, 1996, 6 (1):

<http://www.tandfonline.com/doi/pdf/10.1080/0961452961000157564?needAccess=true>



To help you decide when and how to involve target group representatives, practical recommendations are provided in the "Practical Guide" section and are highlighted with the symbol: 

In addition, Guideline Sheet 4 **"Pointers for engaging target groups"** provides an overview the times at which groups can be invited to participate in the study process and of the types of activities that can be implemented. How-to guides and tools addressing workshop and task group facilitation techniques already exist. Therefore this will not be addressed in depth in this practical guide<sup>45</sup>.

➡ See [Guideline Sheet 4: "Pointers for engaging target groups"](#).

## 4-3- A disability, gender and age sensitive study

This principle reflects one of Handicap International's strategic challenges. Indeed, one of the organisation's major objectives is to promote its specific expertise in addressing the needs of populations that are vulnerable owing to disability, gender and/or age<sup>46</sup>.

Three things must be differentiated regarding disability, gender and age sensitive studies:

- Processes that encourage target population participation during the study cycle. Collective workshops, or meetings, for example. These use, in particular, coordination and facilitation techniques that encourage exchange and assist facilitation (collective workshops, brainstorming, problem tree analysis, etc.).
- Processes that ensure that the study is fair (in terms of selection of individuals), and that all selected individuals participate under conditions that are respectful of diversity, understand the questions, and are therefore able to answer these questions in a reliable manner. Such processes require, in particular, that data collection methods and tools be adapted to the specific needs of targeted populations.
- And finally, the question of data analysis and interpretation, taking into account each of these three types of characteristics (handicap, gender, age). In particular, data disaggregation<sup>47</sup> enables sub-groups to be identified and situations between these subgroups to be compared.

### 4-3-1- Participation of target groups

As seen in the preceding section, target group representatives (women, sexual minority representatives, children, persons with disabilities, etc.) can intervene in specific phases or throughout the entire study process, depending on the case, and if they so desire. The activities

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<sup>45</sup> You can, for example, consult:

- IFAD. A Guide for Project M&E (Monitoring and Evaluation). See Annex D.  
<https://www.ifad.org/evaluation/reports/guide>
- Or SkillWeb, in the Training Rubric: <http://www.hiproweb.org/en/home/trainings-methods-and-technics/tools-for-trainers.html>

<sup>46</sup> Handicap International. **2016-2025 Strategy: For more solidarity and inclusion in the world** (p. 15):  
[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/HI\\_Strategy\\_2016-2025\\_EN.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/HI_Strategy_2016-2025_EN.pdf)

<sup>47</sup> Data disaggregation (or ventilation) enables the body of data to be divided, distributed into smaller units (or sub-groups) that are mutually exclusive. Disaggregating data enables the situations of various units to be compared. For example, based on gender, age or disabling situation.

implemented and techniques employed must however be adapted to participants' capacities and specific needs (e.g. one must ensure site accessibility and adjustment, allow more time for meetings, and prepare supporting media to facilitate exchanges).

Action ideas are suggested throughout the "Practical Guide" section and highlighted with the following symbol: 

Guideline Sheets are also provided in the "Toolbox". These provide tangible and practical recommendations on when and how to organise target group representative participation, on suggested approaches sensitive to disability type and age (children and teenagers), as well as on the types of visual supporting media that can be used.

 See [Guideline Sheet 1](#): "Suggested approaches for interviewing persons with disabilities and children/youth".

 See [Guideline Sheet 3](#): "Supporting media for child and disability friendly studies".


 See [Guideline Sheet 4](#): "Pointers for engaging target groups".

### 4-3-2- Methods accounting for disability, gender and age

Making sure that the methodology is gender, age and disability sensitive contributes to ensuring:

- The study's quality, by contributing to its validity. In this way, for example, the biases related to the misunderstanding of questions by surveyees or of responses by surveyors are limited.
- A "fair" approach: the idea of equity in participant selection is essential here. Adaptations contribute to individual selection processes being performed without discrimination, and without opting for the easiest route (e.g. for communication reasons).

In general, as with the universal accessibility ethos<sup>48</sup>, adaptations are beneficial for all. Indeed, adaptations for persons with intellectual limitations will also contribute to better inclusion of persons with **low literacy levels**. For example, questions must be formulated simply and clearly, and visual supporting media can be provided when response categories are multiple, or draw upon conceptualisations (e.g. representing intensity levels with more than 3 distinct modalities by cubes of increasing volume).

Recommendations for adapting methodologies are provided throughout the "Practical Guide" section of this document, and are highlighted with the following symbol: 

Guideline sheets are also available in the "Toolbox". These provide recommendations on approaches sensitive to disability type and age (children and teenagers), on data collection techniques to use, and on types of visual supporting media that can be used.

 See [Guideline Sheet 1](#): "Suggested approaches for interviewing persons with disabilities and children/youth".

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<sup>48</sup> "Universal accessibility is the nature of a product, procedure, service, information or environment which, with equity as its goal and with an inclusive approach, allows everyone to participate independently in activities and to achieve equivalent results". Source: Handicap International. **Conduct an accessibility audit in low- and middle-income countries**. 2014 (p.14) : [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/AccessibilityAudit\\_PG13.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/AccessibilityAudit_PG13.pdf)

- ➔ See [Guideline Sheet 2](#): “Selecting data collection methods suitable for specific needs (disability and age)”.
- ➔ See [Guideline Sheet 3](#): “Supporting media for child and disability friendly studies”.

### 4-2-3- Analysing and interpreting data based on disability type, gender, and age

Disaggregating data means decomposing, breaking down information based on the modalities of the variables under consideration.

- In the case of a gender-based approach, data is decomposed into at least two categories – men and women<sup>49</sup>,
- In the case of an age-based approach, data is decomposed into at least two categories – the under 18 years *versus* the over 18 years<sup>50</sup>. However, amongst children and youth, it is actually more advisable to adopt at least three categories – under 6 years, between 6 and 11 years and between 12 and 17 years<sup>51</sup>,
- In the case of a disability-based approach, data is decomposed into at least two categories – persons with disabilities versus persons without disabilities.

Such disaggregation provides a first level of information. However, it must be cross-tabulated with other variables, such as access to education, employment or primary healthcare centres. This opens up comparative perspectives which may enable, for example, the identification of potential discrimination phenomena in everyday life. This, in turn, may enable identification of more vulnerable groups, or identification of variations in intervention effects/impact between sub-groups.

A gender-sensitive study will use gender as a comparison variable. It will look at the differences and similarities between men and women in, for instance, their perceptions, their experiences, their situations (in domestic, economic, political or social arenas), as well as in their participation in community and collective life. In such cases, the objective is to demonstrate and understand whether inequities exist, and to propose intervention and affirmative action strategies if necessary.

This is why data disaggregation is recommended, in particular within the Sustainable Development Goals monitoring framework. Indeed, there are specific gender and disability Sustainable Development Goal indicators that must be monitored over time, in order to demonstrate whether gaps between men and women, between persons with disabilities and persons without disabilities, are decreasing or not<sup>52</sup>.

Furthermore, gender, age and disability information can be cross-tabulated, which enables doubly vulnerable groups to be brought to light.

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<sup>49</sup> However, studies interested in SOGIE (SOGIE: Sexual Orientation and Gender Identity and Expression), must integrate different sexual identities (transgender, intersex individuals, etc.) and/or sexual orientations (homosexuality, bisexuality, etc.).

<sup>50</sup> Depending upon age of attainment of adulthood in the country concerned.

<sup>51</sup> Age brackets defined in Handicap International’s revised 2015 Beneficiary Data Collection: User’s Guide: [http://www.hiproweb.org/uploads/tx\\_hidrt/docs/PG18\\_BeneficiariesCollection.pdf](http://www.hiproweb.org/uploads/tx_hidrt/docs/PG18_BeneficiariesCollection.pdf)

<sup>52</sup> For further information: <https://www.un.org/development/desa/disabilities/about-us/sustainable-development-goals-sdgs-and-disability.html>

**Example:** The table below illustrates that<sup>53</sup>:

- Persons without disabilities more frequently know how to read and write than persons with disabilities (81,6% *versus* 69,1%, respectively);
- In both sub-groups, the literacy level of men is higher than that of women;
- Women with disabilities are the sub-group with the lowest percentage of individuals able to read and write.

Ability to read and write (15 years and over)				
	Men	Women	Men and women	p
Persons without disabilities	94,4%	71,3%	81,6%	<0,001
Persons with disabilities	82,0%	60,0%	69,1%	<0,001

If a study's objectives so require, the level of disaggregation can be taken further within a population group. For example, under-18s are a very heterogeneous group, which can reveal great diversity (in terms of social characteristics, needs, perspectives, etc.). The same observation applies to the population with disabilities, which includes people experiencing totally different functional limitations and degrees of severity of difficulties, and therefore totally different profiles and actual lived experiences. Indeed, if the Washington Group's Short Set of Questions on Disability has been used<sup>54</sup>, within a given population with disabilities, data can be disaggregated in terms of functional limitation type and degree of severity of difficulties encountered.

**Example:** The following table shows a population's distribution according to type of difficulty and degree of severity of difficulties encountered<sup>55</sup>:

	No difficulties	Some difficulties	A lot of difficulties	Cannot do at all	Total
Q1- Difficulty seeing	97,4%	1,1%	1,5%	0,1%	100%
Q2- Difficulty hearing	99,1%	0,5%	0,4%	0,06%	100%
Q3- Difficulty moving	97,8%	0,6%	1,1%	0,5%	100%
Q4- Difficulty remembering or concentrating	98,9%	0,5%	0,6%	0,02%	100%
Q5- Difficulty with self-care	99,3%	0,3%	0,2%	0,2%	100%
Q6- Difficulty communicating	99,4%	0,3%	0,2%	0,06%	100%

<sup>53</sup> Example taken from: Handicap International & RAVIM. **People with disabilities in the suburban areas of Maputo and Matola**. 2010 (p. 39): [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/Relatorio\\_GB\\_BD.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/Relatorio_GB_BD.pdf)

<sup>54</sup> For further information, please refer to:

- The SkillWeb page on the subject: <http://www.hiproweb.org/en/home/knowledge-management/research-and-technical-studies/washington-group-and-disability-related-data.html>
- Handicap International. **Orientation Note about disability-related data in National Censuses**. 2014: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/SdWA07.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/SdWA07.pdf)
- Or the e-learning module: "The Washington Group on Disability Statistics and the Short Set of Questions": <http://hilearngo.handicap-international.org/>

<sup>55</sup> Example taken from: Handicap International & RAVIM. **People with disabilities in the suburban areas of Maputo and Matola**. 2010 (p. 36): [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/Relatorio\\_GB\\_BD.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/Relatorio_GB_BD.pdf)

## 5- Of data and methods

### 5-1- Types of data

Within the framework of a study, various types of data can be collected. The classification given below is not intended to be exhaustive, but aims to present the data types most frequently used at Handicap International.

There are two large families of data: primary data and secondary data.

#### 5-1-1- Primary data

This is new data. This data is collected directly from suitably selected informants, based on the study's objectives. Primary data is therefore produced within the framework of a process that is developed and controlled by the study team.

Primary data can be further broken down according to supporting media and methodologies employed:

- **Qualitative data** is textual data, derived from what was said by the persons interviewed. It is obtained by applying specific techniques for selection of individuals (e.g. data saturation), data collection (e.g. open interviews or semi-directed interviews, with an interview guide) and data analysis (e.g. thematic analysis).
- **Quantitative data** is numeric and quantified. It is obtained by applying specific techniques for selection of individuals (e.g. sampling), data collection (e.g. individual interviews with closed questionnaires, anthropometric or clinical measurements) and data analysis (e.g. statistical analyses).
- **Audiovisual data** is data on video. Through video's image and sound, one can observe discursive communication, as well as non-verbal communication, gestures or occupation of space, and even interactions between people and their degree of implication or participation during a gathering, etc. Audio-visual data requires specific collection techniques (e.g. video equipment selection, elaboration of a video shoot protocol<sup>56</sup>) and analysis techniques (e.g. narrative and thematic analyses).
- **Geospatial data** is data that is located in space using GPS coordinates (latitude/longitude). Geospatial data requires specific techniques for data collection (e.g. use of a GPS, drones, etc.), data analysis (e.g. spatial analyses) and data visualisation (e.g. mapping).

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<sup>56</sup> These techniques are not addressed in this guide. However, for further information, please consult the section on [observation](#), which uses similar collection methods; or consult **Tool 12 – Defining the script of a lesson learning film**, in “**The writing project: from ideas to publication**”, (p.72): [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PG06\\_TheWritingProject.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PG06_TheWritingProject.pdf)

## 5-1-2- Secondary data

This is pre-existing data that has already been collected by other actors.

You may encounter two situations:

- Raw data is available (e.g. quantitative or geospatial data is stored in a database). Analysis of this type of material mobilises standard analysis techniques (statistical in nature).
- Data has been analysed: phenomena and/or situations are already documented and synthesised in available documents. The constitution and analysis of such a body of secondary information mobilises specific literary review methodologies.

In both cases, sources must be identified and criteria defined, in order to evaluate the reliability of the sources used.

## 5-2- From data to methods

As previously mentioned, each type of data requires specific methods and tools. Methods can be combined: they do not exclude each other, but can be associated within a mixed approach. Mixed approaches are interesting, as they allow different aspects of a single subject to be examined more deeply, information to be compared and cross-tabulated (thereby enabling validation of trends and results) and a variety of types of actors to be more actively involved.

Finally, each data type and associated method has its own advantages and disadvantages<sup>57</sup>. The decision to use one or other method, or to combine methods, must be contingent upon study objectives, implementation constraints and the targeted group's specific needs<sup>58</sup>.

### Some examples

- In **Rwanda**, a study was conducted to understand factors influencing gender-based violence. Given the sensitivity of the subject, qualitative methods were used<sup>59</sup>.
- In **Mozambique**, a study to measure disability prevalence and to compare the needs of persons with disabilities with those of persons with no disabilities was conducted. Given the objectives, quantitative methods were used<sup>60</sup>.
- In **Cameroon**, research on HIV amongst persons with disabilities was conducted. As there was little existing data on the subject, it was necessary to perform a systematic review of scientific literature<sup>61</sup>.

<sup>57</sup> You will find further information on this subject in the "Practical Guide" section, in chapter 1 "[Defining study subject and objectives](#)".

<sup>58</sup> See [Guideline Sheet 2](#): "Selecting data collection methods suitable for specific needs (disability and age)".

<sup>59</sup> Handicap International. **Community mental health and gender-based violence in the Western Province of Rwanda**. 2012: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/RwandaDSRE03.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/RwandaDSRE03.pdf)

<sup>60</sup> Handicap International & RAVIM. **People with disabilities in the suburban areas of Maputo and Matola**. 2010: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/Relatorio\\_GB\\_BD.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/Relatorio_GB_BD.pdf)

## Please note!

This practical guide addresses primary (quantitative and qualitative) and secondary data management. However, it does not address audio-visual or geospatial data methods in any detail.

## Key points to remember

- A study must be prepared like a project.
- Its execution follows 6 key phases, and study quality greatly depends upon successful completion of each phase.
- The study protocol is essential, and must be considered as a planning and monitoring tool for the study.
- A study must be ethical.
- A study must be gender, age and disability sensitive.
- All the methodological elements presented apply to all studies, whatever their objective(s), context(s) or constraint(s). We must break the myth: “Oh, this is a small study, so there’s no need to do too much!”
- All studies have inherent biases, many of which can be identified at the outset of the study planning phase.

## Now we suggest that you...

- ➔ Navigate within the guide based on your needs.
- ➔ Starting, however, with chapter 1 “[Defining study subject and objectives](#)” of the Practical Guide, and then follow the suggested pathways/shortcuts depending upon what catches your attention.

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<sup>61</sup> Pierre De Beaudrap, Muriel Mac-Seing & Estelle Pasquier. **Disability and HIV: a systematic review and a meta-analysis of the risk of HIV infection among adults with disabilities in Sub-Saharan Africa**, in AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV, Vol. 26, n°12, 2014.  
<https://www.ncbi.nlm.nih.gov/pubmed/25033274>

# Practical guide

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# Chapter 1 – Defining study subject and objectives

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## Preamble

The framework of a study defines the limits that it is given in terms of theme (subject of study and specific dimensions to address), targets (populations, space and time) and goals (i.e. the study's assigned purpose). These elements enable objectives and hypotheses to be formulated. Objectives and hypotheses then guide methodology development.

## 1- Identifying the issue

The first step is to identify the problem, or the general question that the study must answer, i.e. what you want to know. The issue is therefore articulated using question(s), which will then guide data collection and analysis.

**Examples:** Did the intervention implemented by the organisation have a positive effect upon beneficiaries? Why are children with disabilities more often victims of violence? Why do adolescent girls with disabilities have greater difficulty accessing sexual and reproductive health services?

A study responds to an identified/expressed need for information and knowledge (e.g. to bridge an information gap, to objectify observations, etc.). Various types of modalities can be used to identify information needs:

- **Empirical knowledge:** Your own experience is the first reservoir of ideas. Indeed, as an expert in a domain, context and/or community, you have already identified information gaps.
- **Exchanges/discussions:** These exchanges may take different shapes. Informal discussions with colleagues, partners, beneficiaries, decision-makers and other experts must not be underestimated, and often provide valuable information that will point you in the right direction.
- **Individual and/or collective interviews:** Exchanges may also aim to identify the critical issues encountered by populations and by the project team, or confirm already identified avenues of exploration. These interviews may take the form of individual exploratory interviews or collective interviews. Such exchanges can bring together experts, researchers, privileged witnesses, organisation representatives or representatives of the directly concerned populations.
- **Reading sessions:** Information is certainly available in your field of activity. It is essential to be aware of what exists (in terms of data, methodologies, and contexts), what has been done, what has been proven and what questions remain. It is then possible to understand potential issues, and avoid repeating what has already been done or proposing innovative actions that are not, in fact, innovative<sup>62</sup>. Diverse sources exist, both internal and external (grey literature such as reports, briefings of lessons learned, monitoring, evaluation reports;,,

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<sup>62</sup> You will find further information on this subject in the "Practical Guide" section, in chapter 3 "[Managing secondary data](#)".

academic articles, etc.). Confirmation of the reliability of these sources requires critical analysis.

- **Findings of a specific study:** It may be necessary to conduct a preliminary study in order to apprehend the expectations and needs expressed by the various actors in the field (project teams, but also partners and beneficiaries). The study then has the objective of identifying gaps and issues.

This process is not a linear or fixed process. Rather, it is the result of discussions, interactions and confrontations between you, what exists, and the perceptions of other local (partners and/or beneficiaries), national (decision-makers) and/or international (expert networks) actors. Your first idea will certainly evolve as these exchanges unfold. Certain initiatives will also emerge out of opportunities related to current events (e.g. an ongoing conflict or an international process – such as a conference or world day).



### Creating an advisory committee

An advisory committee, bringing together different stakeholders<sup>63</sup>, can be set up at the outset of the study project. This committee can contribute to defining the pertinent issue and the study's objectives. Participatory study framework elaboration is indeed an approach that is increasingly supported by donors and international organisations.

Furthermore, if the committee remains active throughout the study cycle, it will also be able to ensure the study's proper functioning (thereby guaranteeing the study's quality and safeguarding the study's process), and facilitate the appropriation and use of findings.

➔ See [Tool 12](#): “Terms of reference template for study steering, scientific or ethical committees”.



### Example:

As part of the regional LEAD (Leadership and Empowerment for Action on Disability) project, three studies were planned (Morocco, Algeria and Tunisia). The subjects and objectives of each study were defined during participatory workshops that brought together different stakeholders working in the field of disability. Morocco<sup>64</sup> and Tunisia<sup>65</sup> identified a need for information on the situation of households including persons with disabilities, and chose to focus on the extra costs incurred by disability. Algeria<sup>66</sup> chose to focus upon the social inclusion of persons with disabilities.

<sup>63</sup> These stakeholders' profiles must be defined according to the study's subject, objectives and goals. They may be experts on the subject, or partners that are more strategically placed for study implementation. Or, they may be ministry representatives, national association representatives, academic actors, etc.

<sup>64</sup> Handicap International. **Le handicap dans les politiques publiques marocaines face au creusement des inégalités et à l'appauvrissement des familles avec des ayants droit handicapés**. 2014:

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/LEAD-RapportMaroc.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/LEAD-RapportMaroc.pdf)

<sup>65</sup> Handicap International. **Le handicap dans les politiques publiques tunisiennes face au creusement des inégalités et à l'appauvrissement des familles avec des ayants droit en situation de handicap**. 2014:

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/LEAD-RapportTunisie.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/LEAD-RapportTunisie.pdf)

<sup>66</sup> Handicap International. **L'inclusion sociale des personnes en situation de handicap dans la wilaya d'Alger**. 2014: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/LEAD-RapportAlgerie.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/LEAD-RapportAlgerie.pdf)

## 2- Defining the study framework

The study's framework can be defined using the general question that the study must address<sup>67</sup>. The framework ensures the study's objectivity, as it clearly defines the answers that are sought (what? who? where? when? why?), and the goal (what for?). These questions are essential, as they facilitate the formulation of the study's overall and specific objectives.

Figure 3 (see below) illustrates the four constitutive parts of a study:

- The study's thematic framework: what does the study address?
- The study's targets: who will participate, where, and when will the study be conducted?
- The study's level of analysis.
- The study's goals: how findings will be used.

### 2-1- The study's thematic framework (the answer to “what?”)

The objective is to define what will be addressed by the study (the subject), and to specify which aspects (or dimensions) of the subject you are interested in. It is essential to define what you want to work on within the area selected, and to select specific themes amongst all the possible themes in order to clearly delimit the study's perimeter. This is a very useful exercise, which helps avoid planning studies with excessive ambitions and themes, and therefore excessive information expectations.

**Example:** In the education sector, a team may decide to focus upon how to keep children with disabilities within the secondary level school system. The team decides to focus upon four dimensions of the subject: the attitudes of children with disabilities, of their parents, of their teachers during classes, and of other children during playtimes. However, other dimensions could have been included (e.g. the national legislative framework and its local implementation).



#### Consulting target groups

Collective workshops with representatives of the groups targeted by the study may be conducted to identify relevant themes to develop in the study.

The workshop facilitator can use a variety of collaborative exercises, such as brainstorming, problem trees or mind maps. These methods enable the identification of domains and sub-domains, which can then be collectively prioritized.

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<sup>67</sup> A study's framework and its terms of reference are two different things. The framework provides the substance needed to create the terms of reference. The terms of reference are the document which will serve to communicate with third parties regarding the study.

See [Tool 2: Study terms of reference template](#).

## 2-2- The study's targets (answers to "who? where? when?")

The objective is to define the study's targets:

- **The study population** emerges from the study's thematic framework: which people are likely to inform you about what you want to know?

**Examples:**

- To measure service user satisfaction, the target population will be users of the service in question, regardless of their age, gender or social status;
- To measure prevalence of disability in a province's adult population, the target population will be men and women over 18 years of age living in the province;
- To analyse the sexual and reproductive health knowledge and practices of women within a community, the target population will be women between 15 and 45 years of age in the community.

Feel free to specify your study population's profile, as this will serve you later when defining study participant selection modalities<sup>68</sup>.

- **The study's geographical location** depends upon the subject, and the project and field constraints.

**Examples:**

- Specify whether the study will be conducted in rural or urban areas;
- Or specify the intervention regions within a country;
- **The study's time frame** also depends upon the subject, the planned methodology and the project. This element is even more important for retrospective studies<sup>69</sup>, or studies that are based upon service records<sup>70</sup>, or literature reviews (in which cases it is necessary to specify the information collection period).

## 2-3- The desired level of analysis (the answer to "why?")

The objective is to determine the expected degree of analysis.

Levels of analysis proposed	Examples of potential practical applications
<b>Exploration, observation</b>	Identify key points in a relatively unknown sector; define a problem more precisely; define important variables or areas to explore in greater depth
<b>Description, information, documentation</b>	Present a population's profile (age, gender, disability types, education level, etc.); calculate frequencies; measure indicators such as prevalence; study temporal and/or geographical variations of a given phenomenon
<b>Explanation, comprehension</b>	Grasp the meaning of an activity, a relationship, a perception; understand associated representations

<sup>68</sup> Depending upon the methods used, you will find further information on this subject in the "Practical Guide":

- Chapter 4 – "Managing quantitative data", Section "[Participant sampling for a quantitative study](#)"
- Chapter 5 – "Managing qualitative data", Section "[Selecting individuals for qualitative interviews](#)" or "[Selecting individuals, locations and observation frequencies](#)"

<sup>69</sup> That is to say, looking back on past events or situations, in which case it is essential to specify the time period covered by the study.

<sup>70</sup> The data included in patients' clinical records may, for example, serve to assess a project whose objective was to improve the treatment and care of a given disease in a given health service.

<b>Evaluation, measurement, comparison, demonstration</b>	Assess an intervention's effects; compare groups of subjects in order bring risk factors to light
<b>Development, experimentation</b>	Construct operational methodologies, test techniques

These various levels are not mutually exclusive, and can be combined.

## 2-4- The study's goals (the answer to “what for?”)

It is essential, from the outset, to define the ways in which findings will be used, and knowledge produced will contribute to action, in order to avoid ending up with a report or synthesis in your hands, and the question in your mind: “And now what?”<sup>71</sup>.

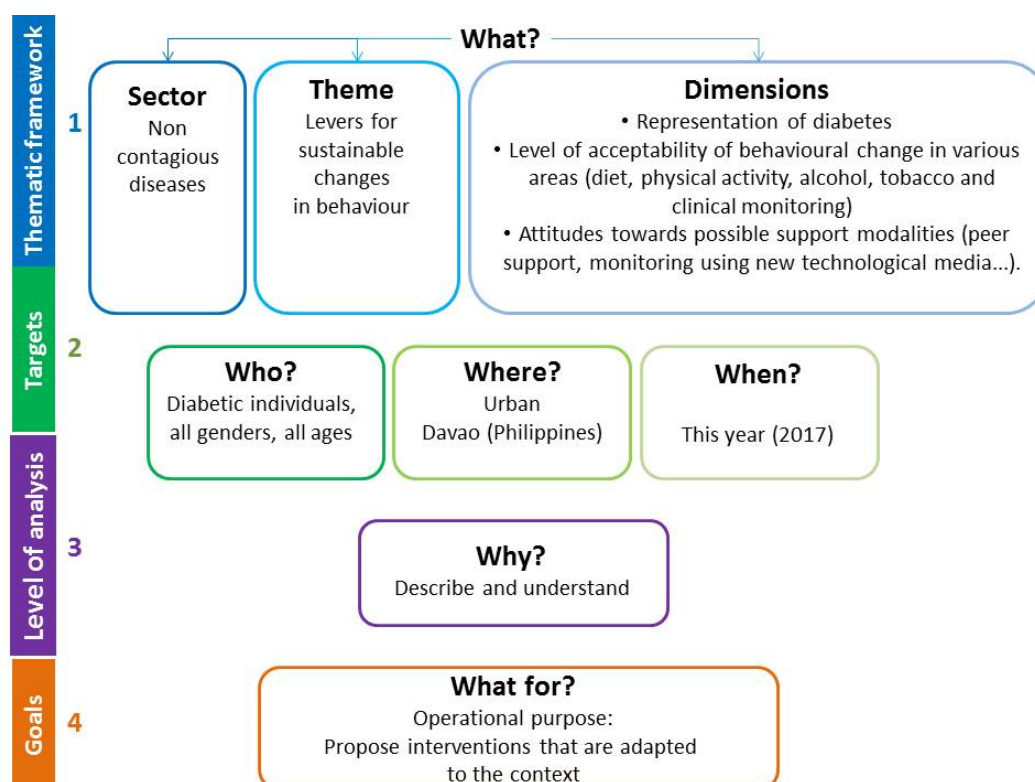
In general, a study's findings will enrich sector-specific background knowledge, deepen more general contextual understanding and provide target audiences with access to reliable and useful information. Findings can be used to any number of ends:

- Feeding local, national or international advocacy for policy change;
- Providing information to assist in decision-making (e.g. drafting of a future project or adjustment of an intervention);
- Serving an operational end (e.g. steering and adapting a project activity, or providing substance to project awareness sessions in order to encourage a change in attitudes and practices);
- Contributing to donor, partner or beneficiary accountability, demonstrating an intervention's effects;
- Seeking to improve practices (e.g. for methodology development or practice assessment – institutional learning).

---

<sup>71</sup> Indeed, the study's use-of-findings strategy must be considered at the outset of the planning/initiation phase. You will find further information on this subject in the “Practical Guide” section, in chapter 6: [“Sharing and using study findings”](#).

**Figure 3: Study framework example**



This process is not a linear one, as the various elements need to be thought through together. Moreover, although this identification and formulation phase is essential before continuing on to subsequent study cycle phases, it is obvious that the first draft of the study framework will evolve, and be adjusted during the study. Indeed, the features that may be revised include, but are not limited to, the dimensions of the subject addressed by the study, the study's geographical extent and its goals.

### 3- Formulating the study objectives

Together, the constituent parts of the study framework defined above facilitate study objective formulation.

A study's objectives must express what we are seeking to know/understand as accurately as possible, in an impartial and neutral manner. They will guide the study to be conducted, and make it operational. Indeed, the objectives will determine methodology design, as well as the data collection tools developed and the analytical modalities used.

Definition of objectives contributes to a study's quality, and must therefore respect certain principles:

- Formulation must be clear and simple;
- Style must be bare, formal and logical;
- Content must be accurate, unambiguous and neutral.



If formulation and content are too vague, specific, adequate and relevant answers will be hard to find. The more precise the formulation, the easier it will be to begin to find and share answers.

The study framework is the foundation upon which objectives are formulated:

- **The overall objective** is the aggregation of desired analysis level, study theme and study target.
- **The specific objectives** are based upon the dimensions that you are most specifically interested in. The purpose here is not to define expected outcomes or list deliverables, but to specify which dimensions of the overall objective you wish to see developed. The number of specific objectives must not exceed five.

**Example:** In the case of the study presented as an example in Figure 3, the following objectives may be articulated:

- Overall objective: To describe and understand which levers support sustainable changes in the behaviour of persons with diabetes in urban areas (Davao, Philippines).
- Specific objectives:
  - To understand what representations of diabetes are held by people living with diabetes,
  - To explore how acceptable behavioural change is to this population (diet, physical activity, alcohol, tobacco and clinical monitoring), and identify resistances,
  - To explore this population's attitudes with respect to available support modalities (peer support, monitoring using new technological media, etc.).



### Specific objectives sensitive to...

Specific objective formulation is an opportunity to clarify the way in which you wish to approach gender, age and/or disability in the following analyses. For example, quantitative results may be disaggregated according to gender, or a particular focus brought to persons with a specific type of functional limitation.

In the case of research, working **hypotheses** must also be formulated. Hypotheses are provisional, proposed analytical explanations of a phenomenon, which anticipate a relationship between two variables. They must therefore be verified and confronted with the data collected in the field. Hypotheses must be verifiable and credible; they are only provisional and may ultimately prove false.

**Example:**

Overall objective	Specific objective	Hypothesis examples
To understand the socio-cultural factors influencing access to sexual and reproductive health services by young girls of 12 to 18 years of age, in La Paz (Bolivia)	To understand the underlying issues and nature of the caregiver-patient relationship when it comes to the treatment and care of young women with early pregnancies	Young girls with early pregnancies do not go to health facilities as neutrality of the caregiver-patient relationship is not respected, because the caregiver is taking on a role of moral advisor

## 4- Testing the planned study

At this point, the following five criteria may be considered in order to make a swift critical analysis of the proposed study, and identify potential reservations:

- **Clarity:** What you wish to study is expressed in a transparent way.
- **Feasibility:** Responding to the issue is possible within the context of action.
- **Value:** The study is justified; it is necessary because it bridges a knowledge gap. It is interesting because it is useful, unprecedented, and fits into the timeline.
- **Efficiency:** Study implementation requires resources that are realistic and within your reach, in terms of competencies, equipment, time and budget,
- **Ethics:** The study does not conflict with the organisation's recommendations and ethical principles<sup>72</sup>.



### Key points to remember

- Remain humble; be willing to reduce the study's scope and the number of dimensions addressed: chose quality over quantity.
- Clarify your expectations.
- Formulate your objectives clearly.
- Define hypotheses whenever possible.
- Ensure that the proposed study is relevant!



### At the end of this step you have...

- ➔ Defined the study's issue and framework, formulated the objectives and verified the study's relevance.



### Now we suggest that you...

- ➔ Continue on to chapter 2 "[Developing a study methodology](#)", which is the first step in the Preparation/Initiation phase.

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<sup>72</sup> You will find further information on this subject in the "Principles and Benchmarks" section, in the "[A few action principles](#)" section. You can also consult the guidance note "**Studies and research at Handicap International: Promoting ethical data management**":

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/EthicalDataManagementGN\\_04.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/EthicalDataManagementGN_04.pdf)

## Chapter 2 – Developing a study methodology

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### Preamble

At this point, the study's framework and objectives have been considered and formulated. Now is the time for methodology development, which is one of the Preparation/Initiation phase's main activities.

However before diving into the details of individual selection modalities, data collection or data analysis, the methodology to be applied must be defined.

Study methodology can be designed using the following elements:

- The type of data desired (primary or secondary, quantitative or qualitative),
- The methods to mobilise and how they are associated,
- The application of these methods through time and across the territory,
- The presence or absence of a baseline group (or control group)<sup>73</sup>.

### A few helpful definitions

**Methodology:** Systematic, theoretical analysis of the methods applicable for a particular purpose. A methodology offers the theoretical underpinning for understanding which method, set of methods, or best practices can be applied to a specific case (e.g. when conducting a study, methods may include individual selection, data collection or data analysis methods). The methodology is the general strategy that outlines your action plan, established according to scientific and operational requirements.

**Method:** Process (=set of rules), which, if correctly applied, ensures the attainment of a result (e.g. in the case of qualitative data collection, various methods may be mobilised: individual open or semi-structured interviews, focus groups, community meetings, or observation).

**Tool:** Means, instrument, supporting media used to implement a method (e.g. in the case of qualitative interviews, the surveyor will use an interview guide).

Methodology elaboration is guided by the study's objectives. However, it also depends upon:

- Study subject (e.g. subjects that are considered more sensitive may mobilise more qualitative methods),
- Information desired,
- Profile of interviewees,
- Access to individuals (and therefore to data, for cultural, logistical or other reasons).

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<sup>73</sup> A baseline group, or control group: a group that is not exposed to a factor. You will find further information on this subject in this chapter, in the section "[Why integrate a control group?](#)".

As well as:

- Budget,
- Time,
- Competencies of persons involved and possibility of technical support,
- Environment (e.g. security).



### Choosing data type according to interviewees' specific needs

Quantitative approaches, based upon closed questions, are difficult to use with persons who have intellectual disabilities, for example, because the reliability of their responses is variable (difficulty choosing between several options, social desirability, lack of concentration, etc.). However, individual face-to-face interviews help build a special relationship, provide breaks in order to respect individuals' rhythms and therefore collect data reflecting the reality of their situation. The same is true for young children, for whom structured, closed techniques are not adapted.



See [Guideline Sheet 2](#): "Selecting data collection methods suitable for specific needs (disability and age)".

## 1- Choosing data type

Data type definitions were presented in the "[Of data and methods](#)" sub-section in the "Principles and Benchmarks" section of this guide.

Conditions of use, strengths and weaknesses of each data type are presented in the following two tables, to guide you in choosing between them:

- Is primary or secondary data more adapted to your subject and your objectives?
- When working with primary data, should you opt for quantitative or qualitative data?

## 1-1- Primary data or secondary data?

	Primary	Secondary
Principle	<b>Data that did not exist before is collected and analysed</b>	<b>Data/pre-existing information is gathered and analysed</b>
Adapted if you want to...	<p>Bridge a gap, an identified lack of knowledge and understanding</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Explore or describe a context, a situation</li> <li>• Better understand a practice, representations</li> <li>• Measure a phenomenon</li> <li>• Assess a baseline situation and evaluate an intervention</li> <li>• Develop a method and tools to implement this method.</li> </ul>	<p>Assess a subject, a situation, a context in its globality</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Support your decision-making process (e.g. operational or strategic decision-making)</li> <li>• Make accessible the entire body of current knowledge in a particular sector</li> <li>• Identify knowledge gaps in a specific sector</li> <li>• Identify methods or tools that might be adapted to your context</li> <li>• Document a situation</li> <li>• Confront/compare primary data with data from other situations</li> </ul>
Strengths	<ul style="list-style-type: none"> <li>• Independent selection of subject and methodology, therefore exact match with identified need</li> <li>• Quality control of entire study cycle, from initiation to end</li> </ul>	<ul style="list-style-type: none"> <li>• Efficiency: secondary data collection expenses are lower</li> <li>• Economy of time, swift results</li> <li>• No need for field work, as possible to work remotely</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>• Resources required (time, budget, competencies)</li> <li>• Team responsible for all ethical aspects (participant security, data security, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Compulsory critical analysis of sources, in order to assess their reliability prior to use</li> <li>• No control over the data collection process (e.g. objectives, collection, analysis, team expertise)</li> <li>• Traceability often limited: access to results, but not always to information relating to entire process</li> <li>• Difficulty accessing certain sources</li> <li>• Risk of getting lost within the mass of information</li> <li>• Can be complex to aggregate, analyse, compare</li> </ul>

## 1-2- Quantitative or qualitative primary data?

	Quantitative	Qualitative
Principle	Interviewees answer closed questions on various subjects. The data is then analysed using statistical methods. The quantitative approach enables a more objective analysis of a subject.	People interviewed are given the chance to express themselves. To explain what they observe, do, think, and feel. To share their story, lived experience, reality, practices, perceptions, hesitations and motivations. Discourses are then meticulously analysed to uncover their meaning. The qualitative approach enables more in-depth analysis of a subject.
Adapted if you want to...	<ul style="list-style-type: none"> <li>Summarise a situation, quantify, enumerate, measure a phenomenon</li> <li>Describe and compare the situations of different populational sub-groups (e.g. according to gender and disability, over time, or in relation to geospatial elements)</li> <li>Seek relationships between a number of variables</li> <li>Measure an intervention's effects</li> </ul>	<ul style="list-style-type: none"> <li>Understand behaviours, practices</li> <li>Explain ways of naming, thinking or feeling</li> <li>Identify the logic that underlies behaviour (motivations, life trajectories, strategies, self-identification, etc.)</li> <li>Explore representations (value systems, cultures, etc.)</li> <li>Explore a new context, a new theme</li> <li>Explore differences between what is said and what is done</li> </ul>
Strengths	<ul style="list-style-type: none"> <li>Perceived as more reliable, credible and objective: figures make observations tangible</li> <li>Generalisation is sometimes possible <b>when sampling methods allow</b></li> <li>Simplified data entry (in particular, thanks to digital data collection)</li> </ul>	<ul style="list-style-type: none"> <li>Obtain answers on sensitive subjects</li> <li>Obtain a more in-depth and subtle picture of reality, despite the inherent complexity of certain situations or contexts</li> <li>Better understand the why and how of trends</li> <li>Give a voice to people who do not have the opportunity to express themselves or no longer have access to communication channels</li> <li>Circular process: initial interviews inform following interviews – more flexible, adaptable methods</li> <li>Fewer human resources mobilised for collection</li> <li>Subject to social desirability,</li> </ul>

		however possible control/verification by interviewer
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• A linear process, with an irreversible chronology: e.g. it is impossible to readjust collection tools once the study has begun</li> <li>• Risk of simplifying reality</li> <li>• Snapshot of a situation with no dynamic vision, sometimes limited to anecdotal evidence</li> <li>• Subject to strong social desirability<sup>74</sup></li> <li>• Source of a great number of biases (study design, non-response, sampling, surveyor, data processing); responses are elicited, therefore potential gaps between what is said/declared and what is done, between words and behaviour</li> </ul>	<ul style="list-style-type: none"> <li>• Time-consuming methods (especially in data analysis phase)</li> <li>• Findings are considered specific, and therefore difficult to extrapolate to other orders of magnitude</li> <li>• Often considered less rigorous, and therefore given less consideration in policy development</li> <li>• Risk of discourse manipulation, of false testimony</li> <li>• Analysis affected by the analyst's perception/representations, analyst's subjectivity has a greater impact</li> </ul>

The strengths and weaknesses presented in the two preceding tables are inherent to the methods themselves. They must be differentiated from the biases resulting from how the methods are applied, which, are a function of the competencies and expertise of the team implementing the study.

Each type of data therefore requires specific competencies<sup>75</sup>:

- Quantitative data requires strong skills in survey design (sampling or questionnaire development) and data analysis (statistical analysis).
- Qualitative data requires strong skills in data collection (encouraging people to speak, generating interest while retaining control of the interview, facilitating focus groups) and data analysis (narrative and thematic analyses, shifting back and forth between individual experiences and collective experience).

<sup>74</sup> Social desirability is the bias which consists in wanting to present oneself in a favourable light to a third party. This mechanism can occur unconsciously, or, on the contrary, be the result of a conscious desire to present one's image favourably to the eyes of others. The person interviewed wishes to win the sympathy of the interviewer or to provide answers that they believe to be appropriate in the interviewer's eyes – thereby modifying/calculating their responses. Or, a participant may, on the contrary, paint a darker picture of a situation, hoping to obtain some assistance.

<sup>75</sup> Information regarding competencies is provided in the "Practical Guide" section, in chapters 4 et 5 "[Managing quantitative data](#)" and "[Managing qualitative data](#)".



## Important to understand

As it involves larger samples, quantitative data is considered of greater value by some, who assume that results can be generalised. However, this is false. First of all, results can only be generalised to the general population if sampling modalities allow. Secondly, a qualitative study may involve fewer individuals, but can generate information that is just as reliable and valid.

Primary data may itself become secondary data for other actors. Therefore, it is essential to **present the methodology in the protocol**<sup>76</sup>, and to specify its biases and limitations, in order to:

- Enable third parties to assess the quality of the information produced,
- Facilitate study replication by a third party.

## 2- Combining methods: The mixed approach

Data types and associated methods are not mutually exclusive. Indeed, the different dimensions addressed and results can complement and enrich each other. This is known as **mixed methodology**. This type of methodology is often used in development and humanitarian contexts.

The findings of one methodology shed light on the findings of another methodology, and vice versa. Analysis must not be performed in an insular way (information/data silos), but must be “transversal”, cross-sectional. This is referred to as **triangulation**. Triangulation may apply to data (the same piece of information is collected from several informants) or methods (several methods are combined to collect data). In all cases, triangulation can be used to confirm (or refute) data collected from multiple sources, as well as to corroborate observed trends or strengthen interpretations. It enables certain biases (during collection, analysis and/or interpretation) to be avoided, thereby contributing to the quality of information produced.

Primary and secondary, qualitative and quantitative methods can be combined for a number of intents and purposes.

**1. To build:** The methodology might begin with a literature review (secondary data) in order to explore the subject and target population characteristics, and then continue with a qualitative approach, to complete the analysis with primary data (e.g. conducting qualitative semi-structured individual interviews – or focus groups<sup>77</sup> – with key informants in order to identify/confirm target groups or areas of interest). Finally, all of this qualitative data might then be processed and analysed, and used to create a closed quantitative questionnaire.

**2. To complete:** Qualitative and quantitative approaches are performed concurrently in the field, thereby enabling information to be collected on a sensitive subject or from a less accessible population.

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<sup>76</sup> As previously explained, the protocol is the document that presents the study’s framework, describes the methodological mechanism envisaged, and lays out the means necessary for study implementation and monitoring. Its function is therefore to precisely and clearly describe what we wish to do, how we are going to do it, when and with whom. A protocol template is provided for you in this guide’s “Toolbox” ([Tool 1](#)).

<sup>77</sup> You will find further information about focus groups in the “Practical Guide” section, in chapter 5 « [Managing qualitative data](#) ”.





### Example

During a person with disabilities needs diagnosis, a quantitative approach is used to collect data from a large group of persons with disabilities. However focus groups are also organised for persons with intellectual limitations, as focus group techniques are most adapted in terms of communication<sup>78</sup>.

Secondary and qualitative methods may also be combined: to begin with, existing information about a situation, context, particular event is sought and gathered, and then interviews with key informants are organised, and observations are conducted in order to complete the pre-existing information.



### Example

For diagnoses in contexts of crisis, this type of methodology enables information to be collected quickly. Indeed, in such situations, the qualitative approach's flexibility is an undeniable asset, as data collection tools can be adjusted daily based upon diagnosis progress. Data triangulation is another key factor, as it enables confirmation of the generated information's reliability.

**3. To examine:** the qualitative approach is conducted first, in order to generate hypotheses that are subsequently tested using quantitative methods.

**4. To explain:** the qualitative approach is conducted after the quantitative approach, in order to explain/confirm some or all of the results obtained by the quantitative approach.

The sequence, in other words, the order and logic with which the methods unfold, is essential. Indeed, it is highly advisable to specify each method's objectives, as well as the targets and themes addressed by each method.



### Participatory methodology development

All of these choices (data types, methods and combination configurations) may be made with the help of target groups. As the people most concerned, target groups can confirm/refute the appropriateness of certain approaches, given the issues and people to be interviewed, and thereby contribute to the study's validity. Workshops can be organised to this end. However, sessions will need to be included to explain the methods to choose from, their advantages and disadvantages<sup>79</sup>.



### A bedrock of methods to tailor

Different types of studies are commonly encountered, including Knowledge, Attitudes and Practices studies<sup>80</sup>, case studies<sup>81</sup> or persons with disabilities needs assessments<sup>82</sup> (e.g. rapid assessments of

<sup>78</sup> You will find further information on method selection based on target population needs in [Guideline Sheet 2](#): "Selecting data collection methods suitable for specific needs (disability and age)".

<sup>79</sup> Some pointers on "how" to do this are provided in [Guideline Sheet 4](#) "Pointers for engaging target groups", in the "Toolbox" section of this guide.

<sup>80</sup> KAP studies focus upon three dimensions of a phenomenon or sector: Knowledge – i.e. what people know, understand; Attitudes (or beliefs and opinions) – i.e. what people perceive, think, judge, feel; Practices and behaviours – i.e. what people do or plan to do. KAP studies are quantitative, and may integrate observation phases in order to measure the gap between what is said and what is done.

disability). What distinguishes these different studies is the way that mobilised methods are combined and sequenced, as well as their sectors of intervention. However, in all cases, the methods themselves always follow the same operating principles. For example, a focus group must always bring together a limited number of participants, who interact with each other, and mobilise a facilitator and an observer.

### 3- Articulation in time and space

A study's methodology can also include notions of temporality and space:

- Temporality: one then refers to studies that are:
  - Transversal (*cross sectional study*): Individuals are met once; there is a single study, a single reference.
  - Longitudinal/cohort/monitoring (*cohort study*): The same individuals are tracked over time, and met several times at defined time intervals.
- Geography: one then refers to studies that are:
  - Monocentric: the study is conducted in a single geographical location.
  - Multicentric: the study is conducted in several geographical locations.

These notions of temporality and space must be considered when developing the protocol, as they will have a direct impact upon study implementation (in particular on data collection organisation, duration and budget).

### 4- Why include a control group?

A baseline group, or control group, is a group that is not exposed to a factor.

**Example 1:** the control group of a case-control study examining the social participation barriers faced by persons with disabilities will be composed of persons without disabilities.

**Example 2:** the control group of a case-control study evaluating a project will be composed of people who have not benefited from the project.

However, as far as other variables are concerned (demography, social position, etc.), the case group and control group must resemble each other. If indeed the groups are well matched, any significant difference observed between the two groups will then be an indication of potential discrimination in the first example and potential project impact in the second example. Rigorous selection procedures must be used to constitute the control group in order for results to be reliable<sup>83</sup>.

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<sup>81</sup> Case studies enable the detailed analysis of a phenomenon, a sub-population or a process. They are based upon multiple sources: literature reviews, closed interviews, observation, focus group(s). The entire body of information gathered is then cross-referenced and triangulated.

<sup>82</sup> These quantitative studies enable disability prevalence within a population to be measured, and the needs of persons with disabilities to be evaluated.

<sup>83</sup> You will find additional information on this subject in the "Practical Guide" section, in chapter 4 "[Managing quantitative data](#)".

Including a control group in the methodology is particularly valuable in the case of **project impact evaluations**<sup>84</sup>. Indeed, there are a number of different methodologies to choose from to evaluate a single project's effects. The World Bank<sup>85</sup> provides six evaluation models whose methodologies combine the notions of time, territory and control groups in different ways (see following table). The Bank stresses that reliability varies greatly from one evaluation model to another (the first model – the gold standard – is considered the best, and the last model is considered the weakest, in terms of produced information reliability).



## Control groups and ethics

Using control groups in cases where studies are deployed within population groups in vulnerable situations raises ethical questions. Indeed, this methodology is particularly questionable in the development and humanitarian sectors. Is it ethical for an organisation to seek the participation of people in difficult situations if they are not beneficiaries of an intervention? The answer is no.

At the very least, project inclusion mechanisms must be developed and implemented in order to address any identified protection or health-related cases in need of urgent action.

A methodological alternative does exist: pipeline sampling<sup>86</sup>. In this case, project activities are introduced in phases, so that certain beneficiaries receive help at a pre-defined later date (e.g. a project that extends across several geographical regions). The control group can then be composed of individuals, households or communities who have been selected to participate in the project, but who have not yet done so. This method is only feasible when there are no major differences in the profiles of the beneficiaries of the various phases.

<sup>84</sup> A number of guides and documents are available on the subject of project evaluation. Examples include:

- Bamberger M. **Introduction to mixed methods in impact evaluation**. Impact Evaluation notes n°3, 2012, InterAction:  
[https://www.interaction.org/sites/default/files/Mixed%20Methods%20in%20Impact%20Evaluation%20\(English\).pdf](https://www.interaction.org/sites/default/files/Mixed%20Methods%20in%20Impact%20Evaluation%20(English).pdf)
- Ravallion M. **Evaluating Anti-Poverty Programs**, in Handbook of Development Economics, Volume 4, 2010, edited by T. Paul Schultz and John Strauss, Amsterdam, North-Holland :  
<http://www.cepr.org/sites/default/files/Evaluating%20antipoverty%20programs%20HDE4.pdf>
- White H. **Theory-based impact evaluation: principles and practices**. International Initiative for Impact Evaluation – Working Paper 3, 2009:  
[http://www.theoryofchange.nl/sites/default/files/resource/white\\_2009\\_theory-based\\_ie\\_principles\\_and\\_practice.pdf](http://www.theoryofchange.nl/sites/default/files/resource/white_2009_theory-based_ie_principles_and_practice.pdf)
- Chambers R, Karlan D, Ravallion M, Rogers P. **Designing impact evaluations: different perspectives**. 3ie, Working Paper n°4, 2009:  
[http://www.3ieimpact.org/media/filer/2012/05/07/Working\\_Paper\\_4.pdf](http://www.3ieimpact.org/media/filer/2012/05/07/Working_Paper_4.pdf)
- White H. **Impact Evaluation – The experience of the independent evaluation group of the World Bank**. 2006: <http://documents.worldbank.org/curated/en/475491468138595632/Impact-evaluation-the-experience-of-the-independent-evaluation-group-of-the-World-Bank>

<sup>85</sup> World Bank Independent Evaluation Group & The Thematic Group for Poverty analysis, monitoring and impact evaluation & Evaluation Capacity Development. **Conducting quality impact evaluations under budget, time and data constraints**. 2006, p.8:  
<http://documents.worldbank.org/curated/en/255551468178129539/Conducting-quality-impact-evaluations-under-budget-time-and-data-constraints>

<sup>86</sup> World Bank Independent Evaluation Group & The Thematic Group for Poverty analysis, monitoring and impact evaluation & Evaluation Capacity Development. **Conducting quality impact evaluations under budget, time and data constraints**. 2006, p.11:  
<http://documents.worldbank.org/curated/en/255551468178129539/Conducting-quality-impact-evaluations-under-budget-time-and-data-constraints>

Model	Description	Diagram
<b>Model 1</b>	<p><b>The gold standard</b></p> <p>Two studies, baseline and endline, are performed. One at the start of the project. One at the end of the project. The baseline study serves as reference, a point of comparison for measuring project effects. In both cases, a control group is also constituted<sup>87</sup>.</p>	
<b>Model 2</b>	<p>Two studies, baseline and endline, are performed. In both cases, a control group is also constituted. However, the baseline is performed after the start of the project. This method must be used with caution, as it is important not to defer the baseline too long. Indeed, the effects of initial interventions might lead to underestimation of the project's effects.</p>	

<sup>87</sup> Randomised Controlled Trials belong to this impact evaluation category. This method comes from the clinical field. A population is randomly separated into two groups. The first group is the case group, and benefits from an intervention. The second is the control group, and serves as a comparative reference. Both groups are monitored. And then, their situations are compared using relevant indicators for the study. This type of methodology is relatively complex, and inevitably requires expert support.

Practical example: evaluation of the effects of job-seeking support. Case and control groups are constituted and monitored. At the end of the project, the proportion of people having found a job in each group is compared.

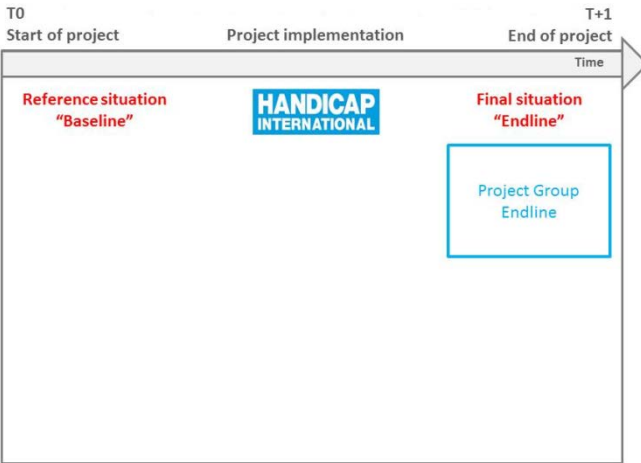
<b>Model 3</b>	<p>Two studies, baseline and endline, are performed. The baseline is implemented with no control group; however, a control group is constituted for the endline. This model reduces evaluation costs, as the study addresses fewer groups, and therefore fewer individuals.</p>	
<b>Model 4</b>	<p>A single study is performed at the end of the project. This endline is implemented with a control group. Note: this model is regularly used for project evaluations. e.g. Ivory Coast, an evaluative KAP study<sup>88</sup> of disability representations<sup>89</sup>.</p>	
<b>Model 5</b>	<p>Two studies, baseline and endline, are performed. However, no control group is constituted. Therefore, the initial hypothesis is that any difference observed between project start and project end is related to the project. Note: this model is regularly used for project evaluations. e.g. Mali, a quality of life evaluation using the ScoPeO approach<sup>90</sup></p>	

<sup>88</sup> KAP study = Knowledge, Attitudes and Practices study.

<sup>89</sup> All the material developed for this study is available on SkillWeb:

<http://www.hiproweb.org/en/home/knowledge-management/research-and-technical-studies/a-good-practice-for-study-implementation.html>

<sup>90</sup> <http://www.hiproweb.org/en/home/projects-management-and-quality/quality-of-life-scopeo.html>

<b>Model 6</b>	<p>Only an endline study is performed, with no control group. This model is the most economical, but also the least reliable. It is based upon retrospective questions and/or recall. It is therefore subject to recall bias, as well as to social desirability. In this case, qualitative data collection methods are generally preferred. Note: this model is regularly used in project completion evaluations.</p>	
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## A practical example of study methodology elaboration

A study was conducted in Bamako in 2014. Its objective was to analyse the short-term effects of stimulative physical therapy sessions offered to children aged 6 to 59 months, as part of the treatment of severe acute malnutrition<sup>91</sup>.

In order to meet this objective, the following choices were made:

- To collect primary data, since what was required was the production of new data concerning the effectiveness (or ineffectiveness) of a treatment procedure
- To collect quantitative data, since what was required was to measure and compare quantified impact variables (such as size, weight, and level of psycho-motor and cognitive development)
- Not to combine methods, as the quantitative approach was sufficient to measure impact. However, a literature review was performed in order to assess existing knowledge on the subject and to understand the context in which to discuss produced results
- To establish two groups: the case group, which received both collective stimulation sessions and stimulative physical therapy sessions, and the control group, which received only collective stimulation sessions
- To monitor the same individuals at a time interval of 35 +/- 10 days (baseline: J1; endline: J35).

<sup>91</sup> Handicap International. **Evaluation of the short-term effects of stimulation physical therapy in the management of severe acute malnutrition in children aged 6 months to 5 years in Bamako (Mali)**, 2015: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/StimulationPhysicalTherapyMali\\_RS\\_FP\\_16.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/StimulationPhysicalTherapyMali_RS_FP_16.pdf)



## Key points to remember

- Methodology is the result of a sum of choices.
- These choices are driven by the study's subject and objectives, and then weighted against its goals and constraints.
- The methodology must be presented in the protocol.
- All the possible types of studies mobilise the same methods as those presented in this guide, and follow the same recommendations.
- Methods have both strengths and weaknesses. However, they may be combined in order to complement each other and to confirm data and interpretations.
- In the case of impact evaluations, methodologies do not all have the same level of reliability.



## At the end of this step you have...

- ➔ Selected a methodology, if you are in charge of the study's implementation.
- ➔ An idea of what you want a third party to implement, if you are coordinating the study.



## Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

### To explore applicable methods based upon data type:

- ➔ Consult chapter 3 "[Managing secondary data](#)"
- ➔ Consult chapter 4 "[Managing quantitative data](#)"
- ➔ Consult chapter 5 "[Managing qualitative data](#)"

### For additional information on resources:

- ➔ Consult chapter 7 "[Resources required for study implementation](#)"

## Chapter 3 – Managing secondary data

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### Preamble

At this stage, you have:

- Defined the study's framework and confirmed the study's objectives and value,
- Identified a methodology that is adapted to your subject, objectives and goals, and chosen to use either secondary information or a mixed approach with a secondary data based component.

As already defined, secondary data is pre-existing data that has already been collected by other actors. It is useful here to differentiate secondary data and secondary information:

- **Secondary data** is raw data, collected by other stakeholders and provided in database form. This data is quantitative, and can be processed using traditional statistical analysis.
- **Secondary information** is data that has been collected, analysed and shared by other stakeholders. If appropriate, information produced by others can be processed using quantitative and qualitative analysis.

In the two cases (data or information), it is necessary to develop both a source-seeking strategy to identify sources and a decision-making strategy to select information. Indeed, everything that is published or shared does not have the same value or reliability. Evaluation and selection criteria must be defined to ensure the quality of the data that will be selected and then analysed, and secondary information must always be used with caution.

All information sources must be specified and correctly cited in reports. It is advisable to include references both in the text (to specify which data comes from which source as and when data arises) and at the end of the document.

This chapter addresses only the collection and analysis of secondary information<sup>92</sup>.

### 1- Types of studies based on secondary information

Secondary information reviews may take one of two forms (see table below): desk reviews or literature reviews.

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<sup>92</sup> Processing and analysing raw secondary data (in database format) is equivalent to processing and analysing quantitative data. Therefore, you will find more information in the sections "[Managing quantitative data](#)" and "[Analysing quantitative data](#)" of chapter 4: "Managing quantitative data".



	Desk review	Literature review
<b>Objectives</b>	<p>A desk review aims to quickly gather reliable information on a given subject, situation or context. Desk reviews can be used to:</p> <ul style="list-style-type: none"> <li>• Document a situation</li> <li>• Gather decision-making aids (strategic or operational)<sup>93</sup></li> <li>• Confront/compare the results generated by a study with other situations in order to situate, discuss these<sup>94</sup>.</li> </ul>	<p>A literature review is a critical synthesis of the documentation available on a specific subject and deemed most relevant and significant for understanding the subject. Literature reviews can be used to:</p> <ul style="list-style-type: none"> <li>• Comprehend, develop understanding, by making all of a specific sector's knowledge available and providing a situational analysis<sup>95</sup>.</li> <li>• Identify knowledge gaps in a sector, in order, for example, to identify future avenues of intervention<sup>96</sup>.</li> <li>• Identify methods or tools that might be adapted to your context.</li> </ul>
<b>Methodology</b>	<p>Research is rigorous in order to ensure information reliability. However, the methodology does strive for any academic standard.</p>	<p>The methodology must be clearly defined and replicable. Transparent decision-making strategies are developed in order to look for sources and objectively select the most relevant information. There are several types of literature review (systematic reviews<sup>97</sup>, scoping reviews<sup>98</sup>; evidence-based reviews<sup>99</sup>).</p>
<b>Duration</b>	A few days to a few weeks	A few days to a few months

<sup>93</sup> Example: In situations of emergency, at the onset of a crisis, secondary information is essential in the early days, as it is the main type of information available. Source: ACAPS. **Secondary data review and needs assessment**. 2011:

[http://www.reachresourcecentre.info/system/files/toolkit/acaps\\_secondary\\_data\\_review.pdf](http://www.reachresourcecentre.info/system/files/toolkit/acaps_secondary_data_review.pdf)

<sup>94</sup> Example: Research performed in order to assess prevalence of disability in Port-au-Prince (Haiti), with the objective of gauging the prevalences obtained compared to the disability prevalence findings of previous local, national and regional studies. Source: Handicap International. **Representation and evaluation of disability in Haiti (Port-au-Prince, 2012)**. 2013. (p. 74) :

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/RS02Haiti.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/RS02Haiti.pdf)

<sup>95</sup> Example: Meta-analysis conducted within the framework of the HandiVIH project in order to identify existing information relating to the HIV epidemic and persons with disabilities in the Saharan region. Source: Pierre De Beaudrap, Muriel Mac-Seing & Estelle Pasquier. **Disability and HIV: a systematic review and a meta-analysis of the risk of HIV infection among adults with disabilities in Sub-Saharan Africa**, in AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV, Vol. 26, n°12, 2014. <https://www.ncbi.nlm.nih.gov/pubmed/25033274>

<sup>96</sup> Example: Systematic reviews proposed in specific sectors, such as the work initiated by DFID/ELRHA on public health in humanitarian intervention contexts. Source: An evidence review of research on health interventions in humanitarian crises. 2015. <http://www.elrha.org/wp-content/uploads/2015/01/Evidence-Review-22.10.15.pdf>

<sup>97</sup> Uman LS. **Systematic Reviews and Meta-Analyses**, in J Can Acad Child Adolesc Psychiatry, 20(1): 57–59, 2011. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3024725/>

<sup>98</sup> Arksey H, O'Malley F. **Scoping studies: towards a methodological framework**, in International Journal of Social Research Methodology, pp19-32, 2005: <http://eprints.whiterose.ac.uk/1618/1/Scopingstudies.pdf>

<sup>99</sup> A few references:

- David L Sackett, William M C Rosenberg, J A Muir Gray, R Brian Haynes, W Scott Richardson. **Evidence-based medicine: what it is and what it isn't**, in BMJ, 1996, 312: <https://www.cebm.org/wp-content/uploads/Sackett-Evidence-Based-Medicine.pdf>
- Bradt DA. **Evidence-based decision-making in humanitarian assistance**, in Humanitarian Practice Network, 67, 2009: <http://odihpn.org/wp-content/uploads/2010/01/networkpaper067.pdf>

Whatever their specific forms, secondary information review methodologies are always based upon the same sequences.

## 2- Defining the information-gathering perimeter

The study's framework provides key elements that define the boundaries or perimeter of the search for information, in relation to: themes, geographical location, target population or temporal coverage (e.g. years of publication to consider).



### A pre-identified perimeter

Sometimes, as in the case of fast multi-sectoral diagnoses, a checklist of data to collect is available and can be adjusted from one context to another<sup>100</sup>: the key issues and topics that must be covered are summarised, as well as the information that is required for each. Teams must then select the information that is relevant to their context.

## 3- Designing a source-seeking strategy

This phase is in some ways equivalent to the individual selection phase for a quantitative or qualitative study. However, here you are not seeking to find people but reports, studies and/or other sources of information. Therefore, the questions here are:

- What are the potential sources of information?
- How can these be accessed?

### 3-1- Internal sources

#### WHAT?

These sources are constituted by reports produced by other teams on the subject, in the same field situation or in different field situations.

#### HOW?

Consult content-sharing platforms such as SkillWeb<sup>101</sup> and Source<sup>102</sup>, and request information from advisers and technical coordinators in some way involved in your study's theme.

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<sup>100</sup> Available upon request.

<sup>101</sup> <http://www.hiproweb.org/>

<sup>102</sup> <http://www.asksource.info/>

## 3-2- External sources

### WHAT?

These can be of various types:

- Official statistics produced by governments (ministries, etc.) or other State agencies, offices or departments. Household surveys or other national surveys (e.g. censuses, Demographic Health Surveys) can provide useful information.
- International Organisation reports (e.g. UN, UNICEF, WHO, World Bank, ODI, etc.), certain donors (e.g. USAID, AFD, DFID, etc.) or NGOs working in the sector of interest. The information generated by these institutions is generally available on their websites.
- The reports and analyses sometimes produced by local Organizations/Associations, and other community-based rehabilitation (CBR) networks.
- Or data produced by these same local organisations as part of their daily activities (monitoring, beneficiary monitoring, etc.).
- The administrative records of certain services (such as education or health sector services) or legal files pertaining to specific legal cases.
- Observatories and other surveillance systems, which produce analyses in specific sectors (e.g. International Observatory on Participatory Democracy).
- Academic literature: books and scientific journals, which publish original research articles.
- Newspapers and other mainstream media

### HOW?

There are several possible strategies.

#### Internet searches

Depending upon sectors and themes, several websites may be of interest. You may, for example, consult (non-exhaustive list):

- International organisation, non-governmental organisation or scientific journal websites
- Non-specialised scientific websites (e.g. The Cochrane Library<sup>103</sup>; Google Scholar<sup>104</sup>)
- Health related websites (e.g. Pubmed<sup>105</sup>; Science Direct<sup>106</sup>; Hinari<sup>107</sup>)
- Rehabilitation-related websites (e.g. PEDro<sup>108</sup>)
- International development related websites (e.g. The Campbell Collaboration<sup>109</sup>)
- Emergency response related websites (e.g. ACAPS<sup>110</sup>, Reach<sup>111</sup>, Reliefweb<sup>112</sup> or Humanitarian Response<sup>113</sup> Reports)
- Other grey literature (e.g. Park Database<sup>114</sup>, OpenGrey<sup>115</sup>).

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<sup>103</sup> <http://www.thecochranelibrary.com/view/0/index.html>

<sup>104</sup> <http://scholar.google.fr/>

<sup>105</sup> <http://www.ncbi.nlm.nih.gov/pubmed>

<sup>106</sup> <http://info.sciencedirect.com/scopus/france>

<sup>107</sup> <http://www.who.int/hinari/fr/>

<sup>108</sup> <http://www.pedro.org.au/>

<sup>109</sup> <http://www.campbellcollaboration.org/>

<sup>110</sup> <https://www.acaps.org/>

<sup>111</sup> <http://www.reach-initiative.org/>

<sup>112</sup> <http://reliefweb.int/>

<sup>113</sup> <https://www.humanitarianresponse.info/fr>



## Structured Internet searches

In order to delimit the source-seeking field of investigation, it is essential to define the terms that will be used and their language (English, French, etc.).

**Example:** A scoping review was conducted to analyse and understand the influence of groups of users on service quality in different sectors (education, health, rehabilitation, social sectors)<sup>116</sup>. Data collection was performed thanks to a selection of keywords in English and French, over the time period running from 1980 to 2015.

Computerised databases selected for the search were identified from the outset: Academic Search Premier via Ebscohost, CINAHL via Ebscohost, MEDLINE via Pubmed, The Cochrane Library, Web of Science and OpenGrey.

Then, keywords and keyword combinations were defined in English:

“User groups **OR** self-help groups **OR** support groups **OR** patient groups **OR** client groups **OR** peer groups **OR** community groups **OR** parents groups **OR** children groups **OR** women groups

**AND**

Health services **OR** rehabilitation services **OR** education services **OR** social services

**AND**

Access\* **OR** skills of professionals **OR** person-centered approach”.



## The issue of access to sources

All documents are not freely shared. In the academic world, some journals charge for access to journal content. Therefore, it is necessary to subscribe. However, a few initiatives provide access to scientific content (e.g. Hinari Access to Research for Health Programme). If some documents are not in open access, feel free to send an email to the original authors. Most often, they are very happy to share their work!

### Meeting with key informants<sup>117</sup>

Not all information is published and shared on the Internet. It may be appropriate to meet with key informants or to attend meetings, either to gather information directly, or to identify potential new information sources. Such exchanges may take place within formal frameworks (working groups, clusters, etc.), or exploratory or semi-structured interviews may be conducted with key informants<sup>118</sup> (e.g. with international organisation or local association representatives).

<sup>114</sup> <http://www.parkdatabase.org/>

<sup>115</sup> <http://www.opengrey.eu/>

<sup>116</sup> Degraive L, 2015. **Measuring user group impact on service quality: Literature review and census of Handicap International projects**. Master Thesis, University of Rennes/EHESP School of Public Health, 96 p. <http://documentation.ehesp.fr/memoires/2015/shps/degrave.pdf>

<sup>117</sup> Key Informant: A person with competencies or professional experience related to the research theme, exceptional understanding of the target population, or access to inside information.

<sup>118</sup> You will find additional information on this subject in the “Practical Guide” section, in chapter 5 “[Managing qualitative data](#)”.

## Other sources

In order to find new references, you can consult the bibliographies of the first reports/documents that you identify. These will direct you to other sources.

Social networks (Twitter, Facebook) can be a very useful complement (e.g. used during the Syrian crisis and the latest floods in Haiti).

## 4- Designing the information selection strategy

Next, information must be evaluated. The criteria enabling information selection must be defined:

- In the case of a desk review, source credibility and reliability of the information gathered may be emphasised<sup>119</sup>;
- In the case of a literature review, identified information inclusion/exclusion criteria can be more diversified, and may include: methodology validity and reliability, target population participation level in the process, inclusion of a gender approach, etc. These criteria can be defined in concert with experts, enabling information to be selected rigorously and transparently.

### Methodological transparency

Methodological traceability is essential in order to assess the quality of the information produced, and therefore to determine whether or not this information can be re-used.

This principle of transparency and sharing of methodologies must be kept in mind when Handicap International implements studies and research. Indeed:

- it is a demonstration of the quality of produced information,
- the results generated in this way will become secondary information for future users, who will themselves need to evaluate whether they are or not reliable.

## 5- Analysing the body of secondary information

A desk review often ends at this stage: selected and confirmed information are directly re-used in order to propose/adjust operational interventions<sup>120</sup>, or else to discuss the results produced by another study. In the latter case, it is important to ensure that information is indeed comparable: i.e. comparable methodologies used to generate data, comparable target populations, comparable categories (e.g. age brackets).

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<sup>119</sup> In particular, data reliability is assessed by triangulation: data from various sources is cross-referenced and confirmed (or refuted).

<sup>120</sup> Within the context of project development, for example.

In the case of literature reviews (systematic reviews, scoping reviews or evidence-based reviews), the information selected constitutes new matter to analyse.

It is then useful to gather all the identified information into a database. As the research process is iterative, this database will need to evolve throughout the process and be regularly updated. The database might, for example, include details relating to the sources themselves (sector, geographical area or main subject addressed) or to the information contained by the sources (content).

Several types of analyses can be applied, according to the type of information available:

- Descriptive statistics, for example, to observe the trends in the literature on a particular subject (source disaggregation, based on year of publication, geographical areas or sectors covered, etc.)<sup>121</sup>,
- Thematic analysis, based upon source content, enabling the extraction of knowledge in a specific area (what is repeated? overlaps? differs from one source to another? or, what is missing?)<sup>122</sup>.

## 6- Resources required for implementation

Human resources requirements for secondary information collection and analysis vary with objectives, contexts and types of selected reviews.

- A desk review of a situation in a difficult context will take a few days and mobilise one or two members of an intervention team,
- A literature review, performed as the first phase of a study, will take a week and mobilize the competencies of one person (junior or expert)
- A systematic or scoping review on a specific subject will take at least 3 months and mobilise searchers with greater expertise<sup>123</sup>.

These variations in human resource requirements will directly impact budget estimations:

- Swift information collection will not require significant budget, as this activity can be integrated into routine team activities,
- However, a systematic review, which has greater breadth in terms of implementation, will have a definite cost (cost will vary with expertise levels and with human resources configurations, however, as an indication, a team of researchers may request 30,000 to 40,000 Euros for this type of exercise).

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<sup>121</sup> For further information on this subject, consult sections "[Managing quantitative data](#)" and "[Analysing quantitative data](#)" in chapter 4 "Managing quantitative data".

<sup>122</sup> For further information on this subject, consult sections "[Processing \(narrative/discursive\) qualitative data](#)" and "[Analysing qualitative data](#)" in chapter 5 "Managing qualitative data".

<sup>123</sup> McGowan J, Sampson M. **Systematic reviews need systematic searchers**, in J Med Libr Assoc. 93(1): 74–80, 2005: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC545125/>



## Key points to remember

- Defining a clear source-seeking strategy limits the risk of overlooking essential information,
- Be sure to sharpen your critical thinking. All that is published is not reliable! Defining selection criteria and triangulating information are therefore essential,
- Secondary information reviews can require time, hard skills, and therefore budget!



## Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

### To learn how to share and use study outputs:

- ➔ Consult Chapter 6 "[Sharing and using study findings](#)"

## Chapter 4 – Managing quantitative data

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### Preamble

At this stage, you have:

- Defined the study's framework and confirmed the study's objectives and value,
- Identified a methodology that is adapted to your subject, objectives and goals, and chosen a quantitative approach or a mixed approach with a quantitative component.

As explained earlier, the quantitative approach enables a phenomenon to be measured and numeric results to be produced. Questionnaire surveys are the primary method of collecting quantitative data<sup>124</sup>. The data collected with questionnaires can be compared between respondents if:

- questionnaire administration modalities (question and response category wording, surveyor attitude...) are similar,
- data coding in the database is harmonised.

Information comparability enables the performance of enumerations, and, more generally, statistical analyses.

As previously discussed, the study's design phase is an essential phase in terms of study quality. Indeed, during this phase, the protocol<sup>125</sup> is thought through, designed, discussed and formalised, in order to precisely define the methodology that will be applied. This is the time to answer questions such as "How must questions be asked to achieve objectives?" or "How must individuals be selected?". And, as we will see, this is also when data collection tools, data entry tools and data analysis plan are co-designed and co-developed.

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<sup>124</sup> Quantitative data can also be produced by observational surveys (see the chapter "Collecting qualitative data", section "[Observation](#)"), or by anthropometric surveys or water analyses.

<sup>125</sup> As previously explained, the protocol is the document that presents the study's framework, specifies the methodological mechanism envisaged and describes the resources necessary for study implementation and monitoring. Its function is therefore to precisely and clearly describe what we wish to do, how we are going to do it, when and with whom. A protocol template is provided in this guide's "Toolbox" ([Tool 1](#)).



## A- Quantitative study participant sampling

### 1- General information

When implementing a quantitative study, one must decide whether to consult the entire population (comprehensive approach, or census), or a selection – or sample<sup>126</sup> of the population (survey).

When the population size is large, it is advisable to work with a sample of the population, for several reasons:

- The overall cost of a survey is lower than that of a census (e.g. fewer human resources mobilised)
- Data collection times are shorter,
- There are fewer logistical requirements (e.g. less travel)
- In the case of hard-to-reach populations, resources can be reinforced,
- Individual data quality is higher (e.g. non-responses are limited).

Working with a fraction of the initial population<sup>127</sup> has an impact on calculations and analyses. Indeed, the true values of proportions, frequencies and averages cannot be calculated, but are estimated based upon the individuals selected for the sample. The **statistical accuracy** criterion is therefore essential. Statistical accuracy measures the difference between the estimates obtained from the sample and the true value of the parameter studied.

This observed difference can be caused by a number of biases and errors. These biases and errors include:

- Sampling error, due to the randomness of the sample selection process. This type of error reflects the variation that occurs randomly when several samples are drawn from the same population. Sampling error magnitude can be estimated and communicated via confidence intervals. This error tends to decrease with increasing sample size.
- Observation (or information) bias, incurred because of human error and methodological limitations during data collection and entry (elevated non-response rate, scoring errors causing coding errors, etc.). This bias can be limited through proper surveyor training and effective supervision during data collection and entry.
- Participant selection bias, incurred during data collection, and related to study subject selection procedures (e.g. incompletely covered geographical areas, excluded populational subgroups<sup>128</sup>).

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<sup>126</sup> Sample, sub-group, or sub-set of the initial population.

<sup>127</sup> The initial population is the population targeted by the study. One must specify population characteristics and geographical location, as well as the date (populations evolve continuously over time). The units of the individual population may be individuals, businesses or other entities depending upon the subject of study. To simplify this section, we will consistently refer to individuals. However, please remember that this term can be replaced, as needed.

<sup>128</sup> Some examples: exclusion of geographical areas for security reasons, of institutions (such as orphanages) for logistical reasons, or of sub-populations for access reasons (e.g. teams only recruit participants in the village centre, or are only present between 10h and 15h, when part of the population is working in the fields).

The following two parameters enable the accuracy of the proposed sampling plan and obtained results to be measured:

- The margin of error, which quantifies estimation error amplitude, was the sampling operation to be repeated. It is generally set at 5%. This signifies that estimates calculated using samples with different compositions, but obtained via identical methods from an identical initial population, will differ by plus or minus 5%.
- The level of confidence, which quantifies the percentage of chance that the true value actually lies within the limits defined by the margin of error. It is generally set at 95%.

If the margin of error is reduced (e.g. to 1%) and the level of confidence increases (e.g. to 99%), accuracy improves but sample size increases.

Sampling plan<sup>129</sup> development is an essential step, but is generally considered complex by field teams, as it draws on mathematical models and uses technical vocabulary that requires expertise in probability and epidemiology. Sampling becomes more complex when target populations are "hard-to-reach" because they are hidden or stigmatised (e.g. people with HIV). Sampling also becomes more complex when, despite being designated in a uniform way, target populations actually experience a great diversity of situations (e.g. persons with disabilities are a heterogeneous<sup>130</sup> group in terms of disability types and degrees of severity of difficulties encountered).

Yet, because the approach is mathematical, teams often expect a one-size-fits-all formula applicable to all contexts, projects and populations to define sample size. However, there is no such formula!

Sampling rules do exist and are applied, in particular in the contexts of household or population surveys conducted within the general population by National Statistical Offices and Institutes, and of research performed by research centres. However, in our intervention contexts, ideal approaches are rarely applicable and must be adapted to intervention constraints (lack of time, budget or difficult access to population for logistical, climatic, security or political reasons).

In our contexts, minimum sample sizes must be defined to ensure produced information precision and accuracy. And, this inevitably involves finding a point of equilibrium between what is possible in the field and what is financially and methodologically feasible.

For example, the generalisation of results to an entire population – which is most often a priority consideration – is only possible if sampling modalities enable a representative sample of the original population to be constituted.

## **Representativeness**

A representative sample has the same structure as that of the original population to which the sampling plan was applied. Here, structure refers to characteristics (or attributes) relating to gender, age, geographical location, economic status, etc.

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<sup>129</sup> Sampling plan: description of the process followed to select a segment of the initial population, i.e. to constitute the study sample.

<sup>130</sup> Diverse in character or content.

In the case of probability sampling<sup>131</sup>, the sample is representative for all the original population's attributes, and estimates can be generalised to the entire initial population. In the case of non-probability sampling, representativeness only applies to one or two specified variable(s) and extrapolations are impossible. Indeed, the more samples differ from the initial population, the less it is possible for results to be generalised.

## 2- Sampling: Who must we survey?

In a quantitative study, deciding who to survey amounts to defining the study's target population<sup>132</sup>, i.e. the people that are able to tell you what you seek to know. In statistical terms, the universe to be studied (i.e. the sample) is composed of statistical units (most often, individuals).

The population's outlines and characteristics must be clearly defined.



### Gender, age or disability sensitivity

Sensitivity to gender, age and/or disability is also manifested during the sampling phase, when target population attributes are defined, and special attention is paid to the representation of these groups in the constituted sample.

## 3- Sampling procedures: How must we survey?

There are two major types of sampling families.

	Probability (or random) sampling	Non-probability (or non-random or empirical) sampling
<b>Principle</b>	Initial population units are selected randomly and have an identical and known probability of being selected for the study sample. It is possible to measure result accuracy (in particular, to calculate parameter confidence intervals).	Initial population units are selected based upon criteria. Choices are made deliberately. Population members have an unknown probability of being selected for the study sample. It is impossible to calculate result accuracy.
<b>Associated modalities</b>	<ul style="list-style-type: none"> <li>• Simple random sampling</li> <li>• Unequal probability (or proportional) random sampling</li> <li>• Systematic random sampling</li> </ul>	<ul style="list-style-type: none"> <li>• Quota sampling</li> <li>• Snowball, or network, sampling</li> <li>• Convenience, purposive or volunteer-based sampling</li> </ul>

<sup>131</sup> You will find further information on sampling procedures in this chapter in the section "[Sampling procedures: How must we survey?](#)".

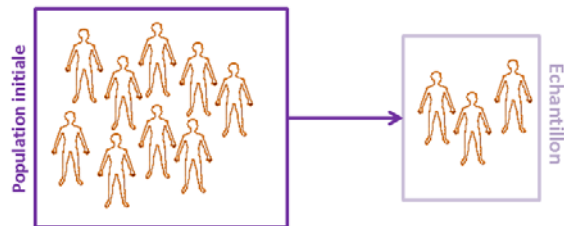
<sup>132</sup> Study target population will already have been discussed during the 'Identify & decide' phase, in which the study's framework is defined. You will find further information on this subject in chapter 1: "[Chapter 1 – Defining study subject and objectives](#)".

	<ul style="list-style-type: none"> <li>• Stratified random sampling</li> <li>• Cluster random sampling</li> <li>• Multi-stage random sampling</li> </ul>	<ul style="list-style-type: none"> <li>• Itinerary sampling</li> </ul>
<b>Advantages</b>	When properly applied, samples are representative of the initial population (all attributes), and results can therefore be generalised to the initial population	<ul style="list-style-type: none"> <li>• Lower cost</li> <li>• No sampling frame required</li> </ul>
<b>Limitations</b>	<ul style="list-style-type: none"> <li>• Often requires a sampling frame<sup>133</sup></li> <li>• Resource intensive (budget, time, human resources, competencies)</li> </ul>	<ul style="list-style-type: none"> <li>• Requires increased monitoring/control during the field phase (e.g. sample constitution monitoring during data collection)</li> <li>• Sampling error cannot be calculated. The sample is not representative of the parent statistical population as a whole. Therefore, results cannot be generalised.</li> </ul>

### 3-1- Probability (or random) sampling

#### 3-1-1- Simple random sampling

This procedure resembles a random drawing, with no replacement. Each unit of the initial population, and therefore each combination of units, has an identical and known probability of being selected.



**Advantages & limitations:** A sampling frame is required. However no auxiliary variables<sup>134</sup> are required, other than user-names and contact details (to be able meet selected people).

**In practice:**

- Technique 1: 1) Assign a unique number to each individual in your list. 2) Write down all of these numbers on slips of paper (one number per slip), then place all the slips of paper in a hat. 3) Remove slips from the hat randomly until sample size is reached.
- Technique 2: In an Excel file, use the formula = RANDBETWEEN. 1) Specify the lower and upper values to enter into the formula (i.e. 1 and whatever the sample size is). 2) Use the RANDBETWEEN function to obtain a set of random integers between these two values. 3) Copy and paste the values generated by RANDBETWEEN into the file containing your list of individuals and associated IDs. 4) Order your list of individuals using the generated values in increasing or decreasing order. 5) Select the first XX individuals, depending upon calculated sample size.

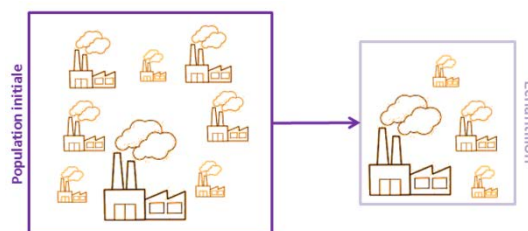
<sup>133</sup> Sampling frame: list of all statistical units of interest to the study.

<sup>134</sup> Auxiliary variables provide additional information relating to statistical units. They specify individual characteristics or attributes, e.g. gender, village, or civil society association membership.

### 3-1-2- Unequal probability (or proportional) random sampling

Units are selected proportionally to a known auxiliary variable (e.g. a region's population density or a company's number of employees).

**Advantages & limitations:** This procedure requires a sampling frame and at least one auxiliary variable (used for the proportional selection process). When selecting units, there is a risk of neglecting smaller units.



### 3-1-3- Systematic random sampling

Each unit has the same probability of being selected. However, combinations have different probabilities of being selected. A sampling interval is calculated in order to determine the interval between each selected unit. The interval,  $k$ , is calculated as follows:  $k = N/n$  ( $N$  = population size and  $n$  = sample size). This interval is used to select individuals from a list as follows: a 1<sup>st</sup> individual is selected randomly from the list, the 2<sup>nd</sup> individual is selected  $k$  individuals away from the first, the 3<sup>rd</sup> is selected  $2k$  individuals away, etc.

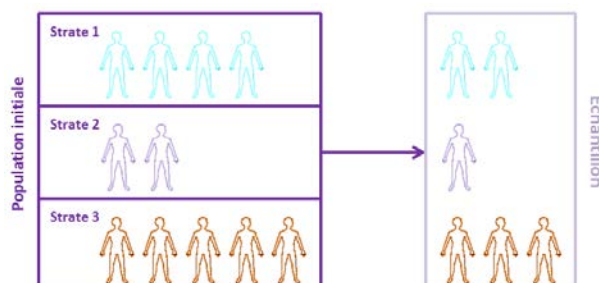
**Advantages & limitations:** This procedure is fast, easy to implement and requires a list of individuals. However, if there is any inherent periodicity in the list, and if the defined sampling interval is any multiple of that periodicity, there is a risk that this procedure will omit part of the population.



**Example:** You must select a sample of 278 students in a school in which 1,000 students are enrolled. 1- Make a list of students 2- Define the sampling interval:  $k = N/n$ , which equals 3.6 (or 4, when rounded up). 3- Randomly select a first student from the list (for instance, ask someone close by to pick a number between 1 and 1,000). 4- Constitute the sample by selecting every 4<sup>th</sup> student.

### 3-1-4- Stratified random sampling

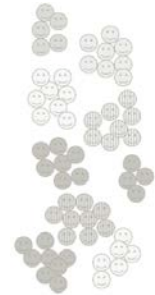
Individuals are classified into subgroups based upon relevant criteria to the study (e.g. private/public schools enrolment). These subgroups, or strata, must be mutually exclusive, independent (high inter-group variability) and homogeneous (low intra-group variability). They must be simple to use and easy to observe. Statistical units are then randomly selected within each subgroup (usually by simple random sampling).



**Advantages & limitations:** This procedure allows results to be compared between strata when strata are sufficiently populated. However, it is costly in information terms (you must know the proportion of each subgroup in the initial population), and may require adjustments during statistical analysis.

### 3-1-5- Cluster random sampling

When the population is large and dispersed over a wide geographical area, the population is divided into groups, or clusters. First, the population is divided into small geographical areas of known size. Then, some of these geographical areas are selected randomly (e.g. by simple sampling or proportionally to population density (proportional random sampling). Finally, in each cluster, individuals are selected randomly.



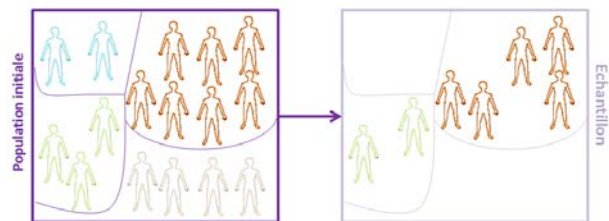
**Advantages & limitations:** This procedure is used when there is no list of statistical units (but you must at least have a list of selected clusters). It reduces data collection team travel costs, and is appropriate for studies that cover large areas. However, it relies on large samples<sup>135</sup> and produces less accurate results, because there is a risk that the units within a cluster resemble each other. Moreover, additional sources of bias must be dealt with during estimations (intra-cluster correlation coefficient, number of clusters and number of individuals per cluster).

**Example:** You wish to study how children with disabilities are perceived by neighbourhood chiefs:

1- Make a list of concerned districts (or clusters). 2- Randomly select XX (depending upon sample size) districts. 3- List the villages in each selected district. 4- Meet all the village chiefs of each selected district.

### 3-1-6- Complex multi-stage random sampling

Several sampling procedures are associated. An initial population of known size is divided into primary units (first stage – e.g. geographical units), which are composed of secondary units (second stage – e.g. households), themselves composed of tertiary units (third stage – e.g. individuals).

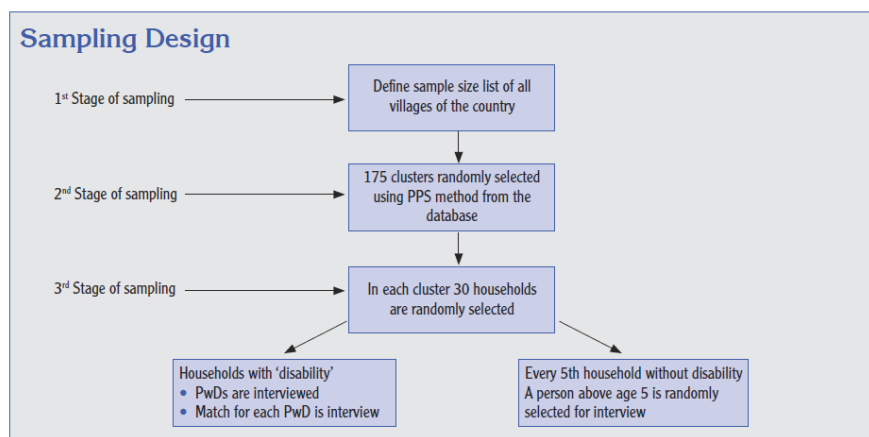


At each stage, specific sampling procedures are mobilised to select the units (e.g. systematic random sampling to select geographical units).

**Advantages & limitations:** This procedure guarantees sample representativeness and therefore the extrapolation of results to the initial population. However, it is also one of the most complex methods to implement.

<sup>135</sup> See section [“Sample size: How many people?”](#), Sidebar “Sample size and sampling modalities”.

**Example:** A study conducted in Afghanistan in 2005 to assess disability prevalence at a national level<sup>136</sup>.



## 3-2- Non-probability, non-random or empirical sampling

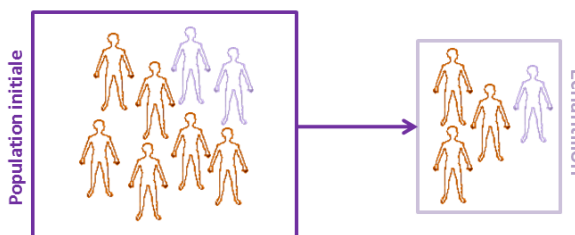


### Please note!

Non-random techniques enable samples to be constituted in order to gather target group information. However, these samples are not representative of the population, and results can therefore not be extrapolated.

### 3-2-1- Quota sampling

One or more relevant variables are selected (e.g. gender) and a quota of units per variable category is set for each variable (e.g. number of men, number of women). The sample must have the same structure, proportionally, as the initial population for this (these) variable(s).



**Advantages & limitations:** This procedure requires increased supervision during data collection. Indeed, surveyors must follow a work plan that specifies the proportions to apply and the precise profiles to identify. Furthermore, certain profiles can be difficult to find in the field.

**Example:** As part of a study on the rights of children with disabilities in schools, a questionnaire is distributed to 3 target groups in order to compare findings: 60 children with disabilities, 60 children without disabilities, 60 teachers, respecting gender distribution for each group.

<sup>136</sup> Handicap International, 2005. **Conducting, surveys on disability; a comprehensive toolkit**. See p. 11 [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/toolkit\\_NDSA.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/toolkit_NDSA.pdf)





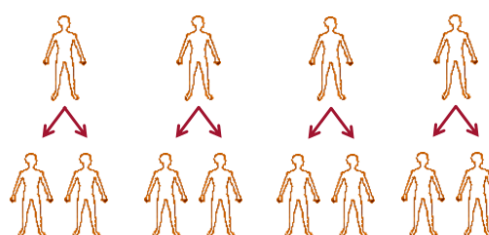
## Confusion between stratified and quota sampling

In the case of stratified random sampling, each population sub-group (or strata) is independently represented within the sample, and the size of each sub-sample is calculated in order to guarantee sub-sample representativeness.

In the case of non-random quota sampling, sub-sample size is defined upfront, based on contextual constraints (budget, time, etc.) rather than on demographic information. The final sample is not representative of the population.

### 3-2-2- Snowball, or network, sampling

A first group of target individuals is identified (e.g. via a civil society organisation or direct identification in a village) and interviewed. These individuals are then asked to indicate two other individuals in similar situations. This second set of individuals is approached, and they then, in turn, directly identify new potential participants. Recruitment therefore occurs in several waves.



**Advantages & limitations:** This technique is very useful when the target population is hard-to-reach for social and/or cultural reasons (e.g. persons with severe disabilities). Selection is based upon relationships (social, political, etc.) between individuals. Therefore, it is essential to ensure a diversity of entry points, so as not to limit recruitment to a single profile, or single network. Remember that the sample is not representative of the population and that results cannot be extrapolated.

**Example:** A study performed in Senegal, on HIV prevalence and vulnerability amongst persons with disabilities in the Ziguinchor region (2015)<sup>137</sup>.

### 3-2-3- Purposive, convenience and volunteer-based sampling

These procedures are more frequently used for qualitative studies<sup>138</sup>, but may also be useful in quantitative studies.

- Purposive sampling is performed using criteria that are based upon study objectives, and individuals are selected based upon their profile;
- Convenience sampling gives precedence to easily accessible individuals;
- Volunteer-based sampling selects people who declare an interest in participating.

**Advantages & limitations:** When applied to quantitative studies, these procedures multiply biases, as they only provide access to a visible segment of the target population.

<sup>137</sup> Report available upon request.

<sup>138</sup> You will find further information on this subject in the chapter “Managing qualitative data”, in section [“Selecting individuals for qualitative interviews”](#).



**Example 1:** Sampling performed within a school will select enrolled children. However, it will be harder to recruit children who are in the process of dropping out, and impossible to recruit children that are not in school.

**Example 2:** Sampling performed within a rehabilitation centre will access those persons with disabilities who were able to come to the centre. The people who stay at home (e.g. due to distance, finances or disability severity) will not be included.

### 3-2-4- Itinerary sampling

This procedure's objective is to arbitrarily produce a sample in the identified village or district. There is a certain level of randomness to the technique. However, it is not a random technique, as ultimately, there is no guarantee that the sample will be representative. A starting point is defined in the village/neighbourhood (usually, the central square). A direction is then selected (e.g. with a bottle), or a number of directions selected depending upon village configuration and number of surveyor teams. Each team follows a defined itinerary and selects households (and an individual in each household) using a predefined sample selection rules (e.g. systematic random sampling with a defined sampling interval for household selection, and purposive sampling for individual selection of women between 15 and 45 years of age). These predefined sample selection rules must be respected throughout the sample assembly phase.

**Advantages & limitations:** This procedure is inexpensive and very useful when little data exists on the study population. It also forces surveyors to cover a wider area instead of staying within a central area. However, it only works within defined and limited geographical areas. It is often used in combination with other sampling methods (multi-stage sampling, in particular).

**Example:** The evaluative Knowledge, Attitudes and Practices study on representations of disability performed in the Ivory Coast, 2013<sup>139</sup>.



#### Team distribution

In order to distribute teams, one must understand the investigation area's configuration, and identify inhabitant profiles and where to find them (e.g. representatives of specific ethnicities or castes living in specific neighbourhoods). In rural areas, a common mistake is to focus upon the heart of the village, when the village is in reality much more widespread. The initial reconnaissance phase is critical and must be prepared with the community.

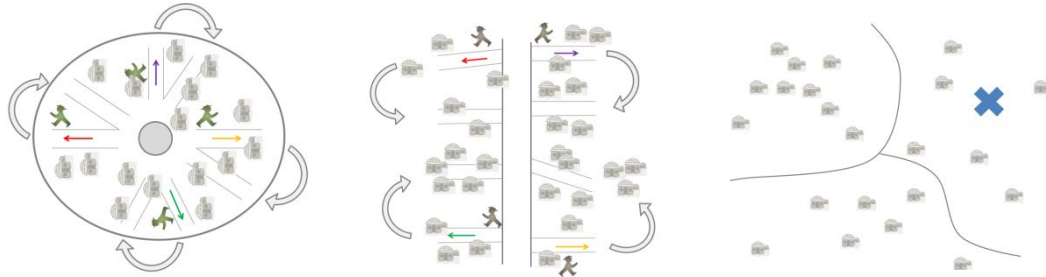
Teams can then be distributed in a number of ways, as shown in the following illustration, depending upon survey area characteristics:

- Village built around a central square (or building: school, church, etc.),
- Village built along a road,

<sup>139</sup> All the material developed for this study is available on SkillWeb:

<http://www.hiproweb.org/fr/accueil/management-des-connaissances/recherche-et-etudes-techniques/etudes-exemple-de-bonne-pratique.html>

- Scattered village: with the help of community representatives, inhabited areas are divided into 2 or 3 zones, depending upon village size. Then, one or two zones are selected.



## Other methods for arbitrary selection of individuals

The itinerary method is the most common method, but it is not adapted to all situations. Therefore, other selection rules must be defined. What is most important here is defining a selection rule that will be respected from beginning to end of data collection.

- Example 1: In a health centre, select 1 incoming patient out of 3, for 10 days
- Example 2: In a classroom, systematically select the last people in each row
- Example 3: In a neighbourhood's central square, select 20 people daily, for 10 days. In this case, mind that the same person is not surveyed more than once.

## 4- Sample size: How many people?

### 4-1- Essential factors for sample size calculation

Sample size calculation depends upon a number of factors that must be considered from the outset of the study design phase.

**Some factors are methodological:**

- Study objectives
- Expected level of accuracy (margin of error and level of confidence)
- Selected sampling procedures (see Sidebar "Sample size and sampling modalities")
- Expected type of analysis. For example, descriptive analyses can be performed on small samples. However, if more complex analyses are required (e.g. regression analysis), sample size must be increased.
- Expected disaggregation level (see Sidebar "Sample size and disaggregation")
- Initial population size. Indeed, for large initial populations, exact size does not matter. However, for smaller initial populations, the situation is reversed, and initial population size has an impact upon variance<sup>140</sup>
- Additional percentages required to compensate for imponderables (see Sidebar "Planning for imponderables!").

<sup>140</sup> Variance is an estimated measure of the error associated with extrapolating sample results back to the initial population.

### Other factors are more organisational and logistical:

- Cost constraints
- Time constraints
- Human resource availability constraints (in particular, for data collection).



### Sample size and sampling modalities

Both cluster and multi-stage random sampling are often used for household surveys. One must then consider the “design effect”. Indeed, in both cluster and multi-stage random sampling, accuracy is reduced, as the units within a sub-group usually resemble each other more than they do the units of other sub-groups. To compensate for this inaccuracy, sample sizes are calculated as for simple random sampling, and then **multiplied by the design effect**, whose value is typically between 1.4 and 2<sup>141</sup>.



### Sample size and disaggregation

Sample size calculation can also take comparison and disaggregation requirements into account. Thus, if you wish to make comparisons between sample sub-populations (e.g. by gender), you must ensure that the number of individuals in each category (women/men) is great enough for analyses to be performed.

- **Example:** 100 individuals, including 50 men and 50 women. However, the greater the number of sub-populations and categories, the greater the sample size, and therefore the greater the cost and complexity in the field (this is especially important to remember for random and quota sampling procedures)
- **Example:** 200 individuals, including 100 men (of which 50 youth and 50 adults) and 100 women (of which 50 youth and 50 adults).



### Contingency planning!

A percentage of individuals must always be added in order to be able to respond to unexpected, imponderable situations. The number of individuals contacted for a quantitative study is often much higher than the number of individuals entered into the final database. Indeed:

- All individuals will not agree to participate, and a refusal percentage must therefore be anticipated.
- In the case of longitudinal (or cohort) studies, initial sample size must be increased to compensate for individuals that are lost between phases (because they moved, died or lost interest in the study).
- A number of individuals may need to be removed from the sample during data entry because of errors (e.g. partial filling out of the questionnaire).

The additional contingency planning percentage is calculated based on experience, relevant literature, context, and/or subject sensitivity. It is generally advisable to include an **additional 5% to 10% of individuals to first estimates, and as much as 20% for longitudinal studies.**

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<sup>141</sup> For information, the design effects range from 1 (homogeneous population, all sub-groups similar to each other) to 4 or more.

## 4-2- Sample size calculation

The purpose of this section is not to present mathematical formulas or explain the models underpinning sample size calculations. This section provides tools to facilitate calculations, additional information and practical examples.

### 4-2-1- Tools

#### Tool 1: Statistical sample size tables

In the case of simple random sampling, statistical sample size tables<sup>142</sup> tell you expected sample sizes, based on initial population size and desired margin of error (ranging from 1 to 5% in table below). In the example provided, for an initial population of 250,000 people, or above, and a margin of error of 5%, sample size stagnates at 384 individuals. In the case of an initial population of 500 people, sample size drops to 217.

Tableau 6 : TAILLE « n » DES ECHANTILLONS pour  $p = 0.5$  et un Niveau de

Taille de la Population Mère « N »	Marge d'erreur « e »				
	0.01	0.02	0.03	0.04	0.05
100	99	96	92	86	80
200	196	185	169	150	132
300	291	267	234	200	169
400	384	343	291	240	196
500	475	414	341	273	217
1'000	906	706	516	375	278
2'000	1'655	1'091	696	462	322
3'000	2'286	1'334	787	500	341
4'000	2'824	1'501	843	522	351
5'000	3'288	1'622	880	536	357
7'500	4'212	1'819	934	556	365
10'000	4'899	1'936	964	566	370
25'000	6'939	2'191	1'023	586	378
50'000	8'057	2'291	1'045	593	381
100'000	8'763	2'345	1'056	597	383
1'000'000	9'513	2'395	1'066	600	384
2'500'000	9'567	2'399	1'067	600	384
4'000'000	9'581	2'400	1'067	600	384
10'000'000	9'595	2'400	1'067	600	384
50'000'000	9'602	2'401	1'067	600	384

<sup>142</sup> You can find statistical sample size tables online or in more specialised guides.

## Tool 2: Statistical sample size calculators

Today, several sites provide online sample size calculators:

<http://www.raosoft.com/samplesize.html>

<http://www.surveysystem.com/sscalc.html>

<http://www.cubereseach.ca/calculators.php>

You will need to enter several parameters (initial population size, level of confidence, margin of error and estimated or expected population proportion ( $P^{143}$ )).



### Please note!

Whether you use tables or calculators, estimations will still be insufficient for sample size definition. Tables and calculators provide basic estimates that are really only applicable to simple random sampling, and an increasing number of factors needs to be considered when using other more complex sampling modalities. On a case-by-case basis, it may be necessary, for example, to add a percentage of individuals to deal with imponderables (between 10 and 20%, depending on the context), and, if you chose cluster sampling, the 'design effect' may need to be factored in (sample sizes usually multiplied by a factor between 1.4 and 2).



### Is my sample small?

This question raises many debates. Indeed, a demographer will consider a sample of 1,000 people "small", while for us, such a sample is almost unhopd for! Generally speaking, for a quantitative study, a sample of 100 people is considered small. A sample with fewer than 30 people is even referred to as a micro-sample. Specific tests for small samples exist, enabling data from such samples to be analysed.

## 4-2-2- Practical examples

A number of different configurations can be encountered in practice, and affect sample size. Here are some examples.

### Configuration 1: Known, small-scale statistical parent population size

If the initial statistical population is small, it is advisable to take a census and meet all individuals. Indeed, time and budget advantages will not offset sampling procedure biases.

**Example:** According to the sampling tables, if there are 60 individuals in the initial population, then the study sample must include 52 individuals. When 10% are added for refusals, sample size reaches 57. So, you might as well meet all 60!

### Configuration 2: Disability prevalence (or other) study in the general population

Estimated number of households to visit is in this case based upon three factors: estimated disability prevalence, margin of error and level of accuracy. In the case of hidden, hard-to-reach, or uncommon

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<sup>143</sup> If the population proportion parameter ( $P$ ) is unknown, it is advisable to choose  $P = 50\%$ .

populations (single women with children, persons with disabilities, etc.), a larger sample must be defined to ensure a minimum number of target persons are identified.

**Example:** Research on disability evaluation in Port-au-Prince, 2012<sup>144</sup>. Optimum initial sample size was estimated at 3,000 individuals, distributed amongst 60 clusters of 50 people. Calculations were based upon the following factors: 5% disability prevalence rate in people over 5 years of age (average percentage based on previous surveys), 20% level of accuracy of prevalence rate estimation, 95% level of confidence, 1.4 design effect and 15% non-response bias. The intention was that the initial sample size enables approximately 150 persons with disabilities to be identified, including 110 adults and 40 children.

### **General population prevalence... and what about the missing millions?**

General population prevalence studies are most often household surveys. However, such surveys do not include people in institutions (prisons, orphanages, long term “stays” in health centres, etc.), nomadic populations living in camps or homeless people. The picture provided by these surveys is “truncated” or partial. However, it is possible for methodologies to include additional studies to include populations living in closed or non-fixed environments.

#### **Configuration 3: Comparative study**

For example, in order to assess an intervention’s effects, a case-control study is recommended. Case and control group size must be similar, and control group individuals must be matched (e.g. by gender or age) to the case group individuals. The recommended minimum group size is 100 to 150 individuals. However, these estimates must be adjusted if comparisons based on other attributes (e.g. economic level) are also desired.

**Example:** Evaluation of the short-term effects of stimulative physical therapy in the treatment of severe acute malnutrition (SAM) in children aged 6 months to 5 years, in Bamako (Mali), 2015<sup>145</sup>.

The objective was to recruit at least 120 children to constitute the control group, and 120 children to constitute the case group, in various pre-identified health centres. The sample size was estimated based on the following parameters:

- Data collection time frame, which was limited to 3.5 months, in order to meet the scheduling requirements of the development project associated with the research;
- Number of children with SAM managed by the health centres;
- The risk, inherent to any semi-longitudinal study, of losing track of a number of individuals;
- The desire that sample size be great enough to obtain robust statistical results.

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<sup>144</sup> Handicap International. **Representation and evaluation of disability in Haiti (Port-au-Prince, 2012)**. 2013: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/RS02Haiti.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/RS02Haiti.pdf)

<sup>145</sup> Handicap International. **Evaluation of the short-term effects of stimulation physical therapy in the management of severe acute malnutrition in children aged 6 months to 5 years in Bamako (Mali)**, 2015: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/StimulationPhysicalTherapyMali\\_RS\\_FP\\_16.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/StimulationPhysicalTherapyMali_RS_FP_16.pdf)



## Key points to remember

- Not all samples are representative, therefore not all results can be generalised to the initial population.
- Sampling plans must satisfy technical criteria and comply with constraints.
- Sampling methods may be combined.
- Do not face sampling issues alone, consult an expert!



## At the end of this step you have...

- ➔ Determined target population characteristics, defined sample size and selected a sampling plan that is adapted to your objectives.



## Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

### To learn how to develop a quantitative methodology:

- ➔ Consult "[Developing a questionnaire for a quantitative study](#)"
- ➔ Consult "[Conducting a quantitative interview](#)"
- ➔ Consult "[Processing quantitative data](#)"
- ➔ Consult "[Analysing quantitative data](#)"

### To compare these techniques with the qualitative approach:

- ➔ Consult "[Selecting individuals for a qualitative study](#)"

## B- Developing a questionnaire for a quantitative study

### 1- Why a questionnaire?

Questionnaires are the data collection tool of choice in quantitative studies. Questionnaires are specialised and structured, and standardise data collection from a large number of respondents.

Questionnaire design must both reflect study objectives (what must be studied or explained?), and simplify data entry and analysis as much as possible. Questionnaires must be addressed and designed at the same time as data entry and analysis is addressed and designed. And, neither the time nor the team and partner availability that this requires must be neglected.



#### Please note!

In a quantitative study, a questionnaire cannot be modified as you go. It must be repeated identically with all people surveyed. This is why it is so important to take the time to develop a well-designed questionnaire, in line with study subject and objectives.

### 2- Questionnaire development

Regardless of intervention context and type of quantitative study implemented (KAP<sup>146</sup> or other type of study), questionnaire design principles remain identical.

#### 2-1- The development principle

As in qualitative interview guide development, the subject and areas of interest identified by the study framework define your starting point.



Questionnaire development follows the following sequence:

- The **first steps** to identify and prioritise the themes that the questionnaire must address based on the study's objectives.

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<sup>146</sup> KAP study = Knowledge, Attitudes and Practices study.



**Example:** for an impact assessment performed in Kenya, the following nine dimensions were selected by Handicap International's teams and partners: socio-demographic profile, perceived safety, perceived motivations justifying possession of arms at community level, effective access to arms, perceived motivations justifying possession of arms at the individual level, misuse of arms at the individual level, perceived prevalence and impact of armed violence, incident reporting mechanisms and access to information on armed violence related risks<sup>147</sup>.

- **Then, within each theme**, information that will enable study objectives to be fulfilled must be identified.

In order to not waste the time of participants and Handicap International teams, this selection process is governed by two principles<sup>148</sup>: avoiding collection of unnecessary data and avoiding collection of already collected (existing or covered by other sources or surveys) data. Only data that will be analysed and useful is introduced into the questionnaire.

**Example:** gender, age and functional impairment type are questions that must be included in your socio-demographics section. However, within the context of your study, might it also be useful to ask questions relating to marital status, number of children and/or economic resources?

- Finally, the information sought is **translated into questions**, along with response categories and instructions for future surveyors. This is the longest step and requires the most coming and going, rectifications, adjustments, etc.



## Brainstorming and other exercises

It is possible to identify the themes to include in the questionnaire during a collective workshop with target study group representatives.

Design and idea organisation methods can be used to stimulate and assist thinking. These methods include brainstorming, mind maps, etc. Begin with a specific subject, and evoke all possible related themes. Then prioritise themes according to study objectives and constraints.

## 2-2- Questionnaire length

For quantitative studies, the recommended average time that it should take to complete a questionnaire is between 30 minutes and 1 hour.

The number of questions must take this parameter into account (the more questions there are, the more time is required to complete... and analyse a questionnaire). Respondent competencies and context must also be taken into account. Indeed, conducting lengthy interviews is sometimes impossible.

<sup>147</sup> Handicap International. **An impact assessment of the armed violence reduction project in North Western Kenya**. 2015: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/AVRProjectKenyaRS\\_FP\\_15.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/AVRProjectKenyaRS_FP_15.pdf)

<sup>148</sup> See recommendation 6 of the Guidance Note **"Studies and research at Handicap International: Promoting ethical data management"**, relating to data use, p. 26.  
[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/EthicalDataManagementGN\\_04.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/EthicalDataManagementGN_04.pdf)



## Children and persons with disabilities, mind questionnaire length!

Young children and persons with intellectual or mental disabilities may have very volatile concentration and short attention spans. The number of questions must therefore be limited; so that surveyors can take all the necessary time to collect reliable data in the allotted time frame (this may require integrating breaks, repeating questions, using supporting media to facilitate the response process, etc.).

➡ See [Guideline Sheet 1](#): “Suggested approaches for interviewing persons with disabilities and children/youth”.

## 2-3- Question elaboration

Before you even begin:

- Find out what exists and what has already been done! Surveys have already been performed, and therefore tested, in a variety of sectors. Feel free to draw inspiration from other experiences<sup>149</sup>.
- However, keep a critical mind! The fact that questions have already been used does not make them good questions. So, feel free to modify and adapt questions to your context.

### 2-3-1- Question types

Three types of questions can be used in questionnaires. These types of questions are defined in terms of the degree of freedom given to respondents in answering.

For quantitative studies, open questions are strongly discouraged – in particular because they are very difficult to code and analyse later. It is therefore advisable to prefer closed or semi-structured questions in your questionnaire.

	Closed (closed-ended)	Semi-structured	Open (open-ended)
Principle	Pre-determined response categories, read out loud (and pre-coded).	Pre-determined and pre-coded response categories, not read out loud. The surveyor must check off responses based upon what the participant says.	No responses are suggested, neither to guide participants, nor to assist surveyors in recording responses.
Advantages	<ul style="list-style-type: none"> <li>• Possible pre-coding.</li> <li>• Easy to collect, code and analyse.</li> <li>• Easy to compare (through time and between populations).</li> </ul>	<ul style="list-style-type: none"> <li>• Respondent discourses are not closed in, and can flow freely.</li> <li>• Limits social desirability.</li> <li>• Possible pre-coding.</li> </ul>	<ul style="list-style-type: none"> <li>• Discussions are not influenced or closed in.</li> <li>• Enables confirmation of responses, clarification of thoughts.</li> <li>• Unexpected responses can surface.</li> </ul>

<sup>149</sup> International standards, previous studies carried out by Handicap International teams, or other organisations or associations.

			<ul style="list-style-type: none"> <li>• Limits social desirability.</li> </ul>
Major areas of caution	<ul style="list-style-type: none"> <li>• A limited choice of responses is provided: participants must select a response amongst those provided, and remain within the imposed framework. Such control of expression can be frustrating or discourage unusual responses.</li> <li>• Possible responses must be identified beforehand. This requires meticulous questionnaire design as well as excellent contextual knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• Greater cognitive effort on the part of participants to formulate responses, requiring more time.</li> <li>• The surveyor must be able to match what is said to the provided response categories. Therefore, response categories must be well prepared so that they are specific to both the study objective and cultural context.</li> </ul>	<ul style="list-style-type: none"> <li>• Greater cognitive effort on the part of participants to formulate responses, requiring more time.</li> <li>• “Word-for-word” response transcription is difficult.</li> <li>• Inter-surveyor variability in the way information is recorded (e.g. different spelling).</li> <li>• Difficult to code and analyse (or laborious standardisation required).</li> <li>• Higher data processing costs.</li> </ul>
Examples	<p>“Have you heard of the Convention on the Rights of Persons with Disabilities?”</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Does not wish to answer”</p>	<p>“In your opinion, what causes intellectual disabilities?”</p> <p><input type="checkbox"/> Traditional/Animism (evil spell, etc.)</p> <p><input type="checkbox"/> Religious/Divine will</p> <p><input type="checkbox"/> Medical (hereditary disease, accident)</p> <p><input type="checkbox"/> Other _____</p> <p><input type="checkbox"/> Unable to answer</p> <p><input type="checkbox"/> Does not wish to answer”</p>	<p>“What does the word disability mean to you?”</p>

### 2-3-2- Response category types

Response categories are a limited list of pre-determined categories that respondents select from to answer a question (for semi-structured or closed questions). There exist a number of types of response categories.

#### NUMERIC

- **Definition:** The response is a numeric evaluation, a figure
- **Example:** “How many children do you have? \_\_\_\_\_”
- **Comments:**
  - 1 answer is possible
  - Responses can be analysed in different ways. For example, an average can be calculated, or a new categorical variable created in order to aggregate a number of responses (e.g. creation of a second variable, based upon number of declared children: No child / Between 1 and 3 children / Between 4 and 6 children / Over 6 children).

## DATES

- **Definition:** The response is a date
- **Example:** “Date of survey?”
- **Comments:**
  - Be sure to define the required date format clearly (e.g. 21/01/2016 or dd/mm/yyyy).
  - For countries that do not systematically use the Gregorian calendar, specify the calendar which is to be used (e.g. Hijri calendar in some Muslim countries). However, try to use the Gregorian calendar wherever possible.
  - Prefer ages to dates of birth. They are easier to collect and limit entry errors.

## DICHOTOMOUS

- **Definition:** Two response options are provided to the respondent
- **Example:** “Did you go to school?”
  - ☐ Yes
  - ☐ No”
- **Comment:**
  - 1 answer is possible
  - Provide a third response option (e.g. “Does not wish to answer”)

## CATEGORICAL

- **Definition:** A series of ordered and mutually exclusive responses is proposed
- **Example:** “How old are you?”
  - ☐ Under 18 years of age
  - ☐ Between 19 and 35 years of age
  - ☐ Between 36 and 65 years of age
  - ☐ Over 65 years of age”
- **Comment:** Only one answer is possible

## MULTIPLE-CHOICE QUESTIONS, LISTS

- **Definition:** A finite number of response categories is given to the respondent  
These must be:
  - Exhaustive: i.e. covering all configurations, all options
  - Mutually exclusive, which means that they do not overlap
  - Homogeneous
  - Adapted to the question
  - Clear
  - Non-oriented
- **Example:** “In your opinion, possessing an arm is...”
  - ☐ A right
  - ☐ A need
  - ☐ A threat to the community
  - ☐ A symbol of power
  - ☐ Other
  - ☐ Does not know
  - ☐ Does not wish to answer”

- **Comments:**

- To capture responses that were not envisaged during questionnaire design, always remember to include an “Other” response category.
- Be attentive to the order of response options, as people may tend to always choose the first or the last option.
- Limit number of options. Indeed, too many options may confuse the respondent, who may not remember them all when responding. It is advisable not to exceed 6 responses for any one question.



This is particularly important for young children and persons with intellectual disabilities, as well as for people with low literacy levels.

- For multiple-choice questions, the respondent may give one or more responses, as defined during questionnaire design.
  - When a single response can be given, the response is what comes first to the respondent;
  - When multiple responses are permitted, the respondent will take more time to think, and certainly feel less pressure to respond. In this case, responses can be ranked, or simply checked off and not ranked. To facilitate subsequent data analysis, it is advisable not to exceed a maximum of 3 possible responses.

## ITEMISED RATING SCALES

- **Definition:** A finite number of ordered and mutually exclusive responses is provided.

Rating scales can be used to qualify different factors:

- Adherence level  
**Example:** “Strongly Agree, Agree, Neither agree nor disagree, Disagree, Strongly Disagree”
- Frequency  
**Example:** “Never, Rarely, Sometimes, Often”
- Assessment of an individual's perception or feelings  
**Example:** “Absolutely, Moderately, A little, Not at all”
- Degree of difficulty  
**Example:** “Very easily, Easily, Not very easily, Some difficulties, A lot of difficulties”
- Quality  
**Example:** “Excellent, Very Good, Good, Fair, Poor”  
**Example:** “Very positive, Somewhat positive, Very negative, Not effective at all”
- Satisfaction level  
**Example:** “Very satisfied, Satisfied, Not satisfied at all”  
**Example:** “Do you feel safe in the day, during your daily activities and when you move around?”
  - ☐ Extremely
  - ☐ Very
  - ☐ Moderately
  - ☐ Somewhat
  - ☐ Not at all”

- **Comments:**

- 1 answer is possible

- These questions can be useful for creating new synthetic quantitative variables: a numeric value is assigned to each response category, and a score is calculated for a set of questions.

**Example:** The Score of Perceived Outcomes (ScoPeO)<sup>150</sup>. The questionnaire is made of blocks of questions pertaining to a number of domains and (quality of life) dimensions. A score is provided for each quality of life dimension.

- With this kind of rating scale, there can be between 3 and 7 response categories. It is the required accuracy of results that determines the number of options provided.



For adults, up to 5 or 7 response categories can be provided. However, for young children, it is advisable to limit the number of response categories to 3.

- Such rating scales ask respondents to qualify and calibrate their responses in relation to notions of time, space, judgement, etc. In order to ensure the reliability of collected data, it may be necessary, before the interview, to assess how these notions are understood, as well as the level of discrimination between categories (e.g. what is understood by the response “sometimes” may vary from one individual to another).



This is particularly important for young children and persons with intellectual disabilities, as well as for people with low literacy levels.

## NUMERIC RATING SCALES

- **Definition:** The respondent is asked to select a numeric response situated between two extreme values in order to rate their perception, opinion
- **Example:** “On a scale of 1 to 10, how would you rate your health today?  
\_\_1\_\_: \_\_2\_\_: \_\_3\_\_: \_\_4\_\_: \_\_5\_\_: \_\_6\_\_: \_\_7\_\_: \_\_8\_\_: \_\_9\_\_: \_\_10\_\_”
- **Comments:**
  - 1 single answer is possible
  - An average may be calculated for the sample

## ADJECTIVE RATING SCALES

- **Definition:** The respondent is asked to give a self-evaluation by selecting an adjective between two extremes (related to an emotion, an attitude).
- **Example:** If I had to respect speed limits when driving in urban areas over the next three months, it would be...  
Dangerous \_\_1\_\_: \_\_2\_\_: \_\_3\_\_: \_\_4\_\_: \_\_5\_\_: Beneficial  
Unpleasant \_\_1\_\_: \_\_2\_\_: \_\_3\_\_: \_\_4\_\_: \_\_5\_\_: Pleasant
- **Comments:**
  - 1 single answer is possible
  - An average may be calculated for the sample between the extremes provided.

<sup>150</sup> For further information: <http://www.hiproweb.org/en/home/projects-management-and-quality/quality-of-life-scopeo.html>



## Please note

Remember to include the two categories “Does not wish to answer” and “Unable to answer”, which may turn out to become informative data during analysis. Indeed, if a large proportion of the sample refuses or is unable to respond to a question, this may indicate that the question is not adapted to the context, touches upon something that is too sensitive/taboo or that it is simply poorly worded or poorly understood.



## Adapting response categories to specific target population needs

Sometimes, and particularly in the case of rating scales, colours, images or other visual supporting media are necessary in order to ensure that the concepts conveyed by the questions and response categories are understood, and/or to help respondents respond.



See [Guideline Sheet 3](#) - “Supporting media for child and disability friendly studies”.



Such adaptations can be discussed with target group representatives in order to define and test the most relevant and effective methods.

## 2-3-3- Question wording

As a general rule, the expert’s initial question is not the question that respondents will end up being asked. The expert identifies required data, and must then find the wording that captures this data and makes sense to respondents.

This is why it is advisable to:

- Keep to a single idea per question, and not merge questions (e.g. if trying to limit the number of questions)
- Use simple, easily understandable words, and avoid technical terms and abbreviations
- Ensure words have a unique meaning and will not lead to confusion
- Use simple sentence structures and avoid double negative questions (“Isn’t it true, don’t you think...”)?
- Prefer short sentences
- Think about the oral form of the questions: questions are above all designed to be spoken.  
**Example:** “How often do you buy...” is easier to understand than “What is the frequency with which you purchase...”

There is no point in asking questions to which no reliable response will be given:

- Either because questions are overly oriented. Examples: “What do you think of people who insult the disabled in the street?”; “Most women consume folic acid during pregnancy for the good of their baby, do you?”
- Or because questions are inadapted to cultural context (considered confidential, too intimate or outright taboo). **Examples:** “What is the number of heads in your herd?”; “Have you ever had sex with a partner of the same sex?”.



## Neutral vocabulary

In order not to orient responses and to preserve a gender and disability sensitive approach, it is essential to use neutral vocabulary, both for questions and for response categories.

### Examples:

- Terms used must not orient towards one or other sex,
- Avoid derogatory terms or terms that could undermine a person's dignity<sup>151</sup>.

Wording generally follows the interrogative form, but feel free to use the affirmative form also, particularly for self-administered questionnaires<sup>152</sup>:

**Example:** "I feel that my opinion is sufficiently taken into account in decisions concerning me (choice of spouse, education, etc.):

- ☐ Strongly agree
- ☐ Agree
- ☐ Neither agree nor disagree
- ☐ Disagree
- ☐ Strongly disagree."

Questions must be precise: feel free to provide a time scale in order to simplify responses and analysis ("In the last 6 months, how many times...").



## Peer-reviewed wording

Questions and response categories can be shared with target population peers, who may work on improving and adapting them. Indeed, who better than a teenager to help you formulate questions for teenagers relating to issues such as relationships (social or romantic)?

## 2-4- Surveyor instructions

Instructions simplify the unfolding of the interview and ensure standardised questionnaire completion procedures between individuals.

### Some instruction examples:

- If the person is not concerned by the question, check off "non-applicable"
- Do not read options, let the person speak and circle the most appropriate response – maximum 3 responses
- Remember to indicate response order from 1 to 3
- Read all options except "Does not know" and "Does not wish to answer"

<sup>151</sup> Sometimes, it is difficult to avoid colloquial terms if one wants to be understood by respondents. The term *Pikaan* (the "broken") in Laos is an example. Surveyors may be authorised to use such words. However, it is essential that, during their training, they learn to understand the meaning and measure the weight of such expressions.

<sup>152</sup> Questionnaires are sent to participants, who complete them alone, without the help of a surveyor.



- A single answer is possible
- Do not ask the question: observe and complete (e.g. gender M/F).

#### Some practical tips:

- Surveyor instructions must be presented differently than the questions for respondents, and these different presentations must be standardised (so that it is obvious to surveyors when comments concern them)
- Short, clear sentences
- Only keep essential instructions.

## 2-5- Questionnaire presentation

The questionnaire is the tool that will be manipulated by the surveyor in order to collect data. Therefore, questionnaires must be:

- Clear: the font must be large enough.
- Convenient to manipulate: questions and their response categories must always fit on the same page together (and not spill over onto the next page).
- Easy to follow and use: instructions and questions must be well differentiated. When there is conditional branching logic between questions – e.g. with conditional questions starting with “if so...” - the next question to ask is easy to find (or skip to), wherever it is in the questionnaire.
- Easy to complete: response categories are presented vertically, with cells to check off. Enough space is provided to fill in answers (e.g. especially when the “Other” option is included).

A questionnaire is composed of several elements:

- An informative section on practical survey conditions (date, location, surveyor, duration, etc.).
- A socio-demographic data section, containing at the very least information on sex, age and disability<sup>153</sup>. This section can be placed at the beginning of the questionnaire (to break the ice during the first minutes of the interview) or at the end (to finish with easier questions when respondents begin to tire).
- A section containing the body of questions itself (including questions, response categories and surveyor instructions).

A questionnaire also contains transitions from one theme to another. Transitions facilitate the introduction of new subjects, break the monotony of long interviews and accompany the respondent during the interview.

A questionnaire template (for hard copy questionnaires) is provided in this practical guide’s Toolbox.

 See [Tool 7](#) – “Quantitative questionnaire template”.

<sup>153</sup> Use of the Washington Group’s Short Set of Questions on Disability (6 questions) is recommended: <http://www.hiproweb.org/en/home/knowledge-management/research-and-technical-studies/washington-group-and-disability-related-data.html>

Finally, one must also consider the order of the questions. Indeed, the responses to a specific question or series of questions on a theme may influence following questions (this is referred to as the halo effect). This can occur because an initial question provokes a feeling (irritation, blues, etc.), which contaminates following questions, or because an initial response elicits a certain response logic in the respondent. In such cases, it is advisable to ask more general questions before asking more specific questions.

**Example:** A person having identified him(her)self as a practising Catholic in an initial question will tend to report regular attendance to mass in another related question, even if this is untrue.

The same care must be applied when questions relative to sensitive issues are included in the questionnaire. One must be mindful to introduce sensitive questions with caution and also that preceding questions not overly influence responses.



### Software/ application use

Software/ applications<sup>154</sup> can facilitate questionnaire elaboration via intuitive design. These alternatives also simplify data entry<sup>155</sup>, and enable paper questionnaires to be avoided altogether when data collection is digital. Surveyors enter responses directly onto telephones or tablets during interviews, and data is directly transmitted and entered into a centralised database server.

However, use of digital data collection also requires that questionnaire structure be re-designed and that a number of issues be anticipated. These issues include: definition of boundaries (e.g. minimum and maximum values) and warning messages, mandatory or optional nature of questions, and manoeuvring within the questionnaire (going back to earlier questions, etc.).

## 3- Data collection mode selection

There are several possible data collection modes:

- Direct collection during individual face-to-face interviews
- Direct collection during individual interviews over the telephone (or other media, such as Skype)
- Collection via self-administered questionnaire: respondents receive the questionnaire (by post or internet) and respond to the questionnaire alone.

It is highly advisable to select direct, face-to-face interviews. This option is more expensive in terms of budget and human resources. However, it limits survey non-participation rates, as well as the number of missing responses. Direct, face-to-face interview collection also contributes to collected data quality, as the surveyor can ensure that questions are understood, use visual supporting media if necessary, accompany the respondent during the interview, etc.

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<sup>154</sup> Software/Applications such as iData, Epi-info, Sphinx, etc.

<sup>155</sup> For further information on this subject, consult section "[Processing quantitative data](#)".



## One-to-one or accompanied interviews?

In some cases, especially for young children or persons with language disorders, the presence of a close individual (parent, representative, teacher, etc.) may be desired.

It is essential to clarify the expected role of such individuals when designing the questionnaire: must they respond for the individual? And, depending upon the questions, does this even make sense? For example, for the ScoPeO tool, which is based upon an individual's subjective assessment of various dimensions of their quality of life (such as Subjective Well-Being), it is difficult to imagine a third party speaking for the individual. The same applies to attitude-related issues, especially intimate issues, such as sexuality. In the same sample, if certain respondents answered directly and others answered through a third party, it is advisable to analyse results separately.

## 4- Questionnaire translation

Tools are usually developed in Handicap International's official languages (French and English). They therefore need to be translated into the local language(s).

The translation process is essential. Indeed, the meaning given to each word and each question must be respected in order to ensure the use of appropriate terminology and to avoid surveyors improvising at the time of data collection.

Several translation methods exist, however it is advisable to use the back-translation technique. This method mobilises two bilingual individuals. One individual translates the tool from French (or English) into the local language. The second individual then back-translates the translated version of the tool into French (or English). The original and back-translated version are then compared and discussed.

When languages are mainly spoken, a special training session must be included during which translation is addressed with surveyors, and a glossary of key words is established in order to ensure standardisation of the terms used in the field.

## 5- Testing the questionnaire

Just like any data collection tool, the questionnaire must be tested before being deployed in the field.

### 5-1- Why test the questionnaire?

Answering a questionnaire is a complex cognitive process, involving several steps:

- The person must agree to answer, and therefore must understand and adhere to the study.
- Once a question is formulated by the surveyor, the respondent must seek the answer in their memory.
- The respondent must decide how to answer (tell the truth, respect social norms, adapt their response to their perception of the surveyor's expectations, etc.).

- Once mentally selected, the response must be formulated and shared/communicated in a way that is adjusted to fit the response categories provided.

Therefore, answering questions is not that trivial. This is why it is advisable to pre-test the questionnaire in real-life conditions in order to assess respondent difficulties.

## 5-2- What must be tested?

Each individual question, and the questionnaire as a whole, must be reviewed.

Different criteria may be considered:

- Generally speaking:
  - **Relevance:** Are all questions relevant and related to the issue?
  - **Structure:** Is question sequencing logical? Are there repetitions? Do certain sections influence other sections?
  - **Correspondence between questions and response categories:** Do response categories correspond to questions? Is the selection of responses provided relevant?
  - **Length:** Is the questionnaire too long?
- As far as respondents are concerned:
  - **Clarity:** Are the questions clear and understandable for the target population? Were there many non-responses during the test? Or “Does not know” responses? Must some wordings be adapted? Might supporting media facilitate comprehension?
  - **Cultural sensitivity:** Are certain questions inadapted to the context? Did women answer certain questions less during the test?
  - **Scope of questions:** Are certain issues too sensitive to ensure reliable responses? Should wording be reworked?
  - **Knowledge, memory:** Is the respondent able to respond to the question? Is the respondent likely to not have the information?
- As far as surveyors are concerned:
  - **Reading:** Is the questionnaire fluid to read? Did surveyors have difficulty reading the questions in a uniform way?
  - **Instructions:** Did the surveyors experience difficulties in understanding instructions, using transitions or using the other explanations addressed to them? Are instructions too complicated?
  - **Translation:** Are there any translation issues to be aware of? Sensitive, vague or polysemous (with multiple meanings) words?

### A question example and counter-example:

- Proposed question and response categories:  
 “Is your child behaving strangely?”  
☐ Yes  
☐ No”

Comment: The expression “behaving strangely” is difficult to understand for the respondent: What does the term “strangely” mean? At what point can we begin to say that behaviour is strange? Where each respondent places the cursor is up to him or her.

- Suggestion:
    - “Compared to children of the same age, does your child have difficulty controlling his behaviour and emotions?
    - ☐ No difficulties
    - ☐ Some difficulties
    - ☐ A lot of difficulties
    - ☐ Cannot do at all”
- During surveyor training, this question will need to be addressed in-depth, so that surveyors understand what information this question is seeking.

### 5-3- How to test the questionnaire?

In order to verify all the criteria given above, a straightforward and very easy way of testing the designed questionnaire is to read it out loud. Also, feel free initially to test it and discuss it with those around you, as soon as you begin to work on the questionnaire design.

Once the first version of the questionnaire is stabilised, you must perform a pilot test in real-life conditions. This pilot test can be performed on a small sample (20 to 30 people), with similar characteristics to the target population. This pilot test must be integrated into the study’s timeline.

There are several possible (and complementary) techniques for testing a questionnaire:

- Organise a debriefing session with the surveyor team in order to collect the team's impressions;
- Ask respondents subsidiary questions at the end of the interview, in order to identify any misunderstandings or difficulties experienced;
- Involve an observer in the interview, to observe reactions, facial expressions and/or body language, emotions during the interview;
- Integrate probe questions<sup>156</sup> into the original questionnaire in order to cross-tabulate responses and verify their reliability.

**Example:** Probe questions were used during development of the UNICEF/Washington Group Module on Child Functioning and Disability questions to identify children with disabilities in the general population<sup>157</sup>. In order to check that the question “Does your child have difficulty with selfcare, for example such as feeding or dressing him/herself?” was being properly understood, the following question was included in the questionnaire during the test phase: “If so, what kind of difficulty are you referring to:

- ☐ Willingness to eat
- ☐ Choice of clothing
- ☐ Needs repeated reminders
- ☐ Physical ability to eat
- ☐ Physical ability to dress
- ☐ Other difficulty of concern.”

<sup>156</sup> Probe questions are a way to test that a participant has correctly understood the intended meaning of a question and is responding reliably. By cross-tabulating data, probe questions enable question comprehension and adequacy of proposed responses to be verified.

<sup>157</sup> [https://www.cdc.gov/nchs/data/washington\\_group/meeting14/wg14\\_session4\\_2\\_loeb\\_module.pdf](https://www.cdc.gov/nchs/data/washington_group/meeting14/wg14_session4_2_loeb_module.pdf)

Questionnaire testing is also an opportunity to develop surveyor awareness of data collection modalities and train surveyors to use the questionnaire.

### **Key points to remember**

- The questionnaire ensures data collection in identical conditions with all individuals.
- Data entry modalities and expected analyses types must be considered right from the outset of the questionnaire design phase.
- The questionnaire must not take more than an hour.
- Be attentive to wording and order of the questions.
- Be attentive to question and response category translation, particularly in the case of frequency, intensity or satisfaction rating scales.
- Be mindful of question and response category accessibility.
- The questionnaire must be tested in real-life conditions.

### **At the end of this step you have...**

- ➔ Developed a questionnaire, which has been translated and tested, and is therefore ready for use.

### **Now we suggest that you...**

- ➔ Navigate within the guide based on your needs.

#### **To learn how to develop a quantitative methodology:**

- ➔ Consult "[Conducting a quantitative interview](#)"
- ➔ Consult "[Processing quantitative data](#)"
- ➔ Consult "[Analysing quantitative data](#)"

#### **To compare these techniques with the qualitative approach:**

- ➔ Consult "[Developing a qualitative interview guide](#)"

## C- Conducting a quantitative interview

At this stage, you have:

- Identified the profiles of the individuals targeted by the interviews and the ways in which to access these people
- Developed and tested a questionnaire and associated visual supporting media (if applicable).

It is advisable to perform quantitative interviews face-to-face (in order to collect more reliable data), and to avoid interventions from third parties during the interview (in particular, to respect respondent privacy and ensure exchange confidentiality).

The quantitative approach requires standardisation. Indeed, surveyors are the key players in data collection, and identical methodology reproduction from one individual to another is in their hands.

### 1- Quantitative survey interview phases

Quantitative survey interviews can be broken down into three key phases:

- Phase 1: Survey interview preparation
- Phase 2: Survey interview performance and capture of participant responses
- Phase 3: Interview finalisation

#### 1-1- Phase 1: Survey interview preparation

Depending upon the case, survey interview preparation involves:

##### Organisational aspects:

- Obtaining the authorisation(s) necessary to access the population in complete safety,
- Identifying the location for the interviews (people's homes<sup>158</sup>, dedicated room or service reception area<sup>159</sup>, Handicap International office or partner office, etc.)
- In certain cases, making appointments with previously identified participants<sup>160</sup>.

##### Logistical aspects:

- Organising the required field equipment. For quantitative studies, this includes, in particular:
  - printing paper questionnaires, or, in the case of digital data collection, tablet preparation

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<sup>158</sup> This option preserves intimacy during interviews, but incurs significant additional costs, especially in terms of surveyor travel.

<sup>159</sup> This alternative is more economical (less surveyor travel, fewer difficulties in recruiting participants), but does not guarantee a confidential area in which to perform the interviews.

<sup>160</sup> You will find further information on making appointments in the chapter "Managing qualitative data", in the section "[Conducting individual and collective interviews](#)".

- surveyor equipment (pens, field notebooks, batteries for tablets, as well as T-shirts, caps, etc.).
- Planning surveyor team travel (distribution of teams, field roadmap, provision of a vehicle – car, motorcycle, etc.).

## 1-2- Phase 2: Survey interview performance and capture of participant responses

**Quantitative survey interviews** include three sequences:

### The introduction

The introduction consists of several elements:

- The surveyor must begin by establishing an initial connection, in order to convince the person to participate in the interview. This first contact is essential, so avoid adopting an apologetic attitude and expressions such as “Are you too busy to [...]?” With this type of attitude, you run the risk of meeting categorical refusal before any exchange even begins. Choose more positive approaches: “I would like to ask you a few questions” or “I would like to talk with you a few moments”.
- The surveyor must then inform the respondent about the investigation’s objectives, why the respondent was chosen, what is expected from their participation and the duration of the interview. It is important to give people a sense of meaning so that they adhere.
- The surveyor must also specify the ethical provisions<sup>161</sup>, such as: data collected is confidential and anonymity will be respected, the respondent may stop the interview at any time and may choose not to answer certain questions<sup>162</sup>. This step is essential in order to obtain the person’s free and informed consent to participate in the study<sup>163</sup>.
- Finally, surveyor and respondent agree to begin the interview.



### Third party consent

In certain situations and contexts, a third party (legal guardian, family member, etc.) may be approached to obtain an individual's participation:

- For reasons of social conventions: in certain cultures, the husband’s or male “guardian”’s permission is required in order to be able to approach a woman;
- For reasons of age: to enable participation of children and adolescents, one must consult the person who is responsible for the child (immediate family, legal representative or other familiar third party or close relative). In this instance, it is advisable to find out what the

<sup>161</sup> For further information on how to obtain informed consent, you can refer to the guidance note on ethics: “**Studies and research at Handicap International: Promoting ethical data management**”, Recommendation 3, p. 19. [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/EthicalDataManagementGN\\_04.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/EthicalDataManagementGN_04.pdf)

<sup>162</sup> In the case of project-related studies, it must also be emphasised that refusal to participate has no consequence upon access to aid.

<sup>163</sup> Consent is integrated into the quantitative questionnaire template provided in this guide’s “Toolbox” ([Tool 7](#)). You will also find in this guide, two examples of sample consent forms for adults ([Tool 4](#)) and children ([Tool 5](#)).



customary attainment of adulthood age is (e.g. in some contexts, individuals are considered adults, and therefore responsible, from 15-16 years of age);

- For reasons of limited comprehension abilities related to a disability: this is for example the case of persons with severe intellectual, mental or psycho-social disabilities (e.g. in a phase of psychosis or in traumatic shock).

In all the above cases, even though the final decision belongs to a third party, it is necessary to inform the directly concerned person (child, disabled person, etc.) regarding data collection issues and objectives, and to obtain their consent.

**The interview itself** (performed according to the guidance provided in the following section).

The surveyor is the intermediary who accurately captures and enters participant responses into the questionnaire template. Quantitative interviews are not audio-recorded; therefore the questionnaires completed by teams in the field are the only trace of the exchange that took place.

Moreover, in some cases, the surveyor will need to transcribe responses from one language to another (especially in the case of non-written local languages). This will require even greater caution and rigour in the capture of exchanges.

### **Closure**

Closure allows the exchanges to come to an end, and the person to be thanked for their participation. When relevant, the surveyor also provides information on the planned restitution of results.

## **1-3- Phase 3: Survey interview finalisation**

At the end of an interview, it is essential to take about ten minutes to:

- Check that all questions have been asked and that no responses are missing;
- Complete the questionnaire with any additional important information (e.g. time at which interview ended);
- Record general comments or impressions, if necessary.

## **2- Advice for conducting quantitative interviews**

Much of the following advice resembles that given in the chapter on the qualitative approach. Indeed, certain postures and attitudes are similar, as in both cases an exchange takes place between two people. However, there are also some specificities in each case.

### **2-1- Show respect and adapt your attitude to the participant**

In an interview, it is advisable to remove barriers and not create new ones. For example, telephones must be turned off. The way one presents oneself has a significant impact upon the unfolding of the interview. Signs of belonging to a community may serve as much as dis-serve the interview. Indeed, a

sense of common identity may facilitate exchanges or heighten animosities. It is also essential to be flexible and adapt to the surveyed person's profile, and in particular to their social status, age and/or gender.



### **Gender, age or disability sensitivity**

Gender, age and/or disability sensitivity is also demonstrated by the surveyor's attitude and behaviour.

- Gender sensitive example: in some cultures, it is preferable to leave the door open when a man interviews a woman;
- Age sensitive example: if the interviewee is a child, the surveyor must adjust their height accordingly, and stay next to the child;
- Disability sensitive example: if the interviewee is visually impaired or blind, when the surveyor moves or changes place, the surveyor must tell the interviewee.

## **2-2- Speak clearly**

During questionnaire development, questions and response categories were designed to be simple, coherent and understandable. Surveyors must ensure that they articulate and speak clearly. A surveyor must not keep their nose stuck in the questionnaire (or on the screen, when using telephones or tablets). An interview is an interaction, and the surveyor must be sufficiently familiar and comfortable with the data collection tool to be able to take some distance from it, and look at the interviewee when asking questions.



### **Gender, age or disability sensitivity**

In the case of deaf persons or persons with hearing-impairments, it is essential to speak clearly and look at the person while speaking, so that they may read the surveyor's lips.

In order to promote question comprehension and to facilitate exchanges with the respondent, it is advisable to use visual supporting media or objects.



See [Guideline Sheet 3](#): “Supporting media for child and disability friendly studies”.

## **2-3- Adopt a calm, caring but neutral attitude**

The surveyor must adopt a respectful, courteous and friendly attitude throughout the interview, in order to put the participant at ease. This can be expressed physically, when one listens with one's whole body, by nodding to encourage the person to express themselves, etc.

However, such encouragements must remain neutral, and must never steer the respondent. The respondent must not guess (or even believe that it is possible to guess) the surveyor's position,

opinion. This involves paying constant attention to the prompts used, and to gestures or other non-verbal reactions, which can betray the surveyor's position and influence the interviewee.



### **The issue of participant compensation**

Survey participants, whatever the type of survey, are not compensated financially for their participation. Sharing one's opinion, subjective experience, and life events remains an entirely voluntary process, in order to avoid interviewee "professionalization". However, participation in the study must cost nothing to the participant, except for the time shared. Travel costs are usually refunded, and a snack offered.

## **2-4- Respect the participant's rhythm and responses**

Some questions may require time for thought. Therefore, respondents must be given time to organise their thoughts and express their responses (especially in the case of ranked multiple-choice questions). Pressing respondents, or interrupting them, can be a source of stress and undermine their confidence or modify their behaviour.



### **Gender, age or disability sensitivity**

Pauses are essential to avoid tiring participants. They therefore contribute to collected data reliability, especially in the case of children or persons with intellectual difficulties. Feel free to take a break and discuss a lighter topic for a few minutes, or to suggest a game or other distraction to clear everyone's mind. However, remember to integrate these pauses when estimating the length of interviews!

There should be no doubt in the surveyor's mind when an answer is checked off. Feel free to ask for clarifications if something is not clear, or to encourage the participant to give examples to shed light on a situation. The surveyor must never project responses or make extrapolations based upon what is observed. The surveyor must capture the participant's response as is, and, if possible, report in the margin any inconsistencies between what was observed and what was shared by the respondent. The surveyor must then refer the matter to the supervisor, who will decide how best to proceed.



### **Example: The Washington Group's Short Set of Questions on Disability<sup>164</sup>**

Six questions enable the identification of persons with disabilities in the general population. These questions are formulated as follows "Because of a health problem, do you have difficulty walking or climbing steps?" The respondent specifies the degree of difficulty encountered in the execution of the activities, according to their own perception. However, sometimes reality can seem different

<sup>164</sup> For further information about this tool, consult SkillWeb: <http://www.hiproweb.org/en/home/knowledge-management/research-and-technical-studies/washington-group-and-disability-related-data.html>

from what a person says: a respondent who is missing a leg might, for example, respond that moving about is not difficult. The surveyor must in this case record the answer given, even if it seems obvious that the person is experiencing difficulties.

## 2-5- Respect the survey and its modalities

A quantitative survey requires the reproduction of identical words, identical gestures and identical conditions for all respondents, in order to ensure comparability of collected data. Therefore, no improvisation is tolerated on the part of the surveyors, in either question or response category wording, order of questions or questionnaire translation. Furthermore, surveyors must capture a response for all the questions. Surveyors must be familiar with the questionnaire instructions, and apply them for each interview conducted.



### Working with familiar third parties or close relatives when interviewees have intellectual difficulties

The presence of a familiar third party or close relative during the interview may be desirable and/or desired. A few pieces of advice<sup>165</sup>:

- At the beginning of the interview, check that the familiar third party or close relative knows the accompanied person well.
- Then explain their role during the interview to them. Example: “I would like you to sit in front of me, next to Fatma. Your role is to tell me what Fatma is expressing. If you do not know, or do not understand, do not try to interpret. Just tell me that you don't know. I will ask Fatma the questions, and wait to let her answer. It is important to give Fatma the time she needs to answer. A smile, an attitude can be helpful for me. I will look at you when I need your interpretation. I will look at Fatma while you speak to me, so that I can also see her reactions.”
- Be attentive that the person is truly speaking for Fatma (“Fatma likes...”), and not from their own projections onto Fatma (“I think Fatma should...”).

## 2-6- Remain alert and agile

Do not forget that an interview is declarative in nature. Indeed, the interview is an invisible negotiation, within which an appropriate equilibrium must be reached between each party's expectations: the expectations of the surveyor, who wishes to collect data and the expectations of the respondent, who may have different expectations (social desirability, fear of getting into trouble, exaggeration in the hope of assistance, etc.) and adapt responses accordingly.

<sup>165</sup> D'Eath M and the National Federation Research Sub-Committee Members. **Guidelines for Researchers when Interviewing People with an Intellectual Disability**. 2005:  
[http://www.fedvol.ie/\\_fileupload/File/Interviewing%20Guidelines\(1\).pdf](http://www.fedvol.ie/_fileupload/File/Interviewing%20Guidelines(1).pdf)

## Some examples of situations that might seem difficult to handle

**People invite themselves to the interview:** The surveyor must remain courteous with everybody, and remind the uninvited guest(s) that their presence is not beneficial, as the interview must be conducted one-to-one with the respondent in order to ensure response confidentiality. If necessary, take time (with the respondent's agreement) to restate the study's objectives.

**The participant asks for Handicap International's help:** The surveyor must re-explain that participation is voluntary and that no aid is promised in return. Depending upon projects and future activities, the above statement may be completed.

**The interview proves non-productive,** i.e. the respondent responds to questions mechanically, only responds to a few of the questions, does not seem to be giving any thought to their responses or have any interest in the exchange: The surveyor may pause to understand what is going on. If the situation persists, one must not hesitate to end the interview as soon as possible, in a way that respects propriety.

**The respondent requests feedback on the survey results:** This question must be discussed prior to commencing the interviews, and interviewers must be briefed in this regard during their training, so that they are able to respond to such requests. For ethical reasons, a contact person must be identified from the outset, and their contact details communicated to participants so that participants may make a complaint if they wish to.

**The surveyor feels uncomfortable or senses danger:** The interview must be stopped: priority must always be given to everybody's safety!

## Digital data collection in sensitive contexts

In contexts that are difficult on a security or political level, digital data collection can preserve collected data confidentiality, as well as the safety of field teams. This is made possible, in particular, by the deletion of collected data from the devices (tablets, telephones) immediately after transmission.

**Example:** A study conducted in Libya. Military controls were performed repeatedly by militia on field teams. It was therefore necessary to ensure team and data safety as soon as interviews were over. However, the use of digital technologies must be considered on a context-by-context basis. The use of GPS or other electronic equipment may be forbidden (e.g. Shebab zone in Somalia).

### 3- Resources required for implementation

#### 3-1- Time devoted to data collection

Time, human resources and budget are closely intertwined. For example, data collection duration will depend upon the number of surveyors in the field, which itself is conditioned by the budget available for the study.

Using the parameters that are known at the outset<sup>166</sup>, the following table can enable a rapid assessment of needs.

**Initial hypothesis:** An effective 8-hour working day (lunch not included), of which 2 to 3 hours are devoted to travel, to finding people to survey on site and to reviewing questionnaires as part of quality control.

What	Quantification
Total number of people to interview	360 people <sup>167</sup>
Estimated duration of individual interviews	45 min
Number of people interviewed per day per surveyor	6 people
Number of surveyors	10 surveyors
Number of people interviewed per day per zone	60 people
Total time in the field	6 days

**Example:** Based upon the estimated time required per interview, and the time available for data collection, one can calculate how many interviews must be conducted per day and therefore the number of surveyors required. In the example presented above, as interviews last 45 minutes, it is estimated that each surveyor can meet with 6 people per day. As the chosen sample size is 360 people, it is then possible to deduce that 10 surveyors will be needed for a collection period of 6 days.



#### Please note!

When estimating interview duration, remember to add a few extra minutes for customary presentations at the beginning of the interview. These presentations can be shorter or longer depending upon the cultural contexts.

<sup>166</sup> Parameters that are known from the start will vary from one study to another. Indeed, collection time may be pre-determined, thereby defining the number of surveyors required to meet the individuals in the study sample. Or, the maximum number of surveyors may be pre-defined (by the budget), and collection time adjusted accordingly.

<sup>167</sup> Fictitious values.

## 3-2- Human Resources: profiles, responsibilities and competencies

### 3-2-1- Profiles and responsibilities

During the data collection phase, two different profile types are mobilised: surveyors and supervisors.

**The surveyor/interviewer** is the person responsible for data collection during an interview, in accordance with the developed questionnaire.

Surveyor/interviewer profiles	
Social skills	<ul style="list-style-type: none"><li>• Able to establish personal contact with diverse individuals in a short time</li><li>• Able to adapt to a variety of investigation contexts</li><li>• Depth and breadth of communication skills (active listening, adaptation to a diversity of profiles)</li><li>• Accustomed to communicating with persons with different types of disabilities</li><li>• Dynamic, responsive, curious, motivated</li></ul>
Technical competencies	<ul style="list-style-type: none"><li>• Trained in quantitative interview methods</li></ul>
Other recommended competencies	<ul style="list-style-type: none"><li>• Excellent knowledge of local culture</li><li>• Speaks the language and is familiar with vernacular</li><li>• Appropriate profile for the cultural context (gender, ethnicity, etc.)</li></ul>
Responsibilities	
Main activities performed during the study	<ul style="list-style-type: none"><li>• Participation in surveyor training</li><li>• Data collection in compliance with interview execution rules</li><li>• Daily verification of questionnaires</li><li>• Submission of completed questionnaires to the study's focal point</li><li>• Participation in debriefing sessions with the study manager/consultant</li></ul>

A number of surveyors are generally recruited for a quantitative study. They are organised into teams and placed under the responsibility of one or several **supervisors**. Supervisors may collect data, but are also in charge of team management, sampling composition, monitoring and data collection quality control (by gathering their team's questionnaires each day, and participating in daily questionnaire review, attending a random number of interviews to verify their execution, and reporting to the study manager on problems encountered in the field)<sup>168</sup>.

Surveyors and supervisors can be recruited specifically for the study, or be identified among Handicap International field teams. In the second case, it must be ensured that there is no conflict of interest between surveyors and respondents, as this would be a source of bias. In particular, for impact evaluation endlines, it is advisable to recruit external surveyors or to swap teams between two intervention areas. This must be planned from the outset of the design stage, in order to earmark the necessary budgets.

<sup>168</sup> You will find further information on study quality control in [Guideline Sheet 5](#): "Ensuring data management process quality A few practical example".



## Peers as co-interviewers

Teenagers or persons with disabilities may participate in the interviews and ask questions directly. Specifically trained for this exercise, they work in pairs, with a supervisor, who accompanies them. They may, for example, write down responses.



## Gender and disability sensitive surveyor recruitment

Put together a mixed and balanced team of surveyors (in gender and/or disability terms), and create working conditions that are supportive for everyone (training, work schedules, expected results, etc.). Diversity will stimulate exchanges between the recruited professionals and strengthen data collection team cohesion. Ultimately, collected data will be all the higher quality for it!

### 3-2-2- Competencies: surveyor/supervisor training

It cannot be over-emphasised: surveyor/supervisor training is key to ensuring reliable and ethical data collection. This step must therefore always be integrated into the timeline, and into the budget defined during the study planning process, and which includes the resources required for implementation.

Surveyor/supervisor training must include sessions that aim to<sup>169</sup>:

- Present the study and its context.
- Explain the data collection techniques that apply to quantitative interviews.
- Explain the questionnaire, the response categories and surveyor instructions.
- Present the translated version of the questionnaire.
- Use the questionnaire in practical, hands-on workshops. For example, through role-playing in pairs: one person taking on the role of the surveyor and another creating a character (e.g. a young, blind, stay-at-home mother) in order to simulate an interview.
- If applicable, understand how to use and manipulate digital data collection tool(s) (such as iData).

In addition, surveyor/supervisor training must include sessions that aim to:

- Teach teams about gender, age or disability sensitive approaches (attitudes and data collection techniques).
- Collectively work on the survey's presentation and the process of obtaining consent. Surveyors exchange ideas, and, based upon their suggestions, a uniform, practical and culturally adapted presentation of the questionnaires and consent forms is obtained.
- Inform trainees about the ethical mechanisms in place (e.g. referral process).
- Address the management of difficult situations.
- Explain individual selection modalities (surveyors are often responsible for sample constitution in the field).

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<sup>169</sup> A lesson plan and a curriculum for surveyor training were developed as part of the ScoPeO tool, which is a tool that enables quantitative measurement of the quality of life of adult project beneficiaries. Certain modules will need to be adjusted, but you will find them useful. Available on SkillWeb:

<http://www.hiproweb.org/en/home/projects-management-and-quality/quality-of-life-scopeo.html>



- Explain surveyor role in the study process and specify expectations (number of people to meet daily, quality control, etc.).
- Present other organisational and logistical aspects (organisation of a day, time of departure, etc.).



### **Involving target groups in surveyor training**

During the training, a number of activities can be performed with the assistance of target population representatives.

Some examples:

- The support of the target population helps trainees more easily find the right words, argumentation and attitude with which to present a study and to persuade individuals to take the time to answer surveyor questions.
- During their training, surveyors are encouraged to use and manipulate the questionnaire during the exercises. In order to make role-playing more credible, it is possible to work with disabled people's organisations (or other civil society organisations), and to invite target group representatives to participate in the workshop. Surveyors then find themselves in a real-life interview situation, face-to-face with individuals who can play their own role.



### Key points to remember

- Constructive attitudes and practices that contribute to quality interviews include: respect for individuals and their rhythms, clear elocution, caring, faithful reporting of responses and agility.
- Make sure you have allowed sufficient time with each participant to cover the entire questionnaire and to check that it is completely filled out.
- Surveyor training is essential to ensure quality data collection.



### At the end of this step you have...

- ➔ Collected quantitative data using the developed questionnaire, and in accordance with the individual selection methodology described in the protocol.



### Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

#### To learn how to develop a quantitative methodology:

- ➔ Consult "[Processing quantitative data](#)"
- ➔ Consult "[Analysing quantitative data](#)"

#### To compare these techniques with the qualitative approach:

- ➔ Consult "[Setting up and conducting individual and collective qualitative interviews](#)"

## D- Processing quantitative data

At this stage, quantitative data has been collected. This data must now be put into a format that will enable statistical analyses to be performed.

Data entry tools must be prepared from during the design phase, once the questionnaire has been stabilised. It is also advisable to test data entry tools prior to the data collection phase.

### 1- Data processing steps and possible supporting media

Data processing involves several phases:

- Input mask creation<sup>170</sup>,
- Data coding and code dictionary design,
- Data entry into input mask (when necessary),
- Database<sup>171</sup> cleaning.

These phases sometimes vary depending upon selected data collection modality (digital or paper collection) and upon the tools used for data entry (software or applications<sup>172</sup>). The following table describes the various alternatives, along with their advantages and limitations.

Alternatives	1- Digital data collection using an application or specific software <sup>173</sup>	2- Paper collection and entry into an application or specific software <sup>174</sup>	3- Paper collection and entry into Excel
Input mask creation	Yes: form format	Yes: form format	Yes: Excel spreadsheet format
Data coding	Yes	Yes	Yes
Entry into database	At the time of data collection, simultaneous transfer to database	Manual	Manual

<sup>170</sup> Input mask (sometimes also referred to as an input interface): set template into which all collected data is entered and to which entered data must conform. This template governs what a user is allowed to enter into a text box. It may take the shape of a form (identical to questionnaire) when applications or software are used. Otherwise it may take the form of an Excel spreadsheet.

<sup>171</sup> Database: Format that gathers and holds together the entire set of collected quantitative data.

<sup>172</sup> Software must be installed on a computer. Applications work with a browser and therefore require an internet connection.

<sup>173</sup> Examples of open access software (digital collection):

- iData: <http://www.hiproweb.org/en/home/knowledge-management/idata.html>
- KoBo ToolBox: <http://www.kobotoolbox.org/>

<sup>174</sup> Examples of open access software (hard-copy collection):

- iData: <http://www.hiproweb.org/en/home/knowledge-management/idata.html>
- KoBo ToolBox: <http://www.kobotoolbox.org/>
- Epi-data: <http://www.epidata.dk/>
- Epi-info: <https://www.cdc.gov/epiinfo/index.html>

Data cleaning required later	Yes	Yes	Yes
Advantages	<ul style="list-style-type: none"> <li>• No paper document to manage in the field</li> <li>• No data entry clerk to recruit</li> <li>• Less time required for data entry</li> <li>• Automatic database construction</li> <li>• Limitation of biases created by manual entry</li> <li>• Data security</li> </ul>	<ul style="list-style-type: none"> <li>• Easy data entry into forms</li> <li>• Automatic database construction</li> <li>• Depending upon the software used, data analysis tools may already be integrated</li> </ul>	<ul style="list-style-type: none"> <li>• Excel software is already installed onto Handicap International computers</li> <li>• Excel software is familiar, already used by field teams</li> <li>• Importable into analysis software</li> </ul>
Areas of caution	<ul style="list-style-type: none"> <li>• Financial investment required for tablets<sup>175</sup></li> <li>• Battery and collection equipment charging</li> <li>• Internet connection for sending completed questionnaires</li> <li>• There is a charge for certain applications (paid services)</li> <li>• Not suitable in all contexts: safety, perception, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Data entry clerk recruitment</li> <li>• Input control systems required to limit biases associated with manual data entry</li> <li>• Less familiar, risk of incorrect use by teams</li> </ul>	<ul style="list-style-type: none"> <li>• Input mask preparation time</li> <li>• Data entry clerk recruitment</li> <li>• Input control systems required to limit biases associated with manual data entry</li> <li>• Slower, more error-prone and impractical data entry</li> <li>• No data security</li> </ul>

## 2- From form (or input mask) to database

We saw above, that in the case of alternatives 1 and 2, data entry is performed directly into a form, which is identical in configuration to the developed questionnaire. The data entered is immediately stored in a database that will eventually take the shape of a spreadsheet. In the case of alternative 3, entry is performed directly into an especially prepared Excel spreadsheet, which faithfully reproduces the entire questionnaire. In this case, the database creates itself progressively, as data is entered.

Whatever data entry media is selected, the rules for database presentation remain identical:

- Respect the following presentation:
  - Individuals occupy lines
  - Questions (now called variables) occupy columns
  - Only one individual per line, only one variable per column
- Define unique identifiers:
  - Unique identifier per individual

<sup>175</sup> To give you an idea, the cost of a Samsung Galaxy Tab S2 8 (T710) tablet is approximately 400 dollars.

- Unique identifier per variable
- Variable names must be explicit and abbreviated. They will be used later for analysis, so they must be short<sup>176</sup> and easy to understand:
  - The entire question is not a variable name, and must not appear in the database
  - Avoid generic designations (such as numbers, or terms such as “date” or “other”)
  - Prefer names beginning with a letter instead of a number
  - Do not use spaces within names
  - Avoid using special characters/symbols (hyphens, commas, accented characters, etc.), with the exception of the Underscore (“\_”)
  - Example:
    - Question: “Did you go to school?”
    - Designation of corresponding variable: “access-school”
- The greater the number of variables, and therefore columns, the more difficult the database will be difficult to manipulate and analyse. Therefore, limit the number of questions/variables.



### Number of columns not identical to number of questions!

The responses to a single question may lead to the creation of several columns within the database.

**Example 1:** Ranked multiple-choice questions with up to 3 responses. In this case, 3 columns may be required to enter responses, i.e. one column per respondent choice.

**Example 2:** In the case of non-ranked multiple-choice questions, one column per response category is created. Each of these columns will then contain “yes” (or 1) if the answer was checked, and “no” (or 0, or is left blank) if the answer was not checked.

Several types of questions may lead to the creation of a new variable, either as a result of calculations (of an index or score based upon a set of questions, see example 1 below) or as a result of conditional branching logic between questions (see example 2).

**Example 1:** The ScoPeO tool calculates a quality of life score based upon a set of questions.

**Example 2:** Based upon the responses to the 6 questions of the Washington Group’s Short Set of Questions on Disability, a new “Persons with disabilities” variable is created, with two possible response categories (Yes/No). If people respond at least once that they have “a lot of difficulties” or are “unable to perform an activity”, they are considered to be persons with disabilities.

## 3- Response coding

Here, the objective is to assign a fixed designation to each of a variable’s response categories. These codes must be identical for all the individuals in the database: this standardisation enables the body of data to be analysed.

<sup>176</sup> In general, analysis softwares accept variable names ranging from 6-8 characters. If names are longer, the under score symbol must be used, otherwise names will be cut short, which may cause variable identification problems during analysis.

## Language Issues

Two languages may coexist within the same questionnaire (e.g. this is often the case in Asia and in Arabic-speaking countries). Coding must then be performed in one of the organisation's official languages (English, French or Spanish).

For some questions, this designation may be presented as abbreviated and informative text. (e.g. the language in which the interview takes place). However, it is advisable to convert data into a **numeric format** (examples: Men = 1 and Women = 2; Yes = 1 and No = 2).

Numeric coding is advised because it:

- Facilitates database readability (limits the number of characters in each column).
- Is better suited to database exportation towards analysis software (indeed, characters and/or text content white spaces can vary from one format to another).
- Can facilitate statistical analysis with certain software (e.g. for merging response categories or creating new variables).

## Location name coding

If geographical data analysis is useful to the study, it is essential to use codes for location names. Indeed, city or village names can often be spelled differently (especially when they are transcribed from a local language) and thereby bias the analysis. It is therefore important to associate a unique code to each location surveyed (e.g. village). In the case of digital questionnaires used on mobile devices, it is possible to use multiple-choice questions to list all possible locations. On paper questionnaires, if the surveyed location list is too long, a free-text field must be included in the questionnaire, and the content of this text field must be coded at the time of data entry.

Please note that digital data collection tools typically enable GPS coordinates to be associated with each questionnaire, and that this can be a simple way to geolocate responses. However, remember to delete or scramble these coordinates if you want data to remain anonymous.

Coding strategy must be repeated in a standardised manner. Two points of caution here:

- Response categories such as "Does not know", "Does not want to answer" or "Not applicable" must each receive a code. It is advisable to adopt a single code applicable to the entire database, such as: Does not know = 99 and Does not want to answer = 999.
- A strategy must be defined for missing data. Indeed, it is inadvisable to leave cells empty, in order to avoid any confusion between missing, as not collected in the field, data and missing, as not entered into the database, data.

## Recoding

Certain variables will require recoding, as aggregation will be required to:

- Merge categories; for example, because numbers of responses per response category are too low to enable analysis.  
Example: a satisfaction scale with 5 categories reduced to a scale with 3 categories.
- Create categories from numeric data.  
Example: Creating age categories based upon stated age.

The coding strategy must be shareable and easily accessible. It is advisable to indicate response category codes within questionnaires. It is also advisable to develop a **code dictionary**. Indeed, code dictionaries enable variable names to be reduced to a minimum when responses are coded and entered into the database. In order to standardise data entry, and not lose the keys to deciphering the database, it is essential to record all this information in a document containing:

- The variable's name in the database
- Its reference column
- A brief description, and link to the reference question
- The response categories and respective codes.

Some software and applications request this information at the time of form design.

## Consultancy deliverables

When the study is conducted as part of a consultancy, remember to include the cleaned database and associated code dictionary in the deliverables, in addition to the final report. If relevant at a later date, this will enable additional statistical analyses to be performed.

## 4- Data entry

During manual data entry, the most common errors are:

- Erroneous reading of response, and therefore erroneous entry;
- Poorly entered data (correct data in incorrect cell, or incorrect data in correct cell);
- Poorly applied coding rules, or variation in entries of identical response categories for a specific variable;
- Forgotten data, collected on paper, but not entered into the database.

Mechanisms that can be put in place to reduce such errors (particularly in Excel) include:

- Pre-defined drop-down lists for multiple-choice questions<sup>177</sup>;
- Constraints (also called data validation in Excel<sup>178</sup>) to prevent entry of aberrant values;
- Database protection, especially when formulas are included<sup>179</sup>;
- Rarely used, yet effective: double data entry! Data is entered twice into two separate databases, by two different data entry clerks. The two databases are then compared, differences pinpointed and corrections made.

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<sup>177</sup> 1. Go to the "Data" tab. 2. Click "Data Validation". 3. In the "Settings" tab, in the "Authorise" box, select "List". 4. In the "Source" box, select the field of cells (e.g. the multiple choice questions) previously referenced in another worksheet of your Excel file.

<sup>178</sup> 1. Go to the "Data" tab. 2. Click "Data Validation". 3. In the "Settings" tab, in the "Authorise" box, select a data format for the data to be entered. You may stipulate a range of data values (e.g. *minimum* and *maximum* in the case of integers). The "Input Message" tab allows you to customise an input message (yellow reminder box of what kind of data can be input into the cell). The "Error Alert" tab enables you to customise error messages.

<sup>179</sup> 1. Go to the "Review" tab. 2. Click "Protect Workbook". 3. Enter a password. 4. Confirm the password.

## 5- Data cleaning

In order to ensure that the database contains no errors, it is advisable to perform a data cleaning operation following data entry, i.e. a verification operation on entered data (for both traditional and digital collection). The objective here is to detect and correct errors (e.g. duplicate identification, outliers, missing values, incorrectly coded values, etc.).

Errors can be identified using several methods, including:

- Calculation of statistical dispersion parameters (e.g. minimum, maximum and median values)<sup>180</sup>. Such initial analyses are performed on each variable, and enable identification of aberrant and missing values;
- Generation of graphs for data visualisation (box plot type);
- Use of logical tests enabling illogical data entry to be detected: e.g. pregnant men; or if certain questions must only be addressed to adults, ensuring that response cells are effectively empty when respondent age is inferior to 18 years (or any other threshold that defines attainment of adulthood in the local context);

In order to correct errors, the data entry clerk can:

- Go back to the questionnaires to check an answer;
- Transform aberrant and unverifiable values into missing values;
- Remove from the database those individuals whose questionnaires are too incomplete<sup>181</sup>.

## 6- Resources required for implementation

### 6-1- Time devoted to data processing

In the case of digital data collection, data entry is no longer a necessary step. However, in the case of manual data entry (Excel or other software/application), data entry duration must be assessed. The time required will depend upon initial sample size and number of available data entry clerks.

The following table can be used to make a swift needs assessment.

**Initial hypotheses:** An effective 8-hour working day (lunch not included)

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<sup>180</sup> For further information, go to the section on univariate analyses in Section "[Analysing quantitative data](#)".

<sup>181</sup> There is a lack of consensus in the wider scientific community regarding this last point. Indeed, there are ways to address missing data. However, these require the skills of an experienced statistician. If such expertise is not available, it is advisable to delete the questionnaires.



What	Quantification
Total number of interviews	360 people <sup>182</sup>
Estimated data entry time per interview	20 min
Number of questionnaires entered per day per data entry clerk	24
Number of data entry clerks	2
Total number of questionnaires entered per day	48
Data entry duration	8 days

**Example:** Based upon the time estimated for entering an interview, and on the total number of questionnaires, it is possible to calculate the required number of data entry clerks and the time that must be devoted to data entry. In the case presented above, data entry takes 20 minutes per questionnaire, and calculations show that 24 questionnaires can be entered per day per data entry clerk. As the chosen sample size is 360 people, it is then possible to say that 2 data entry clerks are required if questionnaires are entered over a period of 8 days. If the double data entry process is used, the number of surveyors, or the time devoted to data entry, must be doubled.

This estimate only takes data entry into account, and not data cleaning. Therefore, **one or two days must be added** to this initial estimate. It is best to overestimate data entry time, in order to avoid putting excessive pressure onto data entry clerks. Indeed, questionnaire entry is repetitive work, requiring great concentration in order to avoid mistakes. It is therefore better to integrate regular breaks for data entry clerks and to avoid tight deadlines. Data quality will be greatly improved.

## 6-2- Human Resources: profiles and responsibilities

### 6-2-1 Profiles and responsibilities

**Data entry clerks** are responsible for data entry, and sometimes also for data cleaning.

Data entry clerk profile	
Social skills	<ul style="list-style-type: none"> <li>• Dynamic, responsive, curious, motivated, rigorous</li> <li>• Patient</li> <li>• Team work</li> </ul>
Technical competencies	<ul style="list-style-type: none"> <li>• Skilled in the use of computational tools (Excel and other software)</li> </ul>
Other recommended competencies	<ul style="list-style-type: none"> <li>• Speaks the local language and is familiar with vernacular</li> </ul>
Responsibilities	
Main activities performed during the study	<ul style="list-style-type: none"> <li>• Participates in data entry clerk training</li> <li>• Enters data into entry tools</li> <li>• Verifies data entered at the end of each day</li> </ul>

<sup>182</sup> Fictitious values.



## Fair recruitment

Data entry clerk recruitment, in the case of non-digital data collection, must be equitable in terms of gender and disability. Working environment and conditions can be tailored to the specific needs of the individuals chosen.

### 6-2-2 Competencies: Data entry clerk training

Just as surveyors are trained to perform their attributed tasks, data entry clerks must also receive training. This training must address data entry techniques, data entry tools, as well as the questionnaire itself. Data entry clerks must be very familiar with the questionnaire, in order to be able to detect inconsistencies during data entry. A number of training modules can therefore be conducted with the surveyors. Both data entry clerk training and data entry supervision will contribute to study quality.

One can also recruit data entry clerks amongst the surveyors. They will then have good knowledge of the questionnaire and study. However, in this case, data collection and data entry cannot take place in parallel, but must be performed one after the other.



#### Key points to remember

- Data processing enables data to be gathered into an analysable format.
- Processing is divided into 4 stages: input form creation, coding, data entry and data cleaning.
- All coded databases must be accompanied by a code dictionary.
- Systems can be implemented to limit entry errors.
- Database cleaning actively contributes to study quality.
- Data entry clerks must be trained, just like the surveyors!



#### At the end of this step you have...

- ➔ Assembled the quantitative data, which is now ready for analysis.



#### Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

**To formalise study/research findings:**

- ➔ Consult "[Analysing qualitative data](#)"

**To compare with a qualitative approach:**

- ➔ Consult "[Processing \(narrative/discursive\) qualitative data: Transcription](#)"

## E- Analysing quantitative data

At this point, you have a database that is complete, clean and ready to be analysed. This database may have been produced by a study that you implemented yourself, or may have been created by a third party<sup>183</sup>.

It is advisable to think about your data analysis plan<sup>184</sup> when developing the protocol. The protocol defines the analysis type(s) that have been identified to satisfy the study's objectives. The greater the complexity of statistical analyses, the greater the expertise and know-how required.



Data analysis plan development is an opportunity to clarify gender, age and disability disaggregation requirements!

Statistics enable quantitative variables to be summarised by describing them, comparing them or demonstrating the relationships between them. Results can be synthesised in tables or graphs (histograms, pie charts, line graphs, etc.). However, they must always be accompanied by a narrative.

A number of basic principles and some practical advice will be presented in this section. The objective is neither to explain the underlying mathematical logic nor to propose procedures (these vary from one software/application to another). Instead, the intention is to provide an overview of what is possible, to specify contexts of use and necessary resources for implementation.

### 1- Knowing variable types

Just as for sampling, some elementary understanding and know-how is required.

Three types of variables<sup>185</sup> can be defined, depending upon types of proposed response categories.

Variable type	Description	Example	Associated response category type <sup>186</sup>
<b>Numeric (or metric)</b>	Response format is numeric	Age	Numeric Numeric rating scale
<b>Categorical (nominal or modal)</b>	Responses format designates a category, represented textually (modalities); but can	Gender Disability	Dichotomous Categorical Multiple-choice

<sup>183</sup> The database may have been generated by project activities, beneficiary monitoring in the context of a humanitarian project, or service user monitoring managed by a partner, for example.

<sup>184</sup> It is advisable to consider the data analysis plan from the outset of the study design phase in order to clarify minimum expectations in analysis terms (variable-by-variable descriptions, one-way cross-tabulation, correlation analyses, etc.). This exercise also enables statistical competency requirements to be identified, and objectives to be adjusted based upon available resources.

<sup>185</sup> In statistics, a variable is an attribute that can be measured for each individual in a sample, and whose value may change from one subject to another, and also for a given subject from one moment to the next.

<sup>186</sup> If necessary, you can review the section "[B- Developing a questionnaire for a quantitative study](#)" in this chapter.

	be numerically coded		
<b>Ordinal</b>	Responses format involves a ranking, an order, a continuum	School level	Categorical Adjective rating scale

## 2- Knowing types of statistical analysis

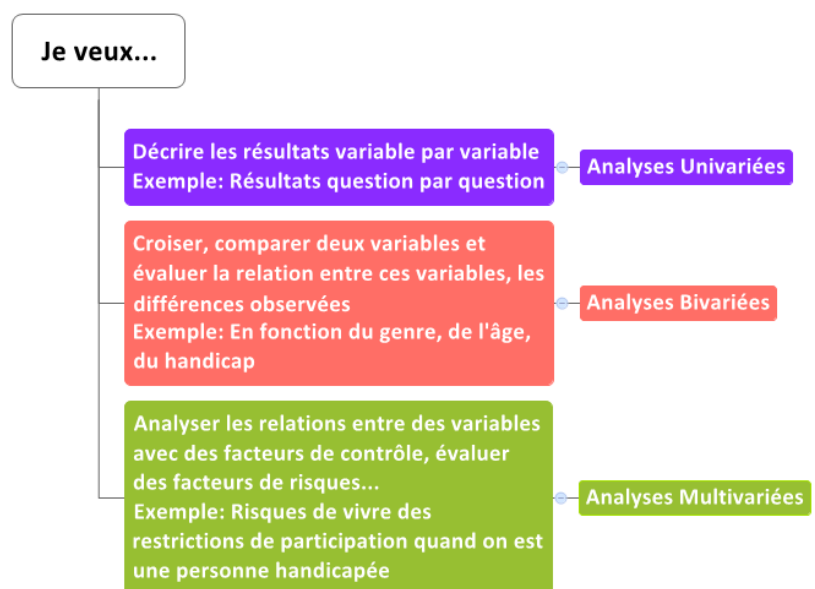
Statistical analyses may consider:

- A single variable: analyses are then referred to as univariate statistics,
- Two variables: analyses are then referred to as bivariate statistics,
- Multiple variables: analyses are then referred to as multivariate statistics.

These analyses are applicable to all variable types, but their approaches and the statistical tests that they use differ.

Analyses are selected according to the objectives (Figure 4).

**Figure4: Types of statistical analyses according to objectives**



## 2-1- Univariate analyses

### WHY?

Univariate analyses aim to describe, synthesise, summarise a variable. They are the most basic level of analysis. Indeed, it is these types of analyses which are recommended for cleaning databases and identifying entry errors.

These analyses are the minimum level of analysis required in quantitative studies.

### WHAT?

Types of calculation vary with type of variable.

#### Continuous numeric variables

Arithmetic calculations (such as subtraction or division) may be performed on continuous numeric variables. It is therefore possible to calculate the following values:

- Minimum and maximum values
- Range, i.e. the difference between the highest and lowest values
- Average, i.e. the sum of the variable values divided by the number of variables
- Standard deviation, which measures the variable's dispersion: the greater the standard deviation, the more heterogeneous the distribution
- Median, i.e. the value separating the higher half (50%) of the values in a data set from the lower half (*at least* 50%) of the values in this data set.

Results can be presented in the form of tables and graphs.

#### Nominal or ordinal variables

No arithmetic calculation is possible with nominal and ordinal variables. However, this type of variable's pattern of distribution between the different possible response categories can nonetheless be quantified and apprehended, by measuring:

- Total numbers, i.e. number of observations per variable response category
- Proportions, or prevalence, i.e. total number of one observation divided by the total number of all observations
- Percentages, i.e. proportions brought back to a scale of 100.

Results are easily presentable in tables and graphs (sector graphs, bar charts, ring graphs, etc.).

### HOW?

Most software/applications provide analysis modules capable of performing these elementary analyses. For example, these types of calculations can be performed very quickly using Excel PivotTables<sup>187</sup>.

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<sup>187</sup> Example: Tutorial for calculation of sums and averages in Excel: [https://www.excel-pratique.com/en/course/excel\\_formulas\\_calculations\\_functions.php](https://www.excel-pratique.com/en/course/excel_formulas_calculations_functions.php)

## Table and graph presentation

### General recommendations:

- Use identical formatting for all tables and identical colour coding for all graphs.
- Use short and precise titles.
- Accompany all tables and figures with a narrative description. Refer to each table and figure in the text.
- Number tables and figures continuously, but separately.
- Cite secondary information sources.
- Dose the number of tables and other figures wisely: more is not necessarily better!

### Specific recommendations for graphs:

- Axes (x-axis and y-axis) must specify what they are representing, as well as units.
- Specify the legend if necessary.
- Pay attention to the contrasts between the colours used<sup>188</sup>.
- Ensure visibility of chart elements for good readability.

### Specific recommendations for tables:

- Do not only present numbers, include percentages
- Present percentages with their confidence intervals and averages with their standard deviations.
- Limit decimal places to two.
- Round up to the higher value when decimal is greater than 5.
- Verify totals when presenting percentages.

## 2-2- Bivariate (or cross-tabulated) analyses

### WHY?

Bivariate analyses cross-tabulate, compare two variables, and enable the relationship between these two variables to be measured.



### Data disaggregation

Bivariate analyses enable data (such as access to education or employment) to be disaggregated according to gender (women *versus* men), age (based on predefined categories) and/or disability (persons with disabilities *versus* persons without disabilities, but also, within a group of persons with disabilities, according to disability type and degree of severity of difficulties encountered). In the case of disability, it is advisable to use the Washington Group's Short Set of Questions on Disability<sup>189</sup>,

<sup>188</sup> For further information: ACAPS, 2012. **Use of Colour in Data Display**. Technical Brief. p. 23

[https://www.acaps.org/sites/acaps/files/resources/files/use\\_of\\_colour\\_in\\_data\\_display\\_may\\_2012.pdf](https://www.acaps.org/sites/acaps/files/resources/files/use_of_colour_in_data_display_may_2012.pdf)

<sup>189</sup> For further information, please refer to:

- SkillWeb page on the subject: <http://www.hiproweb.org/en/home/knowledge-management/research-and-technical-studies/washington-group-and-disability-related-data.html>

which identifies the people most at risk of experiencing participation restrictions due to functional limitations<sup>190</sup>.

## KEY POINTS

- First of all, this approach requires hypotheses, and the selection of which variables to cross-tabulate, and why. Then, the dependent variable and independent variable must be defined. E.g. if you wish to know blood sugar level (glycemia) as a function of age, blood sugar level will be the dependent variable, and age will be the independent variable.
- Then, this type of analysis requires that things be taken further. Indeed, one must demonstrate that differences are not due to chance. It is therefore not sufficient to simply confront values. Tests must also be performed to verify whether observed differences are significant or not<sup>191</sup>. Such tests are rarely applied. However, they are essential, especially in the case of impact evaluations, to demonstrate that observed differences reflect true change.

## WHAT?

All the possible types of cross-tabulation may be considered. However, they involve a variety of approaches and statistical tests – and the support of a statistician!

The following table is provided for information purposes<sup>192</sup>. The most commonly used test in studies is the chi-squared test (or  $\chi^2$  test), which enables the distribution of a variable between two groups to be compared (see the following Sidebar “Data analysis: Comparing variable distribution between two groups”).

Type of cross-tabulated variables	Most common objective	Type of comparison tests
2 numeric variables	Seeking correlation between 2 variables	Pearson Correlation Coefficient (r) Spearman's Rank Correlation Coefficient
1 metric variable x 1 nominal or categorical variable	Comparing averages between two groups	Student's t-Test Mann–Whitney U Test

- Handicap International. **Orientation Note about disability-related data in National Censuses**. 2014 : [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/SdWA07.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/SdWA07.pdf)
- Or the e-learning module: “**The Washington Group on Disability Statistics and the Short Set of Questions**”: <http://hilearngo.handicap-international.org/>

<sup>190</sup> This recommendation has international-level backing (UN, IDA, etc.), in particular within the SDG monitoring framework. Handicap International has developed training materials in collaboration with the UN-Washington Group on Disability Statistics. For further information, consult SkillWeb: <http://www.hiproweb.org/en/home/knowledge-management/research-and-technical-studies/washington-group-and-disability-related-data.html>

<sup>191</sup> The significance level, or p-value, is set at 0.05. If the p-value is inferior to 0.05, differences are considered significant. This means that the observed result has a less than 5% probability of being obtained by chance. Therefore, a true connection is recognised between variables.

<sup>192</sup> Indeed, understanding these tests requires pre-requisites in statistics that are difficult to provide within this guide. We recommend that you consult specialised guides and documents on the issue.

1 nominal variable x 1 ordinal variable	Comparing distributions between two groups	Chi-square Test
2 nominal variables or 2 ordinal variables		Fisher's Exact Test McNemar's Test

Results can be presented in table or graph (histograms, in particular) format.

## HOW?

Frequency distribution tables and average calculations may be performed using software/applications. Significance tests can be performed using Excel, but it is easier to use specialised statistical software (more intuitive)<sup>193</sup>.



### Data analysis: Comparing variable distribution between two groups

**Example:** Analysing socio-economic index in terms of disability<sup>194</sup>.

◊ The dependent variable is the socio-economic index (4 modalities), the independent variable is disability (2 modalities). The indexes therefore occupy the rows, and the disability modalities occupy the columns.

◊ The double-entry table presents totals and percentages in each socio-economic category for the two groups compared.

◊ The significance level (p-value) is presented in a column. Type of test and statistical significance threshold are also specified.

◊ The table is given a title and presented with a narrative text: "When individuals are sorted according to socio-economic index, what becomes visible is the heterogeneity within the persons with disabilities group. Indeed, a majority of individuals in this group have a socio-economic index that lies within the poorest category (index 1: 41.2% of the group). In contrast, in the control group, most individuals are situated close to the index representing the richest (index 4: 34.3% of the group). The differences observed are significant (Chi-square test,  $p < 0.05$ )".

**Table: Socio-economic index of individuals aged 16 years and over**

Socio-economic index of individuals	Persons with Disabilities Group (N = 68)		Control Group (N = 70)		p*
	Population	Percentage	Population	Percentage	
1 (the poorest)	28	41,2%	15	21,4%	<b>p=0.007</b>
2	19	27,9%	13	18,6%	
3	9	13,2%	18	25,7%	
4 (the richest)	12	17,6%	24	34,3%	

\* Chi-square test, level of statistical significance  $p < 0.05$

<sup>193</sup> Many of these programs are not free (SPSS, Stata, etc.). However, some are in open access (PSPP: <https://www.gnu.org/software/pspp/>).

<sup>194</sup> Example taken from the "Representation and evaluation of disability in Haiti (Port-au-Prince, 2012)" study, published in 2013.



## 2-3- Multivariate analysis

### WHY?

This type of analysis involves several variables, and enables the connections and relationships (or lack of connections and relationships) between these variables to be more finely analysed. Multivariate analysis can take into account both the specific effects of each of the variables considered, and the effects of confounding factors<sup>195</sup>.

### WHAT?

Multivariate analyses cover a wide variety of analyses, with varying levels of complexity. Tests vary depending on variable type.

The most common tests are regression analyses. Regression analyses enable environment complexity to be integrated when seeking relationships between variables, via the introduction of control (or test) variables<sup>196</sup>. Indeed, other factors may be responsible for, or modify, the differences observed between groups. Linear regression is the main type of analysis used for numeric variables. Logistic regression (binary or multiple, depending upon the number of modalities) is the analysis most often used for nominal and ordinal variables.

As in the case of bivariate analyses, multivariate analyses are based upon previously defined hypotheses, and rely upon the significativity of results. The concepts of dependent and independent variables are also essential, in order to prioritise the relationships between variables, and to propose relevant regression analyses models.



### Inform, advocate, monitor

Multivariate analyses are often used when the study's objective is to demonstrate differences between two groups of individuals based upon a defined criterion (e.g. disability), while also monitoring the effects of gender and age, or other potential confounding factors. These analyses may therefore prove helpful for reliably informing stakeholders of discrimination and thus for making a stronger case for more inclusive national plans in specific sectors, or for monitoring the Convention on the Rights of Persons with Disabilities or the Sustainable Development Goals.

### HOW?

This type of analysis requires the skilled use of statistical software<sup>197</sup>.

<sup>195</sup> Confounding factors designate a set of potential errors that can occur when interpreting the relationships between dependent variables and independent variables, during results analysis and interpretation. Confounding bias is caused by interference from other extraneous variables insufficiently controlled by the research protocol.

<sup>196</sup> This type of analysis helps to limit confounding bias.

<sup>197</sup> SPSS, Stata, PSPP, etc.

### 3- Describing and interpreting results

Any analysis presented in table or figure format must be accompanied by a narrative text that describes the interesting, important result. There is no space here for subjectivity: observations must be described, based on the underlying statistics (e.g. men participate more frequently in village meetings than women, with respective participation rates of XX% and XX%, and a difference of XX points between the two). When significance tests have been performed, you must specify whether differences are significant or not. Feel free to use footnotes when you feel that they are necessary to provide additional explanatory, conceptual or terminological information.

More analyses/tests than those ultimately presented in the report will certainly be performed. Indeed, additional analyses will certainly have been conducted in order to verify hypotheses, or to discard certain results, ultimately not considered relevant to present. An information selection process must therefore be applied.

Finally, results must be contextualised and discussed. Indeed, a result, an observation makes sense in a specific cultural, social, political, security, or historical context. A quick literature review may be helpful here. Information generated can then be compared with other similar data – pre-existing or from another area – or newly identified avenues of research confronted with existing literature. It is strongly advised to devote a workshop to the consultation of Handicap International field teams. Indeed, field teams are often those best placed to interpret results in the light of the context and of the project itself! This exercise will also be an initial arena of appropriation of study outputs, and will help guarantee that results are adapted to teams' needs and expectations.



#### Inviting target group representatives

In order to comment and interpret findings, or to open avenues for further analysis, a workshop can be arranged with target group representatives: objectives, methodology and results are presented in an accessible manner, and then discussed in working groups. These meetings are also an opportunity for target group representatives to improve their study and data production implementation competencies, which may prove useful to them in the future, if they become actively involved in advocacy.

### 4- Resources required for implementation

Quantitative data analysis requires specific technical competencies in order to perform statistical analyses, including, in particular, the ability to use analysis software. In addition, data interpretation requires good contextual knowledge, and the ability to make a rapid situational analysis on a specific issue if necessary.

In human resources organisation terms, it is possible to entrust the statistical analysis of data to a third party. However, it is then essential to inform and brief the person in question about the history

and methodology used in the field because, as already mentioned, data collection, data entry and data analysis tool development are intertwined. If this third party is identified early enough, they must be invited to participate in the study design phase, in order to participate in protocol development and in the discussions relating to the study's potential biases.

Depending upon the volume of data collected, expected analyses, and the desired level of participation (e.g. organisation of workshops with teams and target group representatives), analysis and interpretation may take a few days to a few weeks.

The budget will therefore need to balance various elements, such as the profile of the person coordinating this phase, equipment requirements (certain software – such as SPSS, Stata, Sphinx, etc. – is not free), and/or workshops.

### **Key points to remember**

- Types of analysis to apply depend on study objectives.
- Types of analysis also depend upon variables types, themselves dependent upon the types of questions used during data collection.
- Presentation of results must be clear and consistent. Each table and graph must be accompanied by a narrative text.
- Involve partners in the deliberation process, as well as your team!
- Do not underestimate the time required for analysis and interpretation.

### **At the end of this step you have...**

- ➔ Analysed all collected quantitative data.

### **Now we suggest that you...**

- ➔ Navigate within the guide based on your needs.

#### **To formalise study findings:**

- ➔ Consult "[Sharing and using study findings](#)"

#### **To focus upon resources:**

- ➔ Consult "[Resources required for study implementation](#)"

#### **To compare with a qualitative approach:**

- ➔ Consult "[Analysing qualitative data](#)"

## Chapter 5 – Managing qualitative data

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### Preamble

At this stage, you have:

- worked on the study's framework, and confirmed the study's objectives and value,
- identified a methodology that is adapted to your subject, objectives and goals, and chosen a qualitative approach, or a mixed approach with a qualitative component.

As explained earlier, a qualitative approach enables a phenomenon, an experience, a practice, perceptions to be explored, understood and explained, and narrative results to be produced based upon the discourse of the people encountered. Several qualitative data collection techniques exist: individual (face-to-face) interviews, collective interviews and observations. Observations may be participant, structured or naturalistic.

You must therefore identify which data collection technique(s) to mobilise in order to meet the study's objectives.

As previously discussed, the study design phase is essential to ensure study quality. Indeed, it is during the study design phase that the protocol<sup>198</sup> is thought through, discussed and formalised, in order to precisely define the methodology that will be applied. This is the time to answer questions such as "How should questions be asked in order to achieve objectives?" or "How should individuals be selected?"

### A- Choosing a qualitative data collection technique

There are several qualitative data collection techniques:

- Interviews, which can be individual (face-to-face) or collective,
- Observations, which can be participant, structured or naturalistic.

Both interviews and observations follow defined data collection and analysis methodologies. The implementation and respect of these methodologies contribute to data reliability.

Data can also be collected in more informal contexts (during individual or group discussions). Such data can provide substance to ongoing processes of deliberation, illustrate certain observations, or confirm observed trends. However, such data is rarely actually qualitatively analysed. Nonetheless, it

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<sup>198</sup> As previously defined, the protocol is the document that presents the study's framework, describes the methodological mechanism envisaged, and specifies the resources necessary for study implementation and monitoring. Its function is therefore to precisely and clearly describe what we wish to do, how we are going to do it, when and with whom. A protocol template is provided in this guide's "Toolbox" ([Tool 1](#)).

is still useful and advisable to record in a notebook (or in a file on your computer) the remarks of the various stakeholders that you have met, in order not to lose any data.

Furthermore, qualitative techniques are complementary and combinable, both in terms of their practical approaches (all interviews have an observational component: gestures, attitudes, intonations; and all observations have a language component), and in terms of data analysis (triangulation).

## 1- Individual interviews

**Principle:** A formal dialogue between a surveyor and a person specifically selected for a discussion on a defined subject, enabling data collection<sup>199</sup>, in a specified time frame.

**Useful if, for example, you want to:**

- Analyse and understand an event, an experience or a situation, a practice or representations – past or present,
- Explore and understand an individual's life trajectory,
- Understand a population's value systems and/or cultural and social norms.

**Types of individual interviews.** There are two types of qualitative individual interviews<sup>200</sup>:

- Open interviews: the approach is non-directive. Interviewer and interviewee have the greatest degree of freedom in their exchange. The surveyor begins all interviews in exactly the same way, by formulating an initial question that sets the interview into motion. The conversation follows its natural flow, based upon the interviewee's discourse and the surveyor's expectations.
- Semi-structured interviews: a series of themes that must be systematically addressed in all interviews is defined ahead of time. The interviewer begins each interview similarly, and keeps re-focusing discussions onto the pre-defined themes, in the order that seems most appropriate, depending upon the flow of exchanges with the participant.

In the development sector, semi-structured interviews are more commonly used than open interviews because their execution, and subsequent data analysis, is easier.

**Team mobilised per interview:** An interviewer and a translator (if necessary).

**Number of participants per interview:** 1.

**Collection tool(s) and equipment:** An interview guide, a field notebook and an audio recorder (if possible).

**Interview duration:** 40 minutes to 2 hours.

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<sup>199</sup> Either face-to-face, over the telephone, or using Skype.

<sup>200</sup> There does exist a third type of interview: closed interviews. However, closed interviews are used only in quantitative approaches. You will find further information on this subject in chapter 4 "[Managing quantitative data](#)".



## **A qualitative interview must not last less than 15 to 20 minutes**

If it does, you must check:

- The relevance and interviewee understanding of the interview's initiation and/or of the following questions asked,
- The environment in which the interview was performed (moment in time, location, surroundings were perhaps not conducive)
- The quality of the interviewer's work.

Indeed, 15 minutes is enough to time to introduce oneself, explain the study, build rapport in a trusting environment and begin a conversation with someone, but will never be enough for an in-depth exchange.



## **Zoom on life stories or biographical approaches**

Life stories provide answers to questions such as "Why and how". They enable life trajectories to be analysed, and, for example, levers and/or obstacles to be identified.

A life story is a unique, personal story. The individual recounts his journey in relation to the theme of the study (e.g. school trajectory, recruitment into inclusive employment, migration trajectory, activist career). Individual are encouraged to think about their actions, justify their choices, criticise other choices, describe the obstacles encountered. Life stories are based on a number of consecutive, semi-structured interviews, which integrate three elements:

- Episodes, which are the key phases identified, which illustrate how the individual experienced the issue addressed (What? Important events? Turning points?)
- Actors and their relationships to the author of the story (Who? Did they provide support?)
- Arguments that explain choices, or clarify perceptions of what is being experienced (How? Why?).

### **Strengths and weaknesses of individual interviews**

<b>Strengths</b>	<b>Weaknesses / Areas of caution</b>
<ul style="list-style-type: none"><li>• Performed with small numbers of people, so fewer human resources required for collection.</li><li>• Provide safe and adapted contexts (physical and temporal), which foster exchange and a certain freedom of speech.</li><li>• Provide access to what the most vulnerable, most hard-to-access or lower literacy level populations have to say.</li><li>• Enable issues deemed sensitive or delicate within a given context (e.g. sexual violence during conflict) to be addressed.</li><li>• Provide access to finer, more nuanced, information, derived from detailed accounts</li></ul>	<ul style="list-style-type: none"><li>• Time-consuming for interviewers, especially for transcription and analysis.</li><li>• Time-consuming for interviewees.</li><li>• Selection of individuals must be diversified, so as not to limit points of view and not overly focus on a specific profile, network, association or organisation, for example.</li><li>• Individual interview techniques require an ability to initiate, re-initiate and bring closure to exchanges, without influencing or biasing them. This can become even more complex if a translator participates and accompanies the interviewer.</li><li>• Based on what is declared: individuals tell</li></ul>

<p>of a phenomenon, an experience, a situation.</p> <ul style="list-style-type: none"> <li>• Enable more complete, deeper analysis.</li> <li>• When they are conducted over the telephone or via Skype, it is possible to include information from individuals living in remote or isolated areas, who may not be accessible for security reasons, for example.</li> </ul>	<p>the story that they wish. Therefore, there may be differences between what is said and what is done in reality.</p> <ul style="list-style-type: none"> <li>• If the collected data is not rigorously analysed, it can be easy to fall into over-interpretation, misinterpretation or inappropriate generalisation. A few first-hand accounts cannot accurately portray an entire culture!</li> <li>• Representations/strategies must be analysed within a framework, a context.</li> </ul>
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## 2- Collective interviews

**Principle:** Gather together the representatives of a group of people, who are witness to and affected by the same problem, and access their opinions/representations through their first-hand accounts, as well as through observation of the interactions between them. A collective interview is therefore not a series of individual interviews. Exchanges do not occur between the interviewer and the individuals, but between the participants themselves, who are encouraged to reflect upon, express and formulate a common experience. New information emerges out of these interactions and discussions. Indeed, collective interview coordinators are generally referred to as group discussion facilitators and not interviewers. A facilitator must also be accompanied by an observer, who has the role of capturing all levels of information, both verbal and non-verbal.

**Useful if, for example, you want to:**

- Study the experiences and difficulties experienced by individuals with a given service, or in a given situation.
- Study the range of stakeholder opinions and feelings on a given subject, put them into perspective and analyse influencing factors.
- Explore and assess needs or expectations, identify problems.
- Analyse an activity's effects within a defined group.
- Or, in the case of community meetings, discuss relevant issues with the community, and/or obtain the community's agreement on a specific issue.

**Types of collective interviews**

- **Focus groups:** Semi-structured interviews organised in a formal and structured manner, conducted with a small selection of individuals concerned by the issue addressed by the study, using an interview guide that lays out the interview initiation procedure (initial guidance/warm-up questions) and themes to cover. All the individuals must participate in discussions, as it is their interactions that create the substance.
- **Meetings/community gatherings:** gatherings of people who meet for a specific reason, and who are invited to share their opinion on a given issue.



## Gender and disability in community meetings

Community meetings are open to all. It is always interesting to observe who is present and who is absent, who speaks and who does not speak, how people position themselves in space. This information can be very useful for identifying marginalised or harder-to-reach groups within the community, in order to then adapt existing strategies to meet them as well.

Focus groups require more rigorous methods than community meetings. Indeed, they require more precise preparation and implementation (selection of participants based upon defined criteria; development of an interview guide; recommendations for facilitation; content analysis; etc.).



### Zoom on expert consultations, DELPHI method example

This method's goal is to collect the justified opinion of a panel of (between 7 and 18) experts in a given field, using an open or semi-structured questionnaire. This technique enables different opinions to be collected remotely, without the experts needing to travel, which reduces costs. The results of a first questionnaire are sent to each expert, with a synthesis of the general and specific trends, opinions and justifications. Then, each expert is invited to react and respond to a second questionnaire, developed using the first set of opinions collected, and so on, until responses converge as much as possible, or a predefined stop criterion is reached<sup>201</sup>.

**Duration of an interview:** 1h30 to 2h30.

**Team mobilised per interview:** A facilitator and observer/note-taker, preferably familiar with the local language and context<sup>202</sup>.

**Number of participants per interview:**

- In the case of focus groups: 6 to 12 people – Ideally between 7 and 10. If the groups are too large, speaking times will be short, dominant individuals will more easily occupy the space, participants will more easily lose interest in the subject of discussion and the facilitator will shift towards regulation and control of the process, instead of facilitation and impulsion. The relationship between group size and participation has been studied<sup>203</sup>. Studies show that for groups of:
  - Between 3 and 6 people, everybody talks,
  - Between 7 and 10 people, almost everybody talks,
  - Between 11 and 20 people, 5-6 people talk a lot, 3-4 participate in the conversation occasionally, the others remain silent,

<sup>201</sup> Bootoo Ekionea JP, Bernard P, Plaisent M. 2011. **Consensus par la méthode Delphi sur les concepts clés des capacités organisationnelles spécifiques de la gestion des connaissances**, in *Recherches qualitatives*, 29 (3), 168-192.

<sup>202</sup> You will find further information concerning the profiles and responsibilities of these two job positions in this chapter, in the "Conducting individual and collective interviews" section.

<sup>203</sup> Bakewell O, 2003. **Sharpening the Development process. A practical guide to Monitoring and Evaluation**, INTRAC, Praxis series N.1, Oxford 2003.



- Over 20 people: 3-4 people dominate the conversation, and there is therefore little or no actual participation of participants.
- In the case of community meetings: there is no recommended limit.



### Focus groups with children (6 years of age and upward)

It is advisable that the number of participants be reduced – numbers vary in the literature, but are situated between 3 and 6 or 8 children maximum – and that the time frame not exceed 1h30, including breaks (which are necessary to keep children's attention).

See [Guideline Sheet 2](#): "Selecting data collection methods suitable for specific needs (disability and age)".

**Collection tool(s) and equipment:** Two interview guides (one for each team member), a field notebook, an audio recorder (if possible), and perhaps a camera.

### Strengths and weaknesses of collective interviews

Strengths	Weaknesses/Areas of caution
<ul style="list-style-type: none"> <li>• Enable a larger amount of information to be collected over a short time period and with a smaller budget.</li> <li>• Promote group dynamics, thereby facilitating exchanges, comments, reactions. Therefore, enable multiple points of views to be collected during the same interview.</li> <li>• Generally well accepted by communities, as the form of discussion used is one that is quite natural and familiar to most communities.</li> <li>• The presence of third parties can reassure, un-inhibit and encourage expression.</li> <li>• Sometimes complex to implement in difficult contexts (in which gatherings may be dangerous).</li> </ul>	<ul style="list-style-type: none"> <li>• Unsuitable if consensus on a subject is sought<sup>204</sup>, if the subject is too sensitive, or if interviewing the target group requires confidentiality or security measures.</li> <li>• Collection occurs over a shorter time frame, but transcription and analysis take time.</li> <li>• The analysis phase is essential in order to avoid erroneous short-cuts or generalisations.</li> <li>• The points of views expressed by target group representatives are not necessarily representative of those of the entire community that they are supposed to represent. Therefore, points of view must be analysed, deciphered, contextualised.</li> <li>• Techniques require facilitation skills in order to create trust, stimulate exchanges, be attentive to group dynamics, ensure fair distribution of speaking time.</li> <li>• Group composition must be properly considered, as inequalities in social status can undermine interactions between participants.</li> </ul>

<sup>204</sup> The objective is to create an impulse, to encourage expression and discussions, and to analyse interactions and other non-verbal communication between participants. Synthesising this material does not mean coming to any kind of consensus.

	<ul style="list-style-type: none"> <li>• Sometimes challenging to find a time when all targeted participants are available (different individual obligations: family, work, etc.).</li> </ul>
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### 3- Observations

**Principle:** Thorough and attentive tracking of facts, community practices, interactions between individuals, with no judgement, no interpretation and no desire to change or interact. Observed sequences are then transformed into written data, and analysed through an organised note-taking process. Observation requires the actual presence of an expert, who may take part to a greater or lesser degree in observed sequences.

**Useful if, for example, you want to:**

- Understand the context of action.
- Describe and analyse habitual gestures (e.g. use of soap before and after meals), physical spaces (e.g. refugee camp reception or transit areas), relationships (e.g. caregiver-patient relationship in a sexual and reproductive health service), temporalities/time frames (e.g. rehabilitation service waiting time), frequencies (e.g. number of patients taken care of by an orientation desk in 4 hours), movements in a given space (e.g. how individuals occupy the space within a camp), or the physical/geographical contexts in which people evolve (e.g. physical accessibility of people's home and surroundings).
- Describe actual behaviour rather than statements about behaviour in a specific situation/context.
- Identify discrepancies between statements and facts.
- Assess a target population's practices (e.g. a teacher in an inclusive class).



#### Gender study observations

Individual interviews create an intimate atmosphere, conducive for addressing complex issues in detail. Collective interviews create a dynamic, conducive for discussions and the emergence of matters of importance. Observation, on the other hand, creates yet other possibilities. Indeed, observation is useful for discerning roles, task distributions, power dynamics between stakeholders, etc.

#### Observation types

- Participant observation: the observer studies a community by sharing its way of life, having been accepted by its members, and participates in group activities and related issues, all the while preserving the posture of someone looking in from the outside.
- Structured observation: the observer uses a pre-defined observation grid, and addresses specific questions/items.

- Naturalistic observation: the observer takes advantage of the public arena's openness, which enables entirely anonymous visual and auditory observation of situations occurring spontaneously in the field<sup>205</sup>.

Participant observation is rarely used in the field because of the time and investment required.



## Observing all ages

Observation does not require any specific language or cognitive skills on the part of the people observed. This technique can therefore be used with very young groups (even under 2 years of age).

➡ See [Guideline Sheet 2](#): “Selecting data collection methods suitable for specific needs (disability and age)”.

**Team mobilised per interview:** an observer, preferably familiar with the local language and context.

**Collection tool(s) and equipment:** An observation grid, a field notebook for taking additional notes, perhaps an audio recorder, and/or a photo or movie camera (if relevant).

## Strengths and weaknesses of observation

Strengths	Weaknesses/Areas of caution
<ul style="list-style-type: none"> <li>• Data has greater authenticity and understandability, because there is direct and irreplaceable access to real-life practices in real time.</li> <li>• As a complement to interviews, enables words and deeds to be compared.</li> <li>• In the case of structured observation, data collected using a standardised observation grid can be numerically quantified, enabling comparisons between sites.</li> </ul>	<ul style="list-style-type: none"> <li>• In-adapted to all issues, to feelings or ideology analysis, or to other abstract objects of study.</li> <li>• Depending upon specific contexts, privacy issues may arise (e.g. in health facilities).</li> <li>• Technique that requires rigorous discipline in observation.</li> <li>• Stakeholders may be disturbed by the observer's presence (particularly, persons with intellectual or mental disabilities), and modify their behaviour<sup>206</sup>.</li> <li>• May require repeated observation sessions in the same place, over a prolonged length of time.</li> <li>• Observer bias: everything is described in terms of how the observer sees a scene. There is therefore a degree of subjectivity.</li> <li>• In the case of participant observation, data collection and analysis requires time.</li> </ul>

<sup>205</sup> Raulin A. **Anthropologie urbaine**. Armand Colin, Paris, 2001, 177 p.

<sup>206</sup> Voluntarily: to hide something or for image control. Or, involuntary: stress, discomfort or perhaps out of a desire to assist the interviewer's observations.

	<ul style="list-style-type: none"> <li>• In the case of structured observation, the observation grid must be exhaustive. Otherwise, there is a risk that certain items may be missed and therefore not identified.</li> </ul>
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## Key points to remember

- Interviews may individual or collective. Observations may be participant, structured or naturalistic.
- The study's objectives must guide the choice of technique.
- There are specific implementation recommendations for each technique to ensure reliability.
- Each technique has advantages, as well as features requiring caution during the study's preparation/initiation phase.

## At the end of this step you have...

- ➔ Selected one or several qualitative data collection techniques, based upon your objectives and constraints.

## Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

### To learn how to develop an interview-based qualitative methodology:

- ➔ Consult "[Selecting individuals for qualitative interviews](#)"
- ➔ Consult "[Developing a qualitative interview guide](#)"
- ➔ Consult "[Conducting individual or collective interviews](#)"
- ➔ Consult "[Processing \(narrative/discursive\) qualitative data: Transcription](#)"
- ➔ Consult "[Analysing qualitative data](#)"

### To learn how to develop an observation-based qualitative methodology:

- ➔ Consult "[Selecting individuals, locations and observation frequencies](#)"
- ➔ Consult "[Developing an observation grid](#)"
- ➔ Consult "[Conducting observation sessions](#)"
- ➔ Consult "[Processing and analysing data collected during observation sessions](#)"

### To compare these techniques with the quantitative approach:

- ➔ Consult "[Managing quantitative data](#)"

## B- Setting up, conducting, processing and analysing individual and collective qualitative interviews

You have selected a qualitative approach, and chosen to work with individual and/or collective interviews.

### B1- Selecting individuals for a qualitative study

#### 1- Who: Selecting individuals for interviews and/or observation

In a qualitative study, one does not think in terms of sample representativeness (as in a quantitative study), but in terms of diversification of profiles and postures, in relation to the issue under consideration and the stated objectives. The individuals that compose the sample must enable the entire range of possibilities to be explored, in order to address all situations and gather different points of views.

**Selection is therefore based upon the principle of maximum diversification.** Selection is an active decision-making process, motivated by the profiles of the individuals. This active decision-making process is referred to as purposive sampling<sup>207</sup>, and sometimes as convenience sampling<sup>208</sup>. The selection phase is essential, as the quality of information produced depends upon sample composition. If, for example, certain profiles are excluded or under-represented, collected data will be partial, and analyses will be incomplete.

Sample diversification can be based upon different variable types:

- So-called classic variables, such as age, gender, disability type, educational level, profession, etc.
- Or, strategic variables, specifically related to the subject, such as severity of a disability, regular attendance (or lack of attendance) of a service, targeted groups (service providers, families, etc.).

The combination of contrasting sources and the triangulation of information enable points of view to be compared and confronted, and enrich the analysis. Therefore, it is important not to depend upon a single source or a single profile. An individual is not the repository of an entire society's wisdom. And, individual discourses and points of view are not the absolute truth.

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<sup>207</sup> Purposive sampling: sample constitution is guided by criteria that are relevant to the study's objectives and previously defined by the study's expert/team.

<sup>208</sup> Convenience sampling: individuals are selected for practical reasons. They are available, easily accessible. This type of sampling has no representative value.



### Include the least accessible!

In general, the most sociable, available and educated people are those that are the most easily mobilised to participate in a study. However, it is important to ensure the participation of those that are most vulnerable, and least accessible, due, for example, to difficulties in self-expression or to social status. It is understandable to seek the simplest and swiftest approach, but the voices of the least heard and most hard-to-access must also be captured. This may require methodology and data collection modality adaptation.



See [Guideline Sheet 3](#): “Supporting media for child and disability friendly studies”.



### Sensitivity to gender and age in focus group composition

For mixed-sex focus groups, remember to balance the number of female and male participants, in order to avoid under-representation of one or other group, and to limit biases resulting from a context that is non-conducive to expression.

Depending upon the study's subject, it is usually advisable to separate men and women. Indeed, a focus group composed of women, and facilitated by a woman will create a more conducive and promising environment in which to talk, share, interact (the same applies to men!).

Depending upon the subjects addressed, it may also be preferable, in a group of women, to propose a number of subgroups based on age (or social status), in order to avoid intergenerational biases. In certain cultures, a married woman no longer has the same freedom of expression as a young woman; or older women may be the guardians of tradition, making it more difficult for young girls to speak freely amongst them.

Finally, if focus groups are conducted with children and youth, it is advisable to group participants according to age. This simplifies the facilitation of exchanges (interaction dynamics are not the same for children and teenagers), as well as promote everyone's freedom of expression (indeed, speaking in front of their elders might be intimidating for young children).

## 2- How many: Number of interviews

In a qualitative study, you will only be able to survey a limited number of people, primarily because qualitative data collection and analysis methods require time, in contexts in which time and financial resources are often limited.

Two principles govern qualitative sample size definition:

- **The saturation principle:** Saturation is reached when no new information is obtained during further interviews, when the range of representational logics and/or behavioural patterns seems to have been fully apprehended for a given field of investigation, and/or when new information simply confirms previously collected information. Information then becomes redundant. The saturation effect signals the end of data collection.
- **More is not better:** The number of interviews planned must be realistic in order to address objectives and provide answers. It is essential to keep in mind that the number of interviews

is not a factor of success for qualitative studies. Thoughtful selection of individuals, and objective and rigorous data analysis will be more informative and effective than a large sample population and superficial analysis.



### Saturation: fact or fiction in our intervention contexts?

Successfully reaching data saturation can be a real challenge in resource and operational terms. During emergency response diagnoses, teams using interview techniques only rarely speak of data saturation, but they will often use triangulation<sup>209</sup> in order to ensure that generated information is reliable. It is, however, entirely possible to conduct qualitative studies that do integrate the saturation principle, as demonstrated by the study presented in the following sidebar: “Example of a qualitative study”.

The number of individuals to meet will vary depending upon selected data collection technique and study objectives. There is no absolute rule defining qualitative sample size. Generally, the greater the reference population’s heterogeneity, the greater the increase in number of people to survey. Here are some estimates, for information purposes:

- **Individual interviews:** depending upon the issue and intervention contexts, it is considered that little new information is collected beyond 40 or 50 individual interviews. This number can be reduced to close to ten individuals in the case of life stories, which require a greater amount of time with individuals. There is no magic number. However, what is certain is that, depending on time and budget, it is preferable to plan 10 well-conducted and analysed interviews, than 25 rushed and poorly-exploited interviews.
- **Focus groups:** depending upon the study’s goals (operational or advocacy), the subject’s complexity and informant profiles, the number of required groups can range from 4 to several dozen.

**Example:** 4 focus groups in a given area can contribute to understanding the attitudes of parents whose disabled children are out of school: 2 focus groups with families with low standard of living, and 2 focus groups with families in more comfortable economic situations. If you wanted to go further and bring gender inequality to light, it would then be useful to separate parents of girls and parents of boys, thereby multiplying the number of focus groups.

## 3- How: Informant access

There are two main types of selection modality.

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<sup>209</sup> Triangulation may apply to data (the same piece of information is collected from several informants) or methods (several methods are combined to collect data). In both cases, the different data are analysed in the light of each other, and are compared and confronted. Triangulation can be used to confirm (or refute) data collected from multiple sources, as well as to corroborate observed trends or strengthen interpretations. It therefore enables certain biases (during collection, analysis and/or interpretation) to be avoided, thereby contributing to the quality of information produced.

### 3-1- Direct access to individuals with no intermediary

In accordance with the selection variables defined by the study, individuals may be randomly selected from a list or file (e.g. from a service facility's client list or a beneficiary database) or approached in public areas (neighbourhood or village market, service facility waiting room, children in a school, etc.). In such cases, because of the context, interviews often remain short and superficial, and non conducive to deepening the field of investigation. In addition, you will only be able to gather the discourses of those present. In the case of studies looking at motivational factors or difficulties in accessing a service, this must be given careful consideration, as the point of view of those that are absent, i.e. the people who do not, for whatever reason, make it to these places, may be relevant to your study.

### 3-2- Access to informants via an intermediary

In the case of hard-to-reach populations or profiles, an intermediary informant will facilitate access to targeted individuals. Such informants may, for example, be members of a civil society organisation, association, social group or institution.

This approach is used in snowball (or network) sampling<sup>210</sup>. Indeed, the snowball sampling technique can be adapted to identify new informants as follows. A person with the characteristics sought is interviewed. The interviewer then asks if this person knows other people in the same situation. In the answer is yes, the interviewer asks to be put in contact with these other individuals.

The "intermediary informant" method is useful because it allows connections to be established swiftly with potential informants. However, one must be careful not to bias the selection by retaining only people that are sociologically similar to the intermediary, and/or by using entry points (informants) that are themselves biased in relation to the subject of the study (e.g. persons identified by an executive director or human resources coordinator for a study on the conditions of employment of persons with disabilities). Intermediary informants can have different profiles. They may, for example, be managers of an association, community leaders, or even members of your team: drivers and translators are often un-suspected intermediaries.



#### Example of a qualitative study

##### **Mental health problems in Juba, South Sudan: local perceptions, attitudes and patient care. A socio-anthropological study<sup>211</sup>**

Two elements were used to define the sample size: data saturation and a desk review of similar studies, to ensure that proposed sample size was sufficient to answer the study's questions.

<sup>210</sup> Snowball or network sampling: individuals are selected based upon their relationships with a small pool of initial individuals. The relationships between individuals can be diverse: social networks, friendships, business relationships, etc.

<sup>211</sup> Handicap International. **Mental health problems in Juba, South Sudan: local perceptions, attitudes and patient care. A socio-anthropological study.** 2015 : [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/MentalHealthInSouthSudan\\_RS\\_FP\\_17.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/MentalHealthInSouthSudan_RS_FP_17.pdf)



Furthermore, the principle of maximum diversity was applied at the time of study participant identification and recruitment.

Sampling objective was to include: 1/ Men and Women (over 10 years of age) with mental health difficulties, with different levels of education and originating from different ethnic groups; 2/ Caregivers, regardless of gender, age, education level and ethnicity; 3/ Service Providers from different professional fields; 4/ Community Members with different profiles in terms of gender, age, ethnicity, education and/or geographical location.

Community leaders were also mobilised, and encouraged to use their contacts and knowledge of their intervention area to include a wide variety of profiles in the sample. People with mental health difficulties and their caregivers were recruited in the support groups set up by Handicap International for the “Touching minds, raising dignities” project.

### **Key points to remember**

- Select individual profiles based upon relevance to the subject.
- Prefer quality over quantity.
- Describe the entire identification and recruitment process in the methodology.

### **At the end of this step you have...**

- ➔ Defined the interesting profiles to meet,
- ➔ Defined the number of people to meet,
- ➔ Identified how you will access individuals.

### **Now we suggest that you...**

- ➔ Navigate within the guide based on your needs.

#### **To learn how to develop an interview-based qualitative methodology:**

- ➔ Consult “[Developing a qualitative interview guide](#)”
- ➔ Consult “[Conducting individual or collective interviews](#)”
- ➔ Consult “[Processing \(narrative/discursive\) qualitative data: Transcription](#)”
- ➔ Consult “[Analysing qualitative data](#)”

#### **To compare with other data collection techniques:**

- ➔ Consult “[Selecting individuals, locations and observation frequencies](#)”
- ➔ Consult “[Quantitative study participant sampling](#)”

## **B2- Developing a qualitative interview guide**

### **1- Why an interview guide?**

The interview guide is the template that guides the interviewer during the interview. It is the interview's guiding thread, and lays out the data that the interviewer is seeking. Qualitative interview guides have two parts: the interview initiation (initial guidance/warm-up questions), and the set of questions/themes to address during the interview. Guides are more or less structured depending upon the type of interview performed (open or semi-structured).

Interview guide development is an essential, but often overlooked, step. Yet, a study's quality can be compromised if the guide is poorly designed. You run the risk of interviewer subjectivity having a greater influence on interviews, of data being difficult to use (irrelevant to study objectives, or, on the contrary, overly oriented), and of your study process lacking in transparency.

### **2- Interview guide development**

#### **2-1- The development principle**

At this stage, the themes to be addressed have been identified and formulated in the study's framework. These themes must now be precisely articulated and translated into key questions. It is also wise at this time to pre-identify prompts for each question. The themes addressed and questions must be logical, and in phase with the issue addressed by the study and its stated objectives.

#### **Concept tree and other facilitation methods**

The concept tree is a graphical tool that enables creative idea investigation, depiction of relationships between ideas and idea classification. This process simplifies the identification of the themes to include in the interview guide:

- 1-** Start from your study's subject, and add on major themes like branches.
- 2-** As you keep identifying related themes, keep adding new branches to the tree.
- 3-** Take a step back, look at the entire tree and prioritise what you wish to see in the study.
- 4-** Operationalise selected items by formulating them as questions.



This kind of exercise can be conducted with study target group representatives during a collective workshop.



If the group is composed of children, other methods can be used, such as the pebbles method. In the pebble method, the objective is defined together and represented by a point on the opposite side of a river. Pebbles help you move forward (4 or 5 pebbles at most) and cross the river. However, in order to be used, each pebble must represent a theme or a question. Children can work in groups, and then share their work. The children's work is then harmonised.

## 2-2- Interview initiation, or initial guidance

The purpose of any initial guidance given to interviewees at the beginning of the interview is to steer them towards the study's subject from the outset. Initial guidance therefore establishes the interview framework. From one interview to another, and therefore from one individual to another, or one group to another, initial guidance homogenises interview initiation.

Qualitative interviews can be introduced in a number of ways:

- Initial questions can address attitudes, opinions, representations: "What do you think of..."; "I would like for you to talk to me about [...] and what meaning it has for you"  
**Example:** "What do you think of the role of NGOs in the treatment and care of persons with disabilities in emergency situations?"
- Or, they can focus on an event, experience, story: "Tell me how ..."; "I'd like you to talk to me about [...] and how things are going".  
**Example:** "I would like you to describe your educational itinerary to me, to tell me how going to school and your studies at school were for you?"

Advice on wording these initial questions:

- Avoid introductions that are too long: 2 or 3 lines maximum.
- Clearly and precisely formulate what is expected from the interview.
- Use non-directive and relatively open questions: the response fields provided must be broad enough for the discourses of all interviewees to find their place within them.

## 2-3- Themes and questions

There are several schools of thought concerning the degree to which qualitative interview guides should be structured. Some advocate a general thematic grid, as a general roadmap to follow, while others advocate a grid with precise, formulated questions. The best choice will ultimately depend upon the interviewer's level of ease, and his mastery of the methods. In our contexts, we suggest that questions be prepared in advance, as well as the prompts that help to stimulate and steer exchanges.

Advice on question wording:

- Avoid questions that are too general or abstract,
- Avoid questions with predictable, stereotypical answers,
- Avoid questions that are too direct or oriented,
- Avoid questions that are too long,

- Use simple, clear and unambiguous word: above all, the question must make sense to the person that you are speaking to, and everyone must have the same understanding of the question,
- Use neutral and non-discriminatory language.



## Adapting your techniques to the age and competencies of children

When interviewing children, your manner and attitude, techniques and supporting media must be adapted to their age, as well as to their level of cognitive and emotional development. Such interviews must therefore be well prepared beforehand, especially when themes pertain to protection (as in the case of sexual abuse and violence), and must be conducted by trained and experienced teams.

**Example 1:** To obtain information concerning knowledge or practice(s), you can ask the child to give advice to a doll (that you have presented to the child beforehand!).

**Example 2:** To know what a child likes or dislikes (e.g. at school, in a health service), you can use drawings. On a piece of paper that you divide into two, ask the child to draw what they like the most on one side, and what they do not like on the other side. Once they are done, ask if they were able to draw what was in their mind, and then ask for an explanation of the drawing. Take notes on the back of the piece of paper. And, above all, listen! It is not so much the drawings that are interesting, but the accompanying explanations.

**Example 3:** You can show the child a set of images/photographs, and ask them to choose those that represent what is important to them, what they like, what they hate, etc.

The images/photographs selected then become the interview guide.

For further information:

➡ See [Guideline Sheet 1](#): “Suggested approaches for interviewing persons with disabilities and children/youth”.

➡ See [Guideline Sheet 2](#): “Selecting data collection methods suitable for specific needs (disability and age)”.

➡ See [Guideline Sheet 3](#): “Supporting media for child and disability friendly studies”.

## 2-4- Question order

During open qualitative interviews, the order in which themes arise during the interview may vary based upon interviewee responses, and the interviewer must adapt the interview accordingly. However, for semi-structured interviews (individual, collective or focus group), the interview guide provides more structure, and themes are generally addressed in the order defined. Nonetheless, although question configuration has been consciously designed beforehand, this layout may also sometimes evolve quite naturally as the exchange progresses.

## 2-5- Number of questions

In open interviews, the number of questions is limited to a maximum of 2 or 3 questions, and it is the prompts that enable all the major pre-identified themes to be covered.

**Here is an example** of an open interview guide used for research in the mental health area, *inter alia* for people living in closed environments, for the study “Emergence and structuring of support groups for people living with mental health problems in Togo, Madagascar, Lebanon and South Sudan”, 2016.

**Open interview guide**  
**Aimed at support group members**

**Question n°1: Can you tell me how you came to be in this support group?**

**Question n°2: Can you tell us what this support group does for you?**

[Provide details, if necessary, but not systematically, for the following categories]

- Living conditions, current situation
- Representation of mental health problems
- Perceived input from the support group
- Feeling of achievement and self-esteem, capacity to deal with mental health problems experienced
- Future life prospects
- Level of participation in support groups (decision-making bodies, design/planning/implementation/evaluation)
- Engagement in social and civic (community) life
- Interactions (based on the five types of social participation) with local authorities (mayors, village health/development committees), services specialised in mental health, and international organisations (including Handicap International teams)
- Point of view, prospects/perspectives

During semi-structured interviews (individual or collective), the number of questions must be limited to 5 or 6 (12 maximum). It is not uncommon to find focus group guides with 20 questions or more. With this number of questions, it is impossible to ensure the participation of all participants, let alone to address all the questions properly.

**Here is an example** of a focus group guide used as part of a study conducted in China in the mental health sector. The purpose of these focus groups was to gain better understanding of the meaning given to the term “participation” in the project’s cultural context.

## Focus group guide

### Gender-based groups:

**8-10 Men living with mental health problems for each FGD**

**8-10 Women living with mental health problems for each FGD**

1. As a person living with a mental health problem, how does the community perceive you?
2. As a person living with a mental health problem, what are the barriers you are facing in your social life?
3. Are the perception and the barriers that the group talked about the same for men and women? Can you tell us more about that?
4. As a person living with a mental health problem, do you attend different kinds of activities in your community? If yes, what activities? (i.e. community/village elections; weddings/funerals; special occasions/holiday celebrations; gatherings/Sunday markets; birthdays/ethnic minority customs/local festivals, etc.).  
Is participation identical for men and women? If participation is not identical, how is it different?
5. As a person living with a mental health problem, are there any social activities that you don't attend in your community? Why?
6. Do your family and/or community members take your opinion into consideration? Do they encourage your participation in the same way as they do for other members of the family and/or the community? Can you say more about this?
7. How do you think the participation of people living with mental health problems can be improved?
8. And you, as a person living with a mental health problem, do you follow your doctor's (or service provider's) advice?

## 2-6- In brief

	Initial guidance/warm-up question(s)	Themes and prompts	Question order flexibility	Number of questions
<b>Individual open interviews</b>	Yes	Pre-identified themes and prompts	Yes++	2 or 3
<b>Individual semi-structured interviews</b>	Yes	Pre-formulated questions and prompts	Possible	5 or 6 (maximum: 10)
<b>Focus groups</b>	Yes	Pre-formulated questions and prompts	Possible	5 or 6 (maximum: 10)
<b>Community meetings</b>	Yes	Pre-identified themes	Yes++	5 or 6



## Qualitative approach flexibility and interview guide adjustment

Unlike quantitative approaches, qualitative approaches have the advantage of being flexible. The interview guide can change with evolving information requirements during data collection. This is essential for studies in difficult contexts. Regular adjustments contribute to ensuring that all necessary data is collected, and to optimising time management in the field. Such adjustments are made possible by quality note-taking, daily interview analysis and continuous communication between data collection teams.

### 3- Interview guide translation

Guides are usually developed in Handicap International's official languages (French and English). They therefore need to be translated into local language(s).

The translation process is essential, as the meaning given to each word and each question must be respected, in order to ensure the use of appropriate terminology and to avoid interviewers improvising at the time of data collection.

Several translation methods exist, however it is advisable to use the back-translation technique. This method mobilises two bilingual individuals. One individual translates the guide from French (or English) into the local language. The second individual then back-translates the translated version of the tool into French (or English). The original and back-translated version are then compared and discussed.

### 4- Interview guide testing

Just like any data collection tool, the interview guide must be tested before being used in the field. You can start by testing the initial guidance/warm-up questions and remaining body of questions with acquaintances. However, once translated, the guide must be tested in real-life conditions, with a small sample of individuals. Such pilot tests enable wording relevance and wording comprehension by interviewees to be verified. They also enable the identification of additional prompts to help sustain interview momentum. There are several possible (and complementary) alternatives for collecting and analysing feedback on how questions are received:

- Organise a debriefing session with the interviewer(s) in order to collect impressions;
- Ask the interviewee subsidiary questions at the end of the interview, in order to identify any difficulties experienced or misunderstandings;
- Integrate probe questions<sup>212</sup> into the original guide, in order to cross-tabulate responses and verify their reliability;
- Involve an observer in the interview, to observe reactions, facial expressions and/or body language, and emotions;

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<sup>212</sup> Probe questions are a way to test that a participant has correctly understood the intended meaning of a question and is responding reliably. Through data cross-tabulation, probe questions enable question comprehension and adequacy of proposed responses to be verified.



### Key points to remember

- For both individual and collective interviews, the number of themes/ questions addressed must be limited.
- The way in which themes/questions are approached must be adapted to the needs/capacities of participants.
- Be attentive to interview guide translation.
- The guide must be pilot tested in real-life conditions.



### At the end of this step you have...

- ➔ Developed the interview guide, which has been translated and tested, and is therefore ready to use.



### Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

#### To learn how to develop an interview-based qualitative methodology:

- ➔ Consult "[Conducting individual or collective interviews](#)"
- ➔ Consult "[Processing \(narrative/discursive\) qualitative data: Transcription](#)"

## **B3- Conducting individual and collective interviews**

When you get to this phase, the protocol has been developed, therefore:

- You have identified the interview techniques that you are going to mobilise;
- You know the profile of the people that will be interviewed, and how you are going to access these people;
- You have developed the interview guide, which has been pre-tested and adjusted if necessary. The interview guide is therefore ready to use!

### 1- Qualitative interview phases

The qualitative interview process – whether individual or collective – can be broken down into 4 phases:

- Phase 1: Making appointments with participants
- Phase 2: Preparing equipment and venue



- Phase 3: Conducting the interview and taking notes
- Phase 4: Finalising the interview

## 1-1- Phase 1: Making appointments with participants

First of all, the identified persons must be contacted. As seen previously, in the section concerning access to informants during the individual selection process, there are two possible approaches: the direct approach (individuals are identified and contacted directly), and the indirect approach (key intermediary individuals, in whom final participants trust, present the study and the person coordinating the study).

The next step is to inform future participants: when you actually establish contact with the participants, you must ensure that information is understandable by your target population. It is therefore advisable to use clear and simple vocabulary. Words that make sense to the target population and that will support their adherence. The objectives, reasons for their selection and time frame of the exchange must also be presented to them.



### Obtaining parental authorisation to access children or persons with intellectual disabilities

When making appointments, parents (or other legal representatives) must first be convinced in order to obtain the authorisation to work with the targeted individuals. Parents must be informed, and probably reassured, in order to overcome resistances (e.g. due to difficult past experiences). This does not mean that the child/participant is excluded from negotiations. Children must also be given explanations, in order to ensure their engagement in the study.

Finally, two factors must be negotiated when making the appointment:

- Time of day of the interview, chosen carefully in order to ensure that it is possible for everyone to participate, even those who are the hardest to reach. This is sometimes quite a delicate undertaking.



Example: if everyone's presence is desired, you will need to find a time which works for both the men who work in the fields in the day, and the women who take care of domestic and family tasks, so that participation of all is ensured.

- Venue of the interview, which will vary depending upon collection techniques:
  - Individual interviews: at home, at the office, in a dedicated room in a health facility, or other, depending upon context;
  - Focus groups: an identified and available public space that has been prepared to meet interview requirements;
  - Community meetings: a location in the neighbourhood or in the village, or a community venue large enough to hold the expected audience.



## Secret meetings

Certain target populations require maximum discretion when establishing contact, making appointments, and during the interview itself. This is particularly important when participant safety must be ensured: confidentiality and anonymity are in such cases of up-most importance.

**Example:** homosexual and transgender individuals needing to remain anonymous because of the danger they would be in if their community discovered their situation.



## Keeping companions busy to guarantee data confidentiality

In certain contexts, male representatives (fathers, brothers, etc.) accompany young girls/women to interviews. Therefore, if you wish to guarantee the confidentiality of the exchanges with a young girl/woman, strategies must be prepared beforehand in order to keep the man busy during the interview.

### Examples:

- Provide a snack in another room. However, this requires preparing the venue in order to define the necessary zones.
- Conduct an interview with the accompanying person. The collected data may not be used, but this will enable a true moment of exchange with the woman.

## 1-2- Phase 2: Preparing equipment and venue

Before conducting an interview, you must ensure that you have all the necessary equipment at your disposal: field notebook, pen, audio recorder (pre-tested to verify proper operation), photo or movie camera, etc.



If interviews are held in a special room, it will most certainly be necessary to make a number of adjustments. The environment must be neutral (e.g. no awareness-raising posters relating to the issue to be addressed on the walls), private and accessible. In the case of focus groups, facilitators or moderators must place themselves strategically throughout the room, so that everyone can see them. Participants must also be able to interact with each other. It is therefore preferable that people be in a semicircle, and not in a straight line, and that height differences between participants be avoided (e.g. facilitators must not be on a stage). It is also advisable to avoid all distractions. For example, refreshments may be offered, but this should be done after, and not during, the discussions.



## Adapting interview venue

The environment must be adapted to the people's needs.

### Examples:

- If there is a person accompanying the participant, have a chair there;
- Organise interviews and meetings in accessible locations, i.e. places which are accessible by public transport, are on the ground floor (unless there is an elevator), and which are properly

equipped: with corridors wide enough for wheelchairs, adapted signage, accessible toilets and accessible tables. Furthermore, meeting rooms must be well-lit and free of obstacles and noise.

- If persons in wheelchairs are to express themselves, avoid the use of podiums. Instead, invite all stakeholders to sit around a table.

Such adaptations will be of benefit to all, and therefore also strengthen universal accessibility<sup>213</sup>. An easily accessible location, as opposed to a building which can only be accessed via a long flight of steps, will make life easier for persons with disabilities as well as for elderly persons, pregnant women and parents with young children.

### 1-3- Phase 3: Conducting the interview and taking notes

A **qualitative interview** is composed of three sequences:

**The introduction:** Interviewers first introduce themselves, then remind participants of the purpose of the interview, why their participation has been requested and what is expected of them. The interviewer must also go over the information pertaining to data privacy, the right not to respond or to stop the interview at any time... and obtain interviewee consent.

↪ See [Tool 4](#): “Sample consent form for adults”.

↪ See [Tool 5](#): “Sample consent form for children”.



In the case of collective interviews, the moderator also provides logistical information (schedule, ground rules to respect so that everyone can speak, etc.), and suggests that everyone present themselves briefly. Such presentations help participants get to know each other, and help the moderator get a feel for participant personalities (strong personalities, talkative people, etc.).



#### Third party consent

In some situations and contexts, a third party (legal guardian, family member, etc.) may be approached to obtain an individual’s participation. This may be necessary for reasons of:

- Social conventions: in certain cultures, the husband’s or male “guardian”’s permission is required in order to approach women;
- Age: to enable participation of children and adolescents, one must consult the person who is responsible for the child (immediate family, legal representative, or other familiar third party or close relative). In this instance, it is advisable to find out what the customary attainment of adulthood age is (e.g. in some contexts, individuals are considered adults, and therefore responsible, at the age of 15 or 16);

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<sup>213</sup> See the practical guide “**Conduct an accessibility audit in low- and middle-income countries**”, 2015, p. 14.  
[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/DiagnosticAccessibilite\\_GM13.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/DiagnosticAccessibilite_GM13.pdf)

- Limited comprehension capacities due to a disability: this is for example the case of persons with severe intellectual, mental or psycho-social disabilities (e.g. in psychotic phases or in traumatic shock).

In all of the above cases, even though the final decision belongs to a third party, the directly concerned individual must be informed of data collection issues and objectives, and their consent must be obtained.

**The interview itself**, performed according to the guidance provided in the following section. It may be necessary to verify the understanding of certain concepts used in the interviews in order to ensure collected data reliability, especially in relation to people's spatio-temporal bearings, comprehension of orders of magnitude (intensity, frequency or satisfaction) and representations concerning the expression of feelings (sadness, anger, etc.).

**Closure:** Brings exchanges to an end, and is a time during which people can be thanked for their participation. When relevant, the facilitator also provides information on the planned restitution of results.

**Note-taking** is essential to a good interview. Indeed, during the interview, the interviewer must be able to make a written note of:

- Items requiring greater detail and new questions to ask,
- Ideas for prompts,
- Illustrative examples or details,
- Phrases or sections of dialogue (which will become future *verbatim*<sup>214</sup>).

Notes can also:

- Pertain to the environment and conditions in which the interviews are conducted (e.g. presence of a third party, when interviewing persons with communication difficulties)
- Summarise any unexpected interruptions that occurred during the interview,
- Describe the emotional reactions/aspects of responses to specific questions,
- Specify if and when there were silences.

There must therefore be a specifically allocated space on the guide for the interviewer/moderator to take such notes. It is also advisable to check or cross out what has been addressed and discussed, in order to be able to track progress through the interview guide, and quickly and easily ascertain what still remains to be addressed.

Taking notes during the interview makes it easier to steer the exchange, but does not preclude **recording** the interview, which is the only way enable to enable faithful transcription of the discussion between interviewee and interviewer. Interview recording must be negotiated with each interviewee before the interview actually begins, in order for informed consent to be clearly given by the interviewee. The use of a recording device is not a trivial matter, neither for the interviewer, nor for the interviewee, and raises privacy and data security issues even more strongly. If you do opt for recordings, be sure to designate the recordings in a way that is unique and consistent with the notes, so that no information is lost.

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<sup>214</sup> *Verbatim*: Exact, literal and complete quotes of statements relating to specific issues.



It is also possible to use video recordings during focus groups. Video documents enable more detailed analysis of emotional variables and non-verbal interactions between participants. However, they also require more time for viewing, coding and analysis.

## **1-4- Phase 4: Finalising the interview**

At the end of an interview, it is essential to take about ten minutes to:

- Check your notes and fill in whatever information still needs to be recorded (e.g. interview duration, and/or information relating to actual responses or contextual physical observations);
- Record overall impressions of the interview, and share/confront them with those of the translator, or colleague who may have attended the interview;
- If recording, check that everything worked correctly. When not recording, take some additional time for an immediate debriefing session with the team in order to capture as much information as possible.

## **2- Advice for conducting qualitative interviews**

Conducting a qualitative interview requires specific hard skills (know-how) and soft skills (knowing-how-to-be). Six methodological tips are provided below to assist you in the execution of high-quality qualitative interviews.

### **2-1- Show respect and adapt your attitude and interview technique to participants**

The participants are the experts; you are there to learn from them. It is essential to remove barriers and not create new ones.

For example, how one presents oneself will have a significant impact upon how the interview unfolds. Signs of belonging to a community may serve or dis-serve the interview. Indeed, a sense of common identity may simplify exchanges or heighten animosities. Some differences are not “erasable” (gender, education level, etc.), and must be taken into consideration during the interviews themselves, as well as during data analysis<sup>215</sup>.

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<sup>215</sup> In an interview, the relationship between interviewer and interviewee is asymmetric. Social and cultural factors have a strong influence. When interviews are conducted by expatriates, consultants or even partners, this asymmetry is even more pronounced. This is sometimes referred to as elite bias.



## **Gender, age or disability sensitivity**

Gender, age and/or disability sensitivity is also demonstrated by the surveyor's attitude and behaviour.

- Gender sensitive example: it is often preferable to leave the door open when a man interviews a woman;
- Age sensitive example: if the interviewee is older than the interviewer, the interviewer must show respect and adopt an appropriate posture in space;
- Disability sensitive example: if a person in a wheelchair is interviewed, the interviewer must make sure that they are at the person's height.

### **2-2- Use simple language and ask questions one at a time**

Technical terms are rarely appropriate in interviews. Use simple, clear and easily understandable language. Be sure to articulate and speak loudly. In addition, learn about local expressions relating to the subject. Furthermore, avoid questions that are too long, and ask questions one at a time. Indeed, sometimes interviewees may only respond partially because initial questions have been forgotten, or because confusion has arisen concerning your expectations.



In order to promote understanding of the issues and simplify exchanges with participants, feel free to use visual supporting media or objects.

### **2-3- Adopt a calm, caring but neutral attitude**

Conducting interviews requires considerable self-control. Indeed, as an interviewer, remaining neutral during exchanges requires controlling one's reactions (facial expressions and/or body language, movements, attitudes, words) in order to not show emotions, thoughts, opinions. This does not mean being cold, distant or overly disciplined – quite the opposite. Creating a trusting and safe environment that is conducive to exchange requires strong social competencies. These competencies include perceptiveness, communication skills, adaptability and open-mindedness. One must adopt a neutral, caring and empathetic attitude, in order to welcome, encourage and understand what is shared during the interview.

Avoid such phrases as “great” or “awesome!”, especially with children or teenagers. Indeed, such expressions and reactions might imply that there are stories or thoughts that are not OK or not “cool”, and as a result participants may adjust what they share.

## 2-4- Respect participants' rhythm and digressions

Sometimes, it is difficult to respond in a swift and direct way to a question, as the question may actually be complex, and require time for inner deliberation and construction of thought before an answer is formulated. Furthermore, in the context of focus groups, individuals are encouraged to deliberate and express their common experience, which is often a first for them. Therefore, qualitative interviews require tact and patience, as well as the ability to be comfortable with silences and pauses.



Pauses are essential to avoid tiring (or putting strain on) participants. They therefore contribute to collected data reliability, especially in the case of children or persons with disabilities. Feel free to take a break and discuss a lighter topic for a few minutes, or to suggest a game or other distraction to clear everyone's mind. However, remember to integrate these pauses when estimating interview duration!

Flexibility and responsiveness are also key skills for facilitating exchanges. The interviewer must be able to encourage relevant digressions, and to explore and improvise with new questions when interesting new avenues appear. The risk that comes with an interview guide is that of staying focused on the grid, to the detriment of what is shared by the interviewee. It is therefore essential to be able to let the guide go sometimes, and focus instead on what is being said. However, the interviewer must also know how to stop interviewees when they stray too far from the subject of study. The interviewer provides a framework for the exchanges, which occur within a controlled environment. It is important to remember that the qualitative interview is not simply a conversation like any other. Indeed, the qualitative interview is an artificial situation: a formal exchange between interviewer and interviewee, relating to an imposed theme, within a defined time frame, in a venue selected by the stakeholders, for a given purpose.

## 2-5- Intervene wisely

Interviewer interventions require insight into and understanding of both the cultural environment and the subject, and this requires significant preparation before the interviews. The greater the interviewer's skill, the greater the relevance of the questions asked, and the more the interviewee will want to share.

Three techniques (prompting, reformulating and synthesising) must be mastered for individual and collective interviews. These techniques serve to impulse the conversation without directing it, and to ensure the interviewer accurately understands what is shared. These three types of interventions also provide opportunities for interviewees to correct any statements or ideas that the interviewer may have misunderstood. In the case of collective interviews, they may also compel the group to listen to the opinions expressed, so they are an effective way to encourage people to listen to each and deliberate. They thereby contribute to ensuring collected data quality and reliability.

These techniques require great listening, tracking and concentration capacities on the part of interviewer, as they build upon what has just been shared, and must to be used with discernment at the most opportune times.

**Prompting:** Prompts are incentive in nature. They are a way to encourage dialogue, make sure all participants get a chance to speak (thereby equalising everyone's right to an opinion), and steer the interview in response to encountered situations.

**A number of methods can be used by the interviewer:**

- Requesting additional information for purposes of illustration: "Could you tell me an anecdote or a story to illustrate what you are saying?"; "Could you give me some examples?"; "In which case?"
- Requesting additional, more in-depth information: "We just discussed this particular issue, do you think there are other issues?"; "Can you tell me more about this?"
- Identifying/clarifying the interviewee's attitude: "What do you think about this?"
- Using "reminder" questions: "We talked about an aspect of this issue before. Can you now tell me a little more about this different aspect of the issue?"



In the case of collective interviews, additional methods can be used:

- The test question, which ensures that everyone has the same understanding of a concept or situation: "Can anyone clarify what is being referred to here?"
- Prompting a specific individual, i.e. discreetly requesting that a participant express themselves: either because they have been quiet, or because they were cut off by another participant, or because their body language and/or facial expressions are demonstrating that they have something to say.
- Relay questions, i.e. questions which have been asked by a participant, and that you pick up on and put to another person or to the whole group.

**Rewording:** Rewording content is a way to check that previous statements have been understood and/or to encourage further development. Rewording consists in coming back to an expressed opinion, judgement or remark made by the interviewee and rephrasing it, out loud: "You just said that...", "So you think that...". When in any doubt, one must not let the interview keep on going, thinking that things will become clear later. This is rarely, almost never, the case! If in any doubt, it is therefore essential to clarify each response and make sure that it is correctly understood.

**This can be done in several ways:**

- The echo technique, or plain and simple reiteration, i.e., word-for-word repetition of what the interviewee has just said.
- The summary, i.e. reformulation of the essence of what was expressed, with the key words used by the interviewee.
- Reformulation (to avoid the confusion or ambiguity that can arise when discourse is left to interpretation). The interviewer expresses the idea or anecdote in their own words, in order to ensure that what has been expressed is properly understood: "You mean to say that...". The participant is asked to confirm or correct the interviewer if there is any error in understanding.
- Elucidation, i.e. deeper inquiry into an issue, when information seems to be withheld by the interviewee. This helps draw out latent information.

**Synthesising:** Synthesising content is a way to check that previous statements have been understood, in order to recap following the discussion of an issue and/or to transition towards another issue: "I heard what you said..."; "Thank you for this exchange...".





In collective interviews, the purpose of synthesising is not to propose a consensus or to summarise a consensual position. Quite the opposite, synthesising brings to light the diversity and/or opposition between participant positions.

## 2-6- Remain alert and agile

Always remember that an interview is declarative in nature. Indeed, an interview is an invisible negotiation in which the right equilibrium must be reached between each party's expectations: those of the interviewer who wishes to collect data and those of the interviewee, who may have different expectations and adapt responses accordingly. Not all interviews are easy to conduct, quite the opposite! Some individuals may demonstrate clear signs of resistance, such as a lack of interest in the issue, a certain apathy, mutism, silence, shifty eyes, or, in the case of focus groups, side conversations, etc. These 'symptoms' can be expressions of interviewee anxiety within the interview context, insecurity or simply fatigue or saturation. There is then a risk of collecting biased and erroneous information, or complacent gossip.

In such cases, the interviewer must make a premature diagnosis of the situation and find adapted solutions, whilst continuing the dialogue. If any doubts remain concerning any of what was said, it may be necessary to verify specific information, either during the interviews, by going into further detail, or later, by cross-referencing certain elements with other discourses/stories.



### Tips to resolve so-called difficult situations

#### **A person does not speak very much or at all, answers briefly (in essence, by just yes or no):**

- The interviewer can draw on the person's facial expressions and/or any body language indicating agreement or disagreement in order to bring up the issue again.

#### **On the contrary, a person is extremely talkative, but keeps straying from the subject:**

- The interviewer must refocus the person, for instance by synthesising an opinion that has been expressed, and steering the conversation back into the right direction.

#### **A person persistently does not participate, or displays a recalcitrant attitude:**

- The interviewer must not hesitate to pause to understand what is happening. If, for example, a lack of information is causing discomfort, the interviewer can reformulate the study's objectives.

#### **The interview appears to be making the person tired:**

- The interviewer must not hesitate to take a break, discuss other subjects, or joke a little to create some amusement, and clear everyone's mind. This is just as beneficial for the interviewer as it is for the interviewee.

#### **During the interview, and in response to a subject that is being addressed, the interviewee shows signs of stress, anxiety, or cries:**

- The interviewer must pause and identify the reasons for this behaviour and these emotions. One must not hesitate to interrupt the interview if necessary, and keep the person's contact details in order to come back and finish the interview at a later time. If a vulnerable situation

has been identified, the interviewer must inform the person of any pertinent assistance and/or services available.

**The interview is going nowhere:**

- It is preferable to stop the exchange and thank the person for their participation.

**A person asks for your opinion**

- The interviewer must emphasise the neutrality of the facilitation role, and place the participant right back into the heart of the process, as the sole expert on the subject.

**The respondent requests feedback on study results:**

- This question must be discussed prior to commencing the interviews, and interviewers must be briefed in this regard during their training so that they are able to respond to such requests. For ethical reasons, a contact person must be identified from the outset, and their contact details communicated to participants, so that participants may make a complaint if they wish to.

**The surveyor feels uncomfortable or senses danger:**

- The interview must be stopped: priority must always be given to everybody's safety!



**Participant compensation**

Survey participants, whatever the type of survey, are not paid for their participation. Sharing one's opinion, subjective experience, and life events is an entirely voluntary process, in order to avoid interviewee "professionalisation". Otherwise, responses might, for example, be oriented to suit the interviewers and the organisations that they represent. However, participation in the study must cost participants nothing, except the time shared. Travel costs are usually reimbursed, and a snack offered.



**Working with familiar third parties or close relatives**

Some interviews will be conducted in the presence of a third party, for example in the case of interviews with children (the presence of a familiar person – family member or teacher – can be reassuring and facilitate the exchanges) or with persons with language or intellectual difficulties (family member or caregiver).

Be sure to speak directly to the person interviewed, and to maintain eye contact with them, rather than interacting only with the accompanying person(s) or translator. The interview is about them, it is their feelings and experiences that you are interested in, and not the projections or opinion of the accompanying person.

### 3- Human Resources: profiles, responsibilities and competencies

The different types of interview require different profiles.

#### 3-1- Individual interviews

The **surveyor/interviewer** is the person responsible for collecting data during an interview, by following the developed guide.

Interviewer profile	
Social skills	<ul style="list-style-type: none"><li>• Able to establish personal contact with diverse individuals in a short time</li><li>• Able to adapt to a variety of investigation contexts</li><li>• Depth and breadth of communication skills (active listening, adaptation to a diversity of profiles)</li><li>• Accustomed to communicating with persons with different types of disabilities</li><li>• Dynamic, responsive, curious, motivated</li></ul>
Technical competencies	<ul style="list-style-type: none"><li>• Versed in qualitative interview methods</li><li>• Understands the issue under investigation</li></ul>
Other recommended competencies	<ul style="list-style-type: none"><li>• Excellent knowledge of local culture</li><li>• Speaks the language and is familiar with vernacular</li><li>• Appropriate profile for the cultural context (gender, ethnicity, etc.)</li></ul>
Responsibilities	
Main activities performed during the interview	<ul style="list-style-type: none"><li>• Performs qualitative interview in accordance with interview execution rules</li><li>• Takes swift, comprehensive, neutral notes</li></ul>

In some cases, the main interviewer may be accompanied by a **translator**. In such cases, translators are central figures, as they are the bridge between interviewers and interviewees.

Translator/interpreter profile	
Social skills	<ul style="list-style-type: none"><li>• Able to establish personal contact with diverse individuals in a short time</li><li>• Able to adapt to a variety of investigation contexts</li><li>• Dynamic, curious, motivated</li><li>• Team work</li></ul>
Technical competencies	<ul style="list-style-type: none"><li>• Capable of translating raw narratives without interpretation</li><li>• Familiar with Humanities and Social Sciences methods</li></ul>
Other recommended competencies	<ul style="list-style-type: none"><li>• Autochton, excellent knowledge of local culture</li><li>• Speaks the language and is familiar with vernacular</li><li>• Appropriate profile for the cultural context (gender, ethnicity, etc.)</li><li>• Respects the framework given</li><li>• Inspires confidence</li></ul>

Responsibilities	
Main activities	<ul style="list-style-type: none"> <li>• Participates in initial training with the main interviewer</li> <li>• Provides accurate, neutral, real-time interview translation</li> <li>• Communicates with the main interviewer</li> <li>• Takes notes during the interviews</li> <li>• Participates in debriefing sessions after each interview and shares impressions</li> </ul>

### 3-2- Collective interviews



A focus group requires the collaboration of two profile types: a facilitator and an observer. The facilitator steers exchanges, sets the group into motion and guides the group throughout the interview. The observer accompanies, observes and takes detailed notes relative to various aspects of the exchanges (content, reactions, group dynamics, environment, etc.). Facilitator and observer work as a pair. Indeed, the observer can provide guidance to the facilitator to assist the unfolding of the interview (using non-verbal gestures, but no direct intervention), and the facilitator can signal important exchanges to record. Focus groups therefore require preparatory work on the part of the facilitator/observer duo so that both are in tune before beginning: in relation to interview objectives and any group-related issues, and in relation to their mode of communication during the interview.

	Facilitator	Observer
Profiles		
Social skills	<ul style="list-style-type: none"><li>• Able to establish personal contact with diverse individuals in a short time</li><li>• Able to adapt to a variety of investigation contexts</li><li>• Depth and breadth of communication skills (active listening, adaptation to a diversity of profiles)</li><li>• Accustomed to communicating with persons with different types of disabilities</li><li>• Dynamic, responsive, curious, motivated</li><li>• Team work</li></ul>	
Technical competencies	<ul style="list-style-type: none"><li>• Versed in qualitative interview methods</li><li>• Understands the issue under investigation</li></ul>	<ul style="list-style-type: none"><li>• Swift, comprehensive, neutral note-taking</li><li>• Versed in observation techniques</li></ul>
Other recommended competencies	<ul style="list-style-type: none"><li>• Excellent knowledge of local culture</li><li>• Speaks the language and is familiar with vernacular</li><li>• Appropriate profile for the cultural context (gender, age, ethnicity, etc.)</li></ul>	
Responsibilities		
Main activities performed during the interview	<ul style="list-style-type: none"><li>• Monitors and controls the dynamics of a group of individuals with a variety of personalities, statuses and beliefs</li><li>• Encourages participation of all participants by facilitating exchanges.</li></ul>	<ul style="list-style-type: none"><li>• Observes and reports:<ul style="list-style-type: none"><li>• discursive elements (content, <i>verbatim(s)</i>, etc.)</li><li>• non-verbal communication elements (emotions,</li></ul></li></ul>

	<p>prompting, reformulating and synthesising what has been said</p> <ul style="list-style-type: none"> <li>• Fosters interactivity by encouraging interactions between participants</li> <li>• Regulates how long and how many times each individual intervenes, in order to encourage the expression of all participants</li> <li>• Communicates with the observer</li> </ul>	<p>attitudes, facial expressions and/or body language, participant reactions, group dynamics, etc.)</p> <ul style="list-style-type: none"> <li>• information about the environment and interview conditions (interruptions, etc.)</li> <li>• Makes a note of the guide questions that are not addressed</li> <li>• Keeps time</li> <li>• Communicates with the facilitator</li> </ul>
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### Peers as facilitators/interviewers

Children, adolescents or persons with disabilities can co-facilitate interviews: they are then referred to as “mentors” or “buddies”. Mentors or buddies are involved from the outset of the study preparation phase, and can, for example, contribute to question rewording in order to ensure that questions are understood by their peers. In addition, they receive special training on data collection techniques, so that they can ask questions during data collection. The accompanying expert is then the one who takes the notes during the exchanges, and intervenes as necessary.



### Gender and disability sensitive recruitment

Put together a mixed and balanced team of interviewers (in gender or disability terms), and create working conditions that are supportive for everyone who is working (training, work schedules, expected results, etc.). Such diversity will stimulate exchanges between the professionals involved and strengthen data collection team cohesion. Ultimately, collected data will be all the higher quality for it!

## 3-3- Interviewer/observer/translator training

Training of all the stakeholders involved in data collection is an essential step in order to guarantee the team's expertise and professionalism<sup>216</sup>.

Indeed, training modules must address data collection methodology (e.g. by including a brainstorming workshop looking at the factors that can compromise interview quality, theoretical advice and/or practical exercises based upon developed guides). Training modules must also include

<sup>216</sup> Expertise is one of the ethical data management recommendations in the context of studies and research See the Guidance Note “**Studies and research at Handicap International: Promoting ethical data management**”, 2015, p. 29.

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/EthicalDataManagementGN\\_04.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/EthicalDataManagementGN_04.pdf)

sessions on ethics (in particular, relating to interviewee safety, informed consent, referrals and/or data security).



Training is also an opportunity to develop interviewer awareness of gender, age and disability issues (attitudes to adopt and methods to apply).



### **Distance learning (or remote training)**

In some cases, team training must be performed remotely (via Skype or telephone). This kind of exercise is entirely feasible. However, extra time and back-up solutions must be foreseen (especially if the internet connection is poor). Distance learning requires significant preparation and anticipation (e.g. sending training materials ahead of time), and significant energy and patience on the part of the trainer!



### **Key points to remember**

- Constructive attitudes and practices that contribute to quality interviews include: respect for individuals and their rhythms, simple language, caring, thoughtful interventions and caution.
- Make sure you have allowed sufficient time with each participant to cover the entire guide.
- Work with the right people, with the right competencies.



### **At the end of this step you have...**

- ➔ Collected qualitative data in accordance with, and in application of, the techniques presented in the protocol.



### **Now we suggest that you...**

- ➔ Navigate within the guide based on your needs.

#### **To learn how to develop an interview-based qualitative methodology:**

- ➔ Consult "[Processing \(narrative/discursive\) qualitative data: Transcription](#)"
- ➔ Consult "[Analysing qualitative data](#)"

#### **To compare with other data collection techniques:**

- ➔ Consult "[Conducting observation sessions](#)"
- ➔ Consult "[Conducting a quantitative interview](#)"

## **B4- Processing (narrative/discursive) qualitative data: Transcription**

At this point, data has been collected and recorded, either directly in writing through note-taking, or vocally using audio recorders. This data must now be gathered and converted into an analysable format.

### **1- Definition**

Transcription is the conversion of verbal content, collected orally, into a written format that can be qualitatively analysed. Transcription can be performed during interviews (detailed note-taking) or after the interviews. In the second case, voice recordings (or videos with sound) are necessary<sup>217</sup>: if there is no recording, it is difficult to faithfully transcribe exchanges.

### **2- Transcription modalities**

There are several possible transcription modalities.

#### **2-1- “Extreme” transcription (verbatim and intelligent)**

**Verbatim transcription** faithfully reproduces interviewer and interviewee words, and incorporates contextual interview elements, which are essential for understanding the interaction. It therefore transcribes every verbal exchange, word-for-word, in the order of utterance. However, it also transcribes all the non-verbal elements - such as whispers, pauses, silences, interruptions or smiles, facial expressions and/or body language, shrugs – all of which are indicators of the interviewed or observed person's state, emotions and feelings. Verbatim transcription is not a summary of the interview. It reproduces the entire interview's content and atmosphere.

Furthermore, all transcriptions must follow a precise nomenclature, reproduced identically for each interview.

 See [Tool 6](#): “**Verbatim and edited qualitative interview transcription nomenclatures**”.

This process is long, tedious and more difficult than it might appear. However software<sup>218</sup> is now available to simplify the process. Verbatim transcription is also the only transcription modality that enables qualitative analyses to access the implicit, i.e. that which relates to the meaning given to the

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<sup>217</sup> Recordings must be named, stored and archived. The entire set of interviews then remains accessible for further processing and analysis, if necessary.

<sup>218</sup> Voice recognition software now exists, enabling oral discourse to be transformed into written text (e.g. Express Scribe Transcription Software – open access; F5 Software – licensed).

words and expressions exchanged. This is indispensable, for example, when the objective is to explore representations (value systems, cultures, etc.), or explain ways of thinking or feeling.

This transcription modality is rarely used in studies implemented in the field, mainly because time constraints most often prevail over such material's potential contribution and informational benefits.

Verbatim transcription taken to its extreme is **intelligent transcription**. Intelligent transcription restructures the exchanges: discussion content is respected, however statements are reformulated and the order of exchanges is modified, in order to make the text more readable and easier to share. This transcription modality is often used, for instance, in the case of testimony. However, the raw information is indeed transformed. Therefore, this alternative is in actual fact more an initial analysis and interpretation of what was said, than a transcription exercise.

## 2-2- Alternative transcription modalities (edited, on-the-spot and note expansion)

A third transcription alternative strikes more of a balance between the time spent transcribing and later opportunities for analysing content: **edited transcription**. The entire exchange is not transcribed systematically as it is for a verbatim transcription. Only the raw material considered interesting is faithfully transcribed. Edited transcription must also follow a defined nomenclature, which must be reproduced for all the interviews transcribed.

➡ See [Tool 6](#): “**Verbatim and edited qualitative interview transcription nomenclatures**”.

Therefore, edited transcription is often used, as it is less time-consuming. However, it is a delicate operation, because the transcriber must select exchange sequences and reproduce them as faithfully as possible, without altering/distorting their nuances and subtleties.

When it has not been possible to make an audio recording, another option is **on-the-spot transcription**. In this type of transcription, detailed note-taking is performed during the interview (either by the interviewer or by a third party), and these notes are completed immediately after the interview, in order to clean and clarify the discourses captured.



This alternative is very useful when teams have little time for data processing.

However, it does not enable discourses to be transcribed word-for-word. Moreover, though such transcription is possible for simple questions, it becomes more arduous and difficult to implement for more complex interviews.

A final approach combines on-the-spot note-taking and edited transcription: the **note expansion approach**. Notes are taken during the interview by the interviewer. However, the interviewer listens to the interview recording as soon as possible in order to:

- Ensure that essential data is transcribed,
- Clarify/adjust certain information, or
- Complete the transcription by including a number of precise *verbatim*s.



The note expansion approach is particularly interesting, because it combines the advantages of both of the last methods. Indeed, it enables interesting exchanges to be captured and documented, while limiting the time devoted to qualitative data processing.

## 2-3- In brief

Transcription type	Recommended?	Why?	Recording necessary?
Verbatim	+	In particular, if the objective is to work on the target population's representations and values.	Yes
Intelligent	-	Raw material is transformed during transcription, which limits the potential for content analysis.	Yes
Edited	++	In particular, if there are significant time and human resources constraints. This option enables the constitution of a body of data that more precisely addresses the essential factors that meet the study objectives.	Yes
On-the-spot transcription	-	Some elements of the exchange will be irretrievably lost. Others may be missing at the time of analysis.	No
Note expansion approach	++	Combines the advantages of edited and on-the-spot transcription: fewer resources required for implementation and documentation of most essential sequences.	Yes



### Transcription as a quality control procedure

Handicap International rarely requests interview transcripts from the consultants who conduct studies. However, just like a quantitative database, this raw material can be useful for further analysis, as well as to check the quality of work performed (actual execution of interviews, quality of exchanges, data collected, etc.). Therefore, it is advisable to request that, in addition to the protocol and study report, deliverables include the transcripts or minutes of all interviews conducted, as well as the original recordings, when they exist.

### 3- Resources required for implementation

Transcription is a phase that requires **time**.

As an indication, it is estimated that for each hour of audio recording, 2 to 3 hours are required for a verbatim transcription. And, this time may be prolonged if the exchanges must be translated. For example, an interview in Arabic transcribed into English for analysis.

In terms of **human resources**, one or more audio typists (or transcribers) will be required depending on the number of interviews performed. Transcription is faster if the audio typists are familiar with the context, attended the interviews and have already performed this type of exercise. The interviewer (or expert, or study coordinator) must check the transcripts to ensure that there is no error. This verification process should be seen as an opportunity to begin the analysis, rather than as a waste of time.

Voice recognition software now exists, enabling oral discourse to be transformed into written text (e.g. Express Scribe Transcription Software – open access; F5 Software – licensed). However, none of this software is perfect (transcription is sometimes approximate or distorted by extraneous interview sounds, voice and accent recognition is tricky). Therefore software-generated transcripts require more thorough verification than when audio typists do the work.

Audio typist recruitment and/or software purchases must be integrated into the study's estimated budget at the outset, during the planning phase. Costs will vary from one study to another, depending upon country of implementation, as well as on the profiles of recruited staff (expert or junior).

#### Key points to remember

- Transcription is the conversion of verbal content into a written and analysable format.
- It is strongly advised to transcribe interviews progressively, in real time.
- Transcription type determines possible analyses.
- Edited transcription and the note expansion approach are interesting alternatives in our contexts.

#### At the end of this step you have...

- ➔ Gathered a body of textual and/or narrative data from interviews/observations, and this body of data is ready to be analysed.



## Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

### To continue to develop a qualitative methodology:

- ➔ Consult "[Analysing qualitative data](#)"

### To compare with a quantitative approach:

- ➔ Consult "[Processing quantitative data](#)"

## B5- Analysing qualitative data

Here, the objective is to produce an analysis, to make sense out of a body of textual data. Such content analysis does not simply address one interview, but all the interviews conducted as part of a study. Interviews may echo or complete each other, converge or single themselves out. Interviews must also be analysed in the light of both originally stated objectives and interviewee profiles (who is expressing themselves? about what?). As opposed to quantitative statistical analyses, qualitative analysis methodologies are not stabilised. Indeed, methodological procedures do exist, but they are not standardised, and implementation quality is highly dependent upon the analyst's experience<sup>219</sup>.

### 1- A few qualitative analysis principles

#### Content analysis is possible at two levels

- First, qualitative analysis can focus upon explicit discourse. This analysis of apparent content focusses upon what is expressed, and aims to identify both recurring themes and interviewee interest in the issue, and to select, gather and analyse the interesting parts of the body of data. The main implicit analysis techniques used are thematic analysis<sup>220</sup> and lexical analysis<sup>221</sup>.
- Qualitative analysis can also focus upon implicit discourse. Content analysis then focusses on meaning, and consists in an interpretation of the discourse, of reading "between the lines", in order to apprehend the meaning of words, collective representations and the influence of

<sup>219</sup> Villate JC. *L'entretien comme outil d'évaluation*. 2007. p. 33.

[https://www.lmac-mp.fr/telecharger.php?id\\_doc=48](https://www.lmac-mp.fr/telecharger.php?id_doc=48)

<sup>220</sup> Thematic analysis: analysis based upon the recurring concepts and themes addressed in the interviews. This analysis is therefore based upon categorisation (coding) of the body of data.

<sup>221</sup> Lexical analysis (or lexicometry): quantitative analysis of the interview's verbal content (occurrence of words, proportions, use, placement, etc.). Statistics (frequencies, correlations) – with the support of software – measure variables such as volume of speech, elocution speed, richness of vocabulary and distance of lexical repetition (or proximity).

social norms. The main explicit analysis techniques used are semantic analysis<sup>222</sup> and structural analysis<sup>223</sup>.

### **Transcription modality determines the possible analyses**

We saw above that accuracy of the recorded exchanges varies with selected transcription modality. This accuracy has an impact on types of possible qualitative analysis. Timing is key here.

- General note-taking and intelligent transcription effectively select data, by retaining only those elements considered essential at the time of transcription. There will therefore be a difference between what was said, how it was expressed, and how it is put into writing. In such cases, processing and analysis are faster, and enable the exploration and identification of general trends and major issues to which participants attach importance.
- In contrast, methodical and exact transcription of verbal discourse and non-verbal communication elements enables the hidden meaning behind spoken words to be probed and examined. The field of what is not expressed, of representations and of individual values can therefore be accessed. Data processing and analysis take longer, but enable in-depth understanding of a context, a problem, a population.

### **Qualitative analysis draws upon the analyst's posture and expertise**

High-quality qualitative analysis requires neutrality, objectivity and critical thinking on the part of the analyst. Analysts must not be swayed by their own representations and emotions, but must remain as close as possible to the participants' discourse and way of thinking. In this way, hasty and sometimes unreasonable, or overly oriented (consciously or unconsciously) interpretations may be avoided. Qualitative analysis is more than just an illustrative approach. Indeed, the objective is not simply to use pieces of the exchange to illustrate a pre-existing interpretation. Qualitative analysis is also more than just a playback approach. Indeed, *verbatim*s, i.e. interview extracts, must provide supporting elements that illustrate an analysis, but must never replace the analysis. Any narrative that you write, verbatim removed, must retain its value and meaning.

### **Qualitative analysis always includes a triangulation phase**

Triangulation enables information to be compared, sources and testimonials to be cross-referenced and collected data to be verified and confirmed. Several interviews are generally performed in order to cross-reference points of views on a given subject. In this way, the process is not limited to a single source. Therefore, the idea is not to summarise a situation, but to take advantage of this heterogeneity, variability. Triangulation avoids overly focussing upon the discourse of a handful of informants (e.g. considered better placed or better informed), and is a tool for understanding interviews better.

### **Study limitations must be presented**

Qualitative studies have limitations, just like quantitative studies do (data may be missing, avenues may remain to be explored, etc.). Here are a few examples of factors which can diminish a qualitative

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<sup>222</sup> Semantic analysis: analysis that is based upon the study of connotations and that identifies the implicit meanings attached to a word, to a unit of meaning (compound words, words, sub-words, sub-units such as affixes).

<sup>223</sup> Structural analysis: this type of analysis seeks to find the relationships between different situations or different phenomena, which are expressions of a hidden order. It looks at the dynamics which exist between units of meaning (associations, oppositions, etc.).

study's value: certain key informants could not be interviewed; interviews on sensitive subjects were conducted in the presence of a third party; despite the team's efforts, focus groups did not work, in particular due to excessive diversity of profiles, or the presence of an official of some sort (administrative or traditional). Such factors must be considered in the analyses, and, in the interest of transparency, highlighted in the final report.

## Synoptic participant table

It is advisable to create a synoptic table to log all interviewed individuals (or groups, in the case of focus groups). A synoptic table lists each individual along with their specific characteristics, such as age, gender, or disability type (being mindful to protect anonymity, of course). This tool provides an at-a-glance picture of interviewee profiles.

Example: The qualitative analysis performed for the study "Representation and evaluation of disability in Haiti (Port-au-Prince, 2012)":

[http://www.hiproweb.org/uploads/tx\\_hidrt/docs/RS02Haiti.pdf](http://www.hiproweb.org/uploads/tx_hidrt/docs/RS02Haiti.pdf)

Identification Individu	Sexe	Classe d'âge <sup>24</sup>	Limitation fonctionnelle principale	Personnes répondant lors de l'entretien	Lieu de l'entretien
Individu 1	Homme	Adulte	Se déplacer	Personne handicapée	Pétionville
Individu 2	Homme	Sénior	Se déplacer	Personne handicapée + 1 proche	Pétionville
Individu 3	Homme	Enfant	Voir, se concentrer	1 proche	Port-au-Prince
Individu 4	Femme	Enfant	Voir	Personne handicapée + 1 proche	Port-au-Prince
Individu 5	Femme	Enfant	S'habiller Communiquer	1 proche	Delmas
Individu 6	Femme	Enfant	Se concentrer Epilepsie	1 proche	Delmas
Individu 7	Homme	Enfant	Communiquer	Personne handicapée + 2 proches	Port-au-Prince
Individu 8	Homme	Enfant	Se déplacer et communiquer	1 proche	Port-au-Prince
Individu 9	Femme	Adulte	Se déplacer	Personne	Port-au-Prince

<sup>24</sup> Enfant : personne handicapée âgée de moins de 18 ans,  
Adulte : personne handicapée âgée de 19 à 59 ans,  
Sénior : personne handicapée âgée de plus de 60 ans.

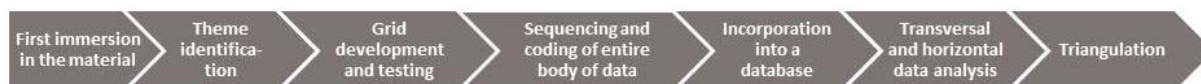
108

Only thematic analysis will be developed in guide. Indeed, it is the technique most frequently used in our intervention contexts, as it is based upon explicit discourses, a clear and reproducible methodological sequence, and enables a wide range of objectives to be met within a reasonable time<sup>224</sup>.

## 2- Thematic analysis

Thematic content analysis is performed using an analysis grid, structured around descriptive and/or analytical categories/themes that enable collected data to be classified and compared.

A thematic analysis follows the following sequence:



### Phase 1: First immersion in the material

Feel free to allocate some time to discovering the material, in particular for a first quick read of conducted interviews. Write down your initial impressions, comments and ideas. The interview transcript verification phase is a good opportunity for a first immersion in and acclimatisation to collected data.

<sup>224</sup> References are provided in the section "[For further information](#)" of this guide.

## **Phase 2: Theme identification (reproduced in analysis grid – next phase)**

Theme identification draws upon a small selection of interviews, considered informative and varied. Theme identification can be performed by a duo: two people separately devise an initial coding scheme using a sample of interviews, and then compare their analyses and make any necessary adjustments. In the case of semi-structured interviews, analysis grids often use the interview guides as a starting point. However, transcribed interviews may reveal new themes and insights, which enrich and nuance the grid.

Themes must be:

- Consistent with the study's subject and objectives,
- Mutually exclusive, i.e. not overlap,
- Homogeneous: the units of text specifying each theme must be analogous,
- Simple to use: category contours must be clearly defined in order to facilitate manipulation,
- Limited in number.

## **Beginning analysis from the outset of the data collection phase**

It is advisable to organise regular debriefing sessions with the interviewers during the data collection phase, in order to begin the job of collaboratively identifying the themes. Feel free to involve interviewers and to invite them to share their points of view. However, be sure to also start identifying the main underlying issues and themes during the actual interviews. New avenues of analysis will certainly emerge from your exchanges and discussions. This process will simplify the post-field phase of work and save time.

## **Phase 3: Grid development and testing**

Once the themes have been identified, they must be organised, and articulated together. Each theme must have an associated code and a stabilised definition of its contours.

In order to check the developed grid's stability and relevance, the grid must be applied to other interviews. Next, any necessary adjustments are made: in formulation, or theme contour definition. If new themes appear, make a note of them, and add them to the grid.

## **Phase 4: Sequencing and coding of entire body of data**

Once the grid is stabilised, it is used to scrupulously screen each interview. Each unit of text is analysed and allocated to the relevant theme. The same process is repeated for each interview.

## **Phase 5: Incorporation into a database (optional when using software)**

All the coded sequences must now be gathered into one place. It is, for example, possible to enter the entire body of information into a database, which presents themes in rows and interviews in columns. Certain software (such as N'Vivo) enable all the extracts related to a specific theme to be identified and selected.

## **Phase 6: Transverse and horizontal data analysis**

The preceding phases untangled, sorted and categorised the information gathered. Now, it is time to make sense of this new information. Several analytical approaches are now possible:

- **Transversal analysis**, i.e. interview specific analysis. This type of approach provides insight, on a case-by-case basis, into how individuals think and express themselves.  
Examples of possible questions to explore: Are discourses consistent from one individual to another? Have any respondent profiles emerged? How can extreme cases and/or exceptions be explained?
- **Horizontal analysis**, i.e. a theme-by-theme analysis of all extracts and quotes.  
Examples of possible questions to explore: What are the themes most developed? What are the minority themes? Are there any recurring argumentations (or expressions)? What types of association are made?



### Gender sensitive analysis and interpretation

A body of data can be analysed using a “gender” sensitive lens: situations, experiences, attitudes and/or practices can be compared and analysed in the light of the social roles attributed based on gender and/or of the power dynamics in effect in the community.

(e.g. a woman may have limited access to a particular service, because, as a woman, she is forbidden to use public transport unaccompanied).

It is also essential to keep in mind that, from one context to another, and from one culture to another, there may be variations in social role distribution, access to and control over resources, power dynamics, as well as legal and social status of men and women. The differences observed within one community do not therefore necessarily apply to another community. One must therefore remain very vigilant when attempting any kind of generalisation.

### Phase 7: Triangulation<sup>225</sup>

Information is cross-tabulated, confronted. Initial trends (or results) are triangulated in order to be validated.



### Involving target population representatives in analysis and interpretation

Restitutions and exchanges can be arranged with representatives of the populations concerned by the study, or of other relevant stakeholders. Such workshops can take place at different times during the analysis, and mainly address two objectives:

- At the start of the analysis: assisting in theme identification and prioritisation to guide the analysis.
- At the end of the analysis: verifying results obtained and thereby testing analysis quality and reliability. This kind of initiative is especially interesting with adolescents. Indeed, inviting them to share their own interpretation of a situation or phenomenon, their own perspective, is a very informative and rewarding exercise, for everyone involved!

<sup>225</sup> Triangulation may be applied to data (identical/request information is collected from several informants) and/or methods (several methods are combined to collect data). In both cases, the different data are analysed in the light of each other, they are crossed-verified. Triangulation can be used to confirm (or refute) data collected from multiple sources, as well as to corroborate observed trends or strengthen interpretations. It therefore enables certain biases (during collection, analysis and/or interpretation) to be avoided, thereby contributing to the quality of information produced.

### 3- Resources required for implementation

Qualitative analysis is a process that requires **time**. Indeed, each interview must be read, sequenced, encoded into a grid with pre-defined themes. Then, all of this matter must be analysed and interpreted. However, despite the fact that all the analytical work is performed after data collection (the analyst retrieves the data, and then works remotely), it is possible to begin to identify key themes at the outset of the field phase.

Time devoted to analysis depends upon the number of interviews, the expected level of analysis required to meet the objectives, and the analyst's expertise. As an indication, the analysis phase represents 15-25% of a study's total duration. Therefore, for a study planned over 12 months, it is advisable to plan at least 2 weeks for data analysis.

In **human resources** terms, at least one person must be assigned to analysing the body of qualitative data. However, it is advisable that at least two people be assigned to this work, and that a supervision system be put in place (to reduce subjectivity and bias). The analyst can work remotely, alone or as part of a team. It is advisable to find someone who has already performed this type of analysis. Text analysis software is now available (e.g. N'Vivo or Atlas.ti – licensed), and simplifies the interview sequencing and coding work. Such software also enables a few quantitative analyses to be performed, but does not enable more in-depth content analysis. Data is pre-digested so that the analyst can make faster progress, but the analyst remains in charge of the thematic analysis.

Staff recruitment or software purchase(s) must be integrated into the study's **estimated budget** at the outset, during the planning phase. Costs will vary from one study to another, depending upon country of implementation, as well as on the profiles of recruited staff (expert or junior).

#### Key points to remember

- Transcription type determines the level of analysis possible.
- The analyst is a key person: the analyst's skill and equanimity contribute to the study's quality.
- An analysis report, *verbatim* removed, must retain its value and meaning.
- Thematic content analysis follows defined phases.
- Do not underestimate the time required for data analysis!

#### At the end of this step you have...

- ➔ Gathered together, sorted and analysed all the data collected during the collective interviews.

#### Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

**To formalise study/research findings:**

- ➔ Consult "[Sharing and using study findings](#)"

**To compare with a quantitative approach:**

- ➔ Consult "[Analysing qualitative data](#)"



## C. Organising and conducting observation sessions

You have selected observation techniques to collect the necessary data for your study.

As previously explained, there are three types of observation: participant observation, which requires immersion in the environment and extended periods of the expert's time, for both data collection and data processing and analysis; structured (or systemic) observation, which is performed using a specific observation grid; and naturalistic observation, which enables more informal and anonymous observation of an environment. The observer's level of involvement changes with observation type. In the first case, the observer is a stakeholder, an actor involved in the event. In the second and third case, the observer is more of a spectator of the event.

In all cases, the observer has the role of witness, and the job of conducting the observation in complete objectivity and transcribing what is seen and heard into analysable material. However, being present and observing are not the same thing, and observing involves more than simply watching. An observation session must be prepared and must satisfy defined technical criteria. Observation is based upon what can be watched and described, i.e. on features that leave a trace behind them, and that can be transformed into descriptive data. It therefore solicits the expert's eyes (what is seen) and ears (what is heard and associated with gestures/body language and behaviour).

Observation techniques are similar to film and video techniques. In the same way that audiovisual data requires a film shoot protocol, observation requires a series of technical and narrative choices, and decisions in relation to specific questions, such as: What is the observer's level of involvement? What is the observation's field of vision? What is the observation frequency? Where is the observer placed?

Finally, observation can be applied in different contexts (development or emergency response) and different sectors (health, education, water, sanitation and hygiene (WASH), accessibility, market studies, social cohesion, etc.). In general, structured observation is the practice most often used in our contexts.

### **C1- Selecting individuals, locations and observation frequencies**

If the observation in question relates to individuals or to families, qualitative interview selection modalities apply<sup>226</sup>, and individuals are therefore selected using the principle of maximum profile diversification. The individuals composing the sample must enable the entire range of possibilities to be explored. This is essential in order to address all situations, gather different points of views and articulate thought processes and analysis around these different points of view.

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<sup>226</sup> For further information on this subject, consult the section "[Selecting individuals for qualitative interviews](#)".



## Can anyone be observed?

Observation does not require the active participation of the people observed. Indeed, it does not involve any exchange, and is therefore adapted for study subjects that involve very young children (e.g. to assess their development, or analyse the interactions between them and their caregiver during a rehabilitation therapy session).

However, the presence of the observer can sometimes be disruptive and generate behaviour changes. For example, adolescents may feel judged and hide their reactions, and persons with intellectual or mental difficulties may feel stressed by the observer's presence and cease all activity.

➡ See [Guideline Sheet 2](#): “**Selecting data collection methods suitable for specific needs (disability and age)**”.

Observation sites and number of sites observed are elements that must be selected and defined according to study objectives and context. If there are a number of possible observation sites to choose from, sampling can be purposive<sup>227</sup>, convenience<sup>228</sup>, or mobilise other quantitative study procedures<sup>229</sup> (e.g. random or stratified random sampling).

There are several possible strategies for determining observation session frequency:

- The same location is observed several times: observations are staggered and repeated over time, in order to gather a body of repeated observations;
- A single observation is performed in each of a number of different locations: observations are multiplied in order to cover a wider and more representative area;
- A single observation is possible, especially in the case of one-off, unpredictable, or spectacular events.

Finally, observation sessions can be continuous, or performed over successive, separate windows of times. Whatever the strategy chosen, observation must be limited in duration, as this technique requires sustained attention on the part of the observer.

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<sup>227</sup> Purposive sampling: sample constitution is guided by criteria that are relevant to the study's objectives and previously defined by the study's expert/team.

<sup>228</sup> Convenience sampling: observation sites are selected for practical reasons. They are available and easily accessible. This type of sampling has no representative value.

<sup>229</sup> For further information on this subject, consult the section “[Participant sampling for a quantitative study](#)” in the “Managing quantitative data” chapter.

## C2- Developing an observation grid

### 1- Why an observation grid?

The observation grid specifies what is to be observed, and how observations are to be recorded from one session to another. It therefore guides the observer during the observation sessions.

Observation grids are more or less structured, depending upon type of observation performed (participant or structured). It is not unusual for an observation grid to be composed of several worksheets. This enables a variety of observable and textually recordable elements to be captured (practices, frequencies, dialogues, etc.), and the observer's comments to be included<sup>230</sup>.

### 2- Observation grid development

An observation grid is specific to the observed event, and be designed to meet the study's objectives. All actions can be broken down into several sequences, have a beginning and an end, and fit into defined spatio-temporal contexts. Observation requires detailed examination of the progression of such sequences.

Therefore, the first step is to precisely define the aspects that observation must systematically address, which involves selecting one or more areas of interest. These areas of interest will form a template upon which the observation grid is developed, and which will guide and accompany the observer. The challenge is to identify - operationally, simply, clearly and unequivocally – the precise elements that must be observed.

This is particularly delicate when, for example, behaviour is being observed. Indeed, in such cases, terminology must be stabilised, especially if several observers are involved. And, if there is only one observer, this observer must be able to describe how behaviours translated tangibly in the field.

**Example:** Observation of the behaviour of a class of children. To stabilise observation grid terminology, precise adjectives must be provided and defined. A lazy child does not finish the work given in the time given. An aggressive child hits and pushes his classmates, and shouts insults. An unmotivated child does not do the work requested by the teacher. An inattentive child plays with the classroom equipment.

Examples of how observation can be use are presented in the following sidebar. Observation can, for example, be a very useful technique for project assessment. In this case, observed items are defined in relation to the interventions implemented by Handicap International (Example 1), or based upon defined standards (Example 2). However, observation can also go beyond the observation of practices. Observation may also look at interactions between individuals, and/or focus on attitudes and representations (e.g. through dialogue, facial expressions and/or body language or certain types of behaviours) (Examples 3 and 4).

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<sup>230</sup> In the specific case of participant observations, it is preferable for the observer to use a log book in which all observations, comments and other related information is recorded.

## Observation grid examples

**Example 1:** Evaluation of health worker practices in primary healthcare centres to identify children with impairments. Here, the grid is used to:

- Record the absence of, or execution of, specific acts, such as:
  - Explanation of objectives and identification procedure,
  - Collection of information on the child's past and present clinical history,
  - Use of the established protocol for examination of the head, eyes, mouth, ears, neck, chest, abdomen, anus, genital system, hips, legs and spinal column.
- Measure each specific act's execution quality (on a scale with 5 modalities, ranging from: "need for improvement" to "very good").

**Example 2:** Preparation of a report identifying encountered obstacles in a municipality, for an accessibility diagnosis<sup>231</sup>. Here, the observation grid is used to evaluate the compliance or non-compliance of an environment's features, in relation to parking, obstacles, crossing roads, signage and orientation and/or security.

**Example 3:** Analysis of the conditions under which persons with disabilities and elderly persons are welcomed into a health facility. Here, the grid follows the patient from the time of arrival through to their referral to the appropriate service. The focus is then on the health professional's and patient's gestures, choice of words and facial expressions and/or body language, as well as on reception quality, general atmosphere, etc.

**Example 4:** Validation of a data collection tool. Here, the observation grid enables the evaluation of a third party's understanding and acceptance of a tool. The items then focus upon all the observable elements pertaining to a state, an emotion: interviewer or interviewee hesitation, rewording, lapses in concentration, laughing, signs of discontent, even participant postures and positions during the observation, etc.

## 3- Observation grid translation

Data collection tools are generally developed in Handicap International's official languages (French and English), in order to simplify coordination between the different HI actors involved (project managers, technical coordinators, technical advisers, technical studies and research coordinator...).

The translation process is essential, as the meaning given to each word and to each question must be respected, in order to ensure the use of appropriate terminology and to avoid interviewers improvising at the time of data collection.

Several translation methods exist, however it is advisable to use the back-translation technique. This method mobilises two bilingual individuals. One individual translates the tool from French (or English) into the local language. The second individual then back-translates the translated version of the tool into French (or English). The original and back-translated version are then compared and discussed.

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<sup>231</sup> See the practical guide "**Conduct an accessibility audit in low- and middle-income countries**", 2015, p. 47.  
[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/AccessibilityAudit\\_PG13.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/AccessibilityAudit_PG13.pdf)

## **4- Observation gridtesting**

The observation grid must be tested in real-life conditions, before being used in the field. Observation grid testing will identify inconsistencies or missing information relating to the elements to be observed and the terminology employed, test the grid's ease-of-use by observers in practice, and ensure that there is sufficient space to record additional comments and notes.

A debriefing session can be organised with the observers after the pilot test. A debriefing session can address what was easy/what was difficult in using and completing the grid, as well as in the observation process itself (how observation was received by the targeted population, changes in behaviour, etc.). Necessary adjustments are then made before the grid is used in the field.

### **C3- Conducting observation sessions**

#### **1- The key phases of an observation**

##### **1-1- Phase 1: Making observation session appointments**

The first thing to do is to make contact with the people responsible for the identified families or facilities/locations, in order to obtain authorisations and to define the time windows in which observation may be conducted. It is therefore necessary to provide understandable information about the objectives, reasons for selection and duration of observations. And, it is strongly advisable to use clear and simple vocabulary and words that have meaning for the people in question, in order to ensure their adherence.

##### **1-2- Phase 2: Equipment preparation**

Before conducting an interview, you must ensure that you have all the necessary equipment at your disposal: observation grid, pen, audio recorder (pre-tested to verify proper operation), photo or movie camera, as required.

##### **1-3- Phase 3: Observation and note-taking**

The observation sessions must be conducted in accordance with the decisions made during protocol development. In addition, they must respect the fundamental principles of discretion and rigour. Discretion, because the observer's presence can have a perturbing effect on individuals' behaviour and reactions, and such effects must therefore be minimised. Rigour, because observation requires

sustained and continuous attention, whilst simultaneously recording what is observed in a way that is clear, understandable and re-usable later on.

The observer must first choose a physical vantage point for observation. There are three possibilities<sup>232</sup> :

- Remaining at a fixed point in space/in one place: observation is repeated and standardised, and data is therefore comparable.  
**Example:** In order to evaluate a clinical practice – observation of an examination room in a health facility.
- Adopting a variety of positions in order to observe situations in all their diversity.  
**Example:** In order to understand how the itineraries water follows within a community – observation of water-use practices at the water pump, on the way home from the pump, and in people's homes<sup>233</sup>.
- Following a person: the observer focuses upon a single person, and follows that person's movements and ambulations.  
**Example:** In order to understand why it may be difficult to stay in school – following a young girl, in the process of dropping out of school, as she goes through her daily activities.

**Note-taking** must capture what is observed without any loss of information. Depending upon observation type, the grid will be more or less structured, and note-taking more or less coded. In some cases, all observations will be directly encoded into the grid (e.g. absence or presence of a gesture or infrastructure). In other cases, observations will mainly be captured in the form of brief narratives that describe what is being watched and analysed (e.g. description of a scene).

It is important to remember that data processing and analysis approaches vary with type of data capture technique (codes or narrative),

- when coding is used, data is entered into a database and undergoes statistical processing<sup>234</sup>;
- when narratives are used, data is transcribed and undergoes content analysis<sup>235</sup>. In such cases, data can be captured in different ways: precise chronological minutes of observed sequences, on-the-spot dialogue transcription, post-observation descriptions of a scene.

Whatever the case, observers cannot rely upon their own memory to record their observations. Indeed, recording observations requires sustained attention and the management of a vast amount of information over a very short time frame. It is therefore advisable to take notes directly.

However, it is sometimes difficult to record observations on-the-spot, due to constraints relating to discretion, or time (e.g. actions occurring in succession, or simultaneous events). In such cases, note-taking must be deferred. However, do not wait until the end of the session. If necessary, feel free to isolate yourself for 5 minutes, in order to record your observations (e.g. if discretion is necessary, you can go to the bathroom).

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<sup>232</sup> Schatzman L and Strauss AL. **Field Research: Strategies for a Natural Sociology**. Prentice Hall PTR. 1973, 149 p.

<sup>233</sup> Commonly referred to as a Transect walk: <http://www.sswm.info/content/transect-walk>

<sup>234</sup> For further information on this subject, consult the sections "[Processing quantitative data](#)" and "[Analysing quantitative data](#)" in the chapter "Managing quantitative data".

<sup>235</sup> For further information on this subject, consult sections "[Processing \(narrative/discursive\) qualitative data](#)" and "[Analysing qualitative data](#)" in the "Managing qualitative data" chapter.

Moreover, it is always useful to record additional information, such as:

- Numbers and quantities: quantifying, calculating, counting objects, frequencies, etc. to provide potential indicators that will be simple to analyse later on;
- Descriptions, profiles of people met: such contextual information is of great value for analysis, as well as for fleshing out portraits, for example;
- Vocabulary, expressions, etc. along with details concerning observation circumstances (who, in what context);
- Diagrams representing the location. For example, if you follow people within a service (be sure to specify the observer's position on the diagram);
- Diagrams representing interactions between individuals during an observed sequence.

This information can be completed by photographs (specifying location and time), audio and/or video recordings. Photographs are a good complement to note-taking, but must be used with caution, as the permission of those photographed is required.

## 1-4- Phase 4: Observation finalisation

At the end of an observation session, it is essential to take about ten minutes to:

- Check notes and fill in any missing information (e.g. observation time windows, and any other important elements not recorded for lack of time);
- Make a note of general impressions;
- If audio or video recording, check that everything worked correctly. If no recording was made, take a little more time to make a note of everything that you remember about the conducted session.

## 2- Human Resources involved: profile and responsibilities

The observer is the key actor of the observation sessions, with the mission of translating what is observed into analysable material.

Profile of an observer	
Social skills	<ul style="list-style-type: none"> <li>• Able to adapt to a variety of investigation contexts</li> <li>• Discreet, very attentive to surrounding environment, perceptive</li> <li>• Dynamic, responsive, curious, motivated</li> <li>• Easily able to create relationships within short periods of time</li> </ul>
Technical competencies	<ul style="list-style-type: none"> <li>• Versed in observation methods</li> <li>• Understands the issue under investigation</li> <li>• Swift, comprehensive, neutral note-taking</li> </ul>
Other recommended competencies	<ul style="list-style-type: none"> <li>• Excellent knowledge of local culture</li> <li>• Speaks the language and is familiar with vernacular</li> <li>• Appropriate profile for the socio-economic and cultural context (gender, ethnicity, etc.)</li> </ul>

Responsibilities	
Main activities performed during the observation session	<ul style="list-style-type: none"> <li>• Observes and completes the observation grid: <ul style="list-style-type: none"> <li>• Goes through all the items defined by the observation grid</li> <li>• Adds complementary information</li> </ul> </li> <li>• Manages observation time frame, in accordance with guidelines</li> </ul>



### Study participants as observers

The subjects of the study can also be observers, and capture essential information. **Examples:** The family of a child living with cerebral palsy describes how a specific day unfolds; a woman describes her daily activities and interactions; a health professional records their daily activities in a log book. This alternative data collection process is useful when interviewers cannot enter into certain spheres (e.g. intimate/family), as well as for actively involving study participants. However, it is essential that training be provided, in order to explain what is expected, and how to fill in a log book or observation grid.



### Observer profile

As in the case of interviews and focus groups, observer profiles must be appropriate in light of the study's subject and observed individuals' characteristics.

**Example:** to analyse practices in a maternity ward, female surveyors will be much more accepted and more inconspicuous.

## C4- Processing and analysing data collected during observation sessions

In the case of narrative material, data processing and analysis resemble that of qualitative data collected during qualitative interviews<sup>236</sup>.

However, in the case of observation with closed or coded responses, data processing and analysis are identical to that of quantitative data collected with a closed questionnaire<sup>237</sup>.

<sup>236</sup> For further information on this subject, consult the sections "[Processing \(narrative/discursive\) qualitative data - Transcription](#)" and "[Analysing qualitative data](#)" in the chapter "Managing qualitative data".

<sup>237</sup> For further information on this subject, consult the sections "[Processing quantitative data](#)" and "[Analysing quantitative data](#)" in the chapter "Managing quantitative data".





## Key points to remember

- An observation protocol is very similar to a film shoot protocol.
- The observation grid is constructed based upon the sequence of the event, of the situation to be observed.
- Discretion and rigour are the key ingredients for high-quality observation.
- Depending upon observation type, data processing and analysis modalities resemble either qualitative or quantitative approach.



## At the end of this step you have...

- ➔ Collected data in accordance with the observation techniques presented in the protocol.



## Now we suggest that you...

- ➔ Navigate within the guide based on your needs.

### To continue, depending upon the nature of the collected data:

- ➔ Consult "[Processing \(narrative/discursive\) qualitative data: Transcription](#)"
- ➔ Consult "[Analysing qualitative data](#)"
- ➔ Consult "[Processing quantitative data](#)"
- ➔ Consult "[Analysing quantitative data](#)"
- ➔ Consult "[Sharing and using study findings](#)"

## Chapter 6 – Sharing and using study findings

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### Preamble

The question here is how to use the information generated by the study (primary – quantitative or qualitative, and secondary).

### 1- Introductory elements

When the study's framework was developed, the goals of the data collection were defined. The reliable information (or evidence) that is produced must be of use to the different Handicap International and partner stakeholders. For instance, to:

- Provide information to assist in operational decision-making;
- Improve field interventions;
- Demonstrate intervention effects;
- Contribute to an improvement in attitudes and/or practices;
- Feed local, national or international advocacy for policy change<sup>238</sup> ;
- Document and denounce an unacceptable situation in terms of international standards (human rights violation(s), International Humanitarian Law, non-respect of humanitarian principles, etc.)
- Contribute to the organisation's visibility and legitimacy

The challenge is to deliver the right messages, to the right people, at the right time, in order for these messages to be appropriated and used effectively.

The concept of "Knowledge Application"<sup>239</sup> is a bridge between the information generation and information use phases. In other words, it connects information producers and users. The dynamic process of knowledge application is characterised by the active transfer of information, in order to meet defined objectives (changing policies, improving practices, etc.).

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<sup>238</sup> Advocacy is a deliberate process aiming to influence decision-makers, in order to abrogate inappropriate policies, amend unfavourable existing policies and/or create new policies. Source: Sprechmann S, Pelton E. **Advocacy tools and guidelines: Promoting policy change**. Care. 2001 : [http://www.hiproweb.org/fileadmin/cdroms/Biblio\\_Renforcement/documents/Chapter-2/Chapter2\\_2/Chap2\\_2Doc3\\_1.pdf](http://www.hiproweb.org/fileadmin/cdroms/Biblio_Renforcement/documents/Chapter-2/Chapter2_2/Chap2_2Doc3_1.pdf)

<sup>239</sup> Knowledge application has become a major issue for both data producers and users. Indeed, internationally, increasing reference is being made to the following concepts: Knowledge Transfer and Knowledge Translation, Linking Research to Action, From Evidence to Practice, From Knowledge to Action, Translating Knowledge into Action, and Bridging the Gap between Knowledge and Action.

The process of sharing and using study findings can be broken down into the following three phases:

Phase	Description
Synthesis	Showcasing, highlighting, presentation of study findings, via an adapted format/media that best serves the study's goals.
Sharing	Distribution, dissemination, sharing, exchange, communication of study findings. Findings leave the experts lap and made accessible to a targeted audience.
Application	Use, capitalisation, implementation of the study's findings, in order to impulse change.

Synthesis and sharing are concurrent and complementary phases. Indeed, specifying the target audience and expected change enables the best choices to be made in terms of most appropriate supporting media, dissemination channels, and frequencies.

Today, bridging the gap between information production and use is considered a true challenge, which has captured the attention of a wide range of stakeholders<sup>240</sup> (academia, international organisations, non-governmental organisations, even donors<sup>241</sup>).

A number of lessons have been learned by the global community:

- Production of information in itself is not enough to contribute to change. Indeed, information is essential, but information alone has little effect.
- Findings presented must speak to targeted audiences and apply to expected changes. Therefore, for any single issue, findings presentation must be adapted. Indeed, if the context is one of advocacy, the goal is to be attractive and convincing. Messages undergo a selection process, are clear and simple, and must contribute to policy change. However, if the context is academic, the goal is to be objective, and emphasise the rigour of methodologies employed, as the ultimate goal is to generate knowledge and contribute to scientific debate.

<sup>240</sup> This is demonstrated by an abundance of literature on the issue, which includes:

- Lavis J, Robertson D, Woodside JM, McLeod C, Abelson J and the Knowledge Transfer Study Group. **How can research organizations more effectively transfer research knowledge to decision-makers?** Milbank Q, 2003, 81(2): 221–248 : <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2690219/>
- WHO. **Bridging the “know-do” gap – Meeting on Knowledge Translation in Global Health.** 2005
- Stratton Johnson L. **From knowledge to knowledge translation: applying research to practice.** OT Now, July/August 2005 : <https://www.measureevaluation.org/resources/training/materials/high-impact-research-training-curricula/bridging-the-know-do-gap.pdf/view>
- Mitton C, Adair CE, McKenzie E, Patten SB, Perry BW. **Knowledge Transfer and Exchange: Review and Synthesis of the Literature.** Milbank Q, 85(4): 729–768, 2007 : <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2690353/>
- Ward V, House A, Hamer S. 2009. **Knowledge Brokering: The missing link in the evidence to action chain?** Evidence Policy, 5(3): 267–279, 2009 : <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3024540/>
- Bennet G, Jessani N. **The Knowledge Translation Toolkit Bridging the Know-Do Gap: A Resource for Researchers.** SAGE Publication. 2011 : <http://idl-bnc.idrc.ca/dspace/bitstream/10625/46152/1/IDL-46152.pdf>

<sup>241</sup> Recent years have seen growing donor interest in data use. Indeed, the DFID designed the “Improving communication of research evidence for development (ICRED)” programme to address data use in 2015; the French Development Agency (AFD) organises workshops to address data use; and the International Foundation of Applied Disability Research (FIRAH) includes data use as a project selection criterion.

- Knowledge application requires a comprehensive analysis of the environment (power dynamics between stakeholders, agenda priorities, etc.) and internal conditions (resource availability: time and budget).

Levers that have been identified as facilitating appropriation of generated information include<sup>242</sup>:

- Guarantee of data reliability,
- Formulation of messages that are actionable<sup>243</sup> and accessible (user-friendly)
- Credibility of data producer,
- Effective access to knowledge,
- Donor support.

As well as:


- Proper understanding of the socio-political environment,
- Participation of target audiences in the process
- Quality of dialogue between information producers and users,
- Peer review (e.g. validation of a study's findings by an academic authority)
- Recognition of findings by local or international authorities (e.g. ministries or WHO).

The definition of a study **use-of-findings strategy** from the outset of the design phase is one of the key elements that guarantees successful knowledge transfer and use.

The use-of-findings strategy is the operational template for knowledge application. Indeed, on the one hand, communication media selection and development contribute to the synthesis of findings. And, on the other hand, target audience, dissemination channel and timing definition contribute to the sharing of findings. As previously emphasised, this strategy must not be designed in a linear fashion, as its various constitutive elements influence each other (targets, supporting media, messages, etc.).

**Examples:**

- Scientific articles provide the study and team with visibility, and communicate findings in a non-targeted fashion, only in the academic sphere.
- Round tables present findings to a targeted and limited audience, directly concerned by the study's issue, thereby promoting the appropriation of the new information produced.

 See [Tool 8](#): “Study use-of-findings strategy template”.

Study use-of-findings strategies may be simple or ambitious, depending upon the goals defined during the design phase.

**Examples:**

- Routine project impact assessment<sup>244</sup> results are presented in a comprehensive technical report and sent to donors (to demonstrate the effects of activities) and, if and when appropriate, shared internally via content-sharing platforms.
- On the other hand, study findings that are intended to feed advocacy are presented in a number of specific formats, and their dissemination strategies are designed with a specific change in mind.

<sup>242</sup> WHO. **Bridging the “know-do” gap – Meeting on Knowledge Translation in Global Health**. 2005.

<sup>243</sup> Also called EBAMs = Evidence-Based-Actionable-Messages.

<sup>244</sup> Examples: ScoPeO evaluations, or PIAs (Pre and post impact assessments) in the field of armed violence reduction.

## 2- Synthesis

### 2-1- Dissemination media (Baskets of Knowledge)

The question here is: which media will enable best presentation and effective delivery of information to targeted stakeholders?

A single same study may enable a number of different media to be generated, according to target audience needs.

**Examples:** A scientific report is comprehensive and technical, as it is addressed to an initiated audience. However, if findings are to be communicated to disabled people's organisation representatives, a shorter report, using simplified language and emphasising visual communication, will be more adapted. And, if the targeted audience is the general public, a more concise and forceful message will be more effective.

Study findings can be presented in different formats.

#### 2-1-1- Technical written formats

**Full reports:** Detailed report presenting, *a minima*, the context, objectives, complete methodology, interpreted results, recommendations if required, and data collection tools provided in appendices (50 pages or more).

➡ See [Tool 9](#): “Study technical report template”

**Briefs<sup>245</sup>, syntheses, guidance notes:** These report formats are lighter-weight. Following a brief presentation of context and methodology, the focus is on the main findings (10 pages).

**Targeted<sup>246</sup> summaries:** context, methodology and main findings are presented in a short format (2 pages maximum).

**Scientific articles<sup>247</sup>:** This format, published in specialised journals, respects a pre-defined structure, which is specified by the journal to the author(s). The language used is technical and addressed to initiates in the field in question.

**Posters:** A poster summarises a study in a single page, in large-print, aesthetic format, and is most often presented at scientific congresses.

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<sup>245</sup> For practical advice, consult the practical guide: Handicap International: **The writing project: from ideas to publication** – See [Tool 19 “Drafting a brief”](#).

[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PG06\\_TheWritingProject.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PG06_TheWritingProject.pdf)

<sup>246</sup> Ibid. See [Tool 17 “Writing a summary”](#).

<sup>247</sup> Ibid. See [Tool 11 “Writing a scientific paper”](#).

**Example:** The different technical supporting media and tools developed for the research project “Representation and evaluation of disability in Haiti (Port-au-Prince, 2012)”:<sup>248</sup>



## The comprehensive report: an indispensable deliverable

At the end of every study, a comprehensive report (or scientific article, if applicable) must be made available. Comprehensive reports undergo a review process, during which relevant (organisation or partner) actors provide feedback/comments via e-mail or during specific workshops entirely devoted to this objective.

When the report is prepared by an external stakeholder (consultant, researcher) and includes recommendations, it is highly advisable that Handicap International teams be involved in the formulation and finalisation of these recommendations. Indeed, external stakeholders can provide a first draft of recommendations; however, these can rarely be used as they are, as they are often too general (or too specific). Handicap International's teams (operational and technical) must work on study findings in order to extract the most practical and adapted guidelines: the best experts are the teams themselves!



## Gender and disability sensitive reports

In and of itself, a study report's format can be gender and disability sensitive. A few gender sensitive examples:

- Photographs/images represent a balanced number of men and women,
- Photographs/images do not convey any stereotypes relating to roles and gender,
- Vocabulary employed is impartial and neutral.

A few disability sensitive examples<sup>249</sup>:

- Contrasts are sufficiently pronounced (especially for the visually impaired)<sup>250</sup>,

<sup>248</sup> All these documents are available on SkillWeb: [http://www.hiproweb.org/fr/annexes/recherche-de-documents/docs/liste.html?tx\\_hidrtdocs\\_pi1%5BuidDoc%5D=910&cHash=b8fa096cf2](http://www.hiproweb.org/fr/annexes/recherche-de-documents/docs/liste.html?tx_hidrtdocs_pi1%5BuidDoc%5D=910&cHash=b8fa096cf2)

<sup>249</sup> For further information concerning document accessibility: Handicap International. Tool sheet **Digital accessibility**, 2016: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/DigitalAccessibilityToolSheet1.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/DigitalAccessibilityToolSheet1.pdf)

- Presentation is sober (especially for those with concentration disorders),
- Use of character fonts, paragraph formatting and titles is optimised in order to create a table of contents and simplify navigation within the text, etc.

## 2-1-2- Popularised written formats

This type of supporting media targets a wider audience. Therefore, vocabulary and wording are adapted in order to communicate study findings clearly and simply.

- Booklets, leaflets, computer graphics
- Promotional posters
- Articles in newspapers, newsletters, or information bulletins
- Press articles in large-audience, non-specialised newspapers
- Press releases<sup>251</sup>.

**Example:** country-specific brochures developed to disseminate the IFAR (Improve Financial Access to Rehabilitation) project's findings.<sup>252</sup>

## 2-1-3- Oral format for meetings

Presenting the study and its findings orally enables a direct encounter with an audience. Such encounters can:

- Address a variety of audiences: Handicap International colleagues, technical peers, partners, beneficiaries, etc.
- Have a variety of objectives: to inform, discuss the results, or to identify practical applications within the framework of a project
- Take on a variety of forms: meetings, round tables, workshops, conferences, forums, seminars, day-long study seminars, Webinars, etc.

➡ See [Tool 10](#): “Oral presentation template”

## 2-1-4- Training modules

Training is the optimal format for sharing findings, as well as for contributing to changes in practices. Such capacity-building can take a number of different forms: face-to-face training, e-learning module development, or direct capacity-building through implementation of joint activities (e.g. advocacy activities).

<sup>250</sup> For practical advice, you can consult Handicap International's practical guide: **The writing project: from ideas to publication** – See [Tool 6 “Facilitating access to information for people with low vision”](#).  
[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PG06\\_TheWritingProject.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PG06_TheWritingProject.pdf)

<sup>251</sup> For practical advice, you can consult Handicap International's practical guide: **Using testimony: Supporting our denunciation and advocacy actions** – See [Tool “External example of a press release containing testimonies”](#): [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PP07Testimony.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PP07Testimony.pdf)

<sup>252</sup> Laos: <https://magic.piktochart.com/output/15918727-lao-pdr-2015-ifar-diagnostic>  
Afghanistan: <https://magic.piktochart.com/output/15870563-ifar-diagnostic-in-afghanistan-2016>

## 2-1-5- Visual formats<sup>253</sup>

**Comic strips and images:** These formats illustrate key findings in a way that easily engages attention (especially that of children or people with low literacy levels).

**Photo essays and exhibitions:** A study's findings can be illustrated, and supported by photographs, which convey key messages in and of themselves.

**Example:** Both a photo essay and research were conducted for the "Touching minds, raising Dignity" project, which targeted people living with mental health problems in closed environments in Togo, Madagascar, Lebanon and South Sudan<sup>254</sup>.

## 2-1-6- Multimedia formats

This format conveys the essential information that emerged from the study. It is generally captivating and dynamic, and enables swift access to the information.

- Short videos
- Videos/Documentaries<sup>255</sup>
- Web documentaries
- Video games/Applications inspired by a study's findings
- Radio shows/broadcasts
- Facebook pages
- Blogs, Internet sites, etc.

**Examples:**

- Video launch – IMPACT research project (production of orthopaedic prostheses using 3D printing in Togo, Madagascar and Syria)  
<https://www.youtube.com/watch?v=-bxozsNg1ko>
- Web documentary – DECIDE project (Morocco, Algeria, Tunisia)  
<http://decide-magheb.net/>

## 2-1-7- Other social media

The key messages of a study can also be used and shared through theatre, dance, or song. Such formats, like the visual formats, enable messages to be conveyed in a more engaging, less formatted, way, thereby promoting "unconscious" yet effective appropriation of the information.

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<sup>253</sup> The use of images and photographs may bring up copyright, ethical and/or security considerations. For more in-depth consideration of these issues, you can consult the Handicap International practical guide: **The writing project: from ideas to publication** – See Tool 14: "Using images and authorisations form" [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PG06\\_TheWritingProject.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PG06_TheWritingProject.pdf); and the Handicap International practical guide: **Using testimony: supporting our denunciation and advocacy actions** – p. 35 [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PP07Testimony.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PP07Testimony.pdf)

<sup>254</sup> [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/MentalHealth\\_TogoMadaLibanSudan\\_RS\\_03\\_Brief.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/MentalHealth_TogoMadaLibanSudan_RS_03_Brief.pdf)

<sup>255</sup> You can find specific guidance for the creation of a lesson learning film in the practical guide: Handicap International: **The writing project: from ideas to publication** – See Tool 12 "Defining the script of a lesson learning film": [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PG06\\_TheWritingProject.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PG06_TheWritingProject.pdf)





## Involving target group representatives in supporting media development

Target group representatives can be involved in selection and development of dissemination media during workshops or discussions. Indeed, target groups can contribute to:

- Finding a title<sup>256</sup>,
- Illustrations (cover page, photographs, etc.),
- Improving the accessibility of the documents produced,
- Co-writing sections of the report,
- Producing supporting media (summaries in their own words).

## 2-2- Content, key information

The question here is: What message is most adapted to the targeted audience?

The study produced findings, substance to communicate. However, this substance must be selected and shaped in order to provide content for the various output formats. Wording, length, tone (technical communication, general public messages, etc.), as well as language used, are conditioned by target audience needs and dissemination channels used.

## 3- Sharing

The synthesis phase addresses potential supporting media for sharing and content. However, if a sharing-of-findings strategy is implemented, then automatically there is an information emitter and an information receiver. The questions are then:

- Who are the recipients (target audiences)?
- What is the desired change? What do you expect from the target audience(s)?
- How? i.e. what is the best way to reach them?
- When? i.e. when is the best time to deliver your message?



## Involving target groups in sharing study outputs

Representatives of women's groups, persons with disabilities or youth organisations may, for example, contribute to:

- Target identification,
- Identification of adapted communication channels (including social networks),
- Distribution of flyers or other materials during events,
- Organisation of a seminar, meeting, etc.
- Presentation of findings
- Implementation of advocacy/lobbying or awareness-raising activities.

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<sup>256</sup> Ibid. See **Tool 16 "Choosing a title"**.

### 3-1- Who?

The questions here are: Who are the recipients of the study outputs? Who are those who will use the information as defined in the study's goals?

The objective is therefore to identify the key institutions/organisations/associations that you want to reach, be they project partners or not. Target audiences are defined depending upon the sector and expected change:

- Donors
- Other humanitarian actors
- Governments, senior officials and other official decision-makers
- Executives and service personnel
- Civil society associations and opinion leaders
- Private businesses and organisations
- Press, Media
- General public
- Community members
- Researchers, etc.

#### Identifying key stakeholders for advocacy and/or lobbying activities

It is vital to identify, within targeted organisation(s), one or several persons with the capacity and authority required to act or to impulse the desired change. Identifying and understanding relationship dynamics between stakeholders is a fundamental preliminary step, in order to understand the power dynamics that you must take into account. For example, this type of analysis contributes to the identification of primary (directly targeted by activities) and secondary (able to influence key decision-makers decisions) target audiences.

### 3-2- For what change?

The question here is: What can be expected, realistically, from the target audience?

To begin with, this requires an evaluation of the initial situation at the target audience level (e.g. level of knowledge and commitment to an issue). Depending upon the situation, needs can be defined and actions to implement can be determined. The following table provides some examples<sup>257</sup>:

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<sup>257</sup> To look at other examples, you can consult Handicap International's practical guide: Making it work : **Good practices for disability-inclusive development and humanitarian action** – See **Tool 16 "Examples of different types of activities to influence change"**:  
[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/MIWGuidelines\\_PG17.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/MIWGuidelines_PG17.pdf)

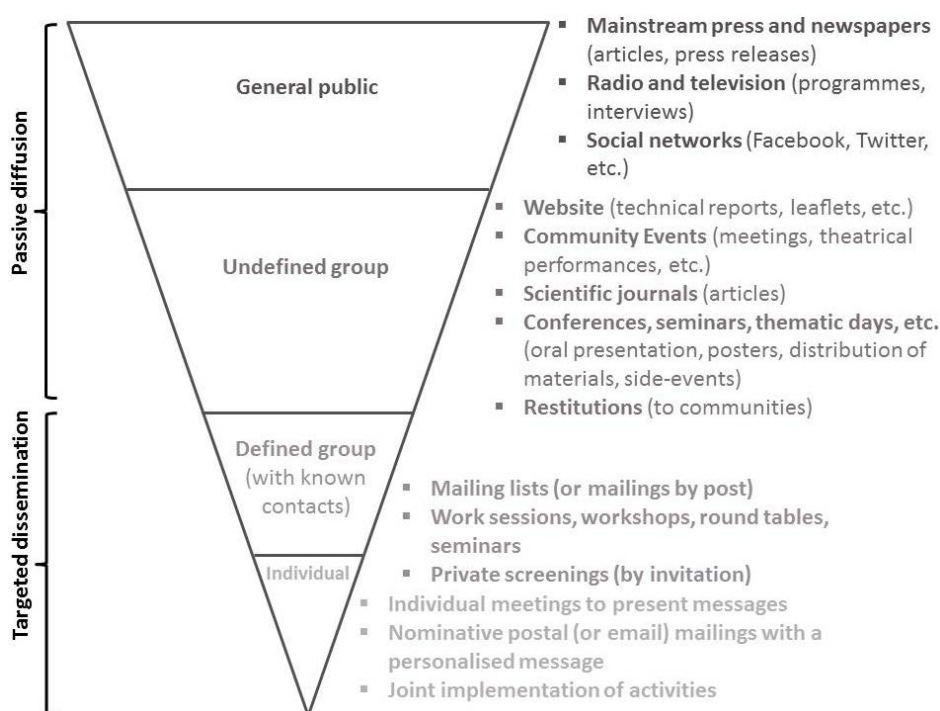
Initial situation	Need to...	Activity examples <sup>258</sup>
Target audience does not know that information exists.	Raise awareness, inform	Uni-directional information transfer, provision of knowledge (adapted to target audience profile: community meeting, email, articles, etc.).
Target audience is familiar with the situation, but does not know what action to take.	Motivate, train for action	Capacity-building to enable practical implementation (via training, joint activities, individual meetings, etc.); data producers and users must work together.
Target audience does not understand the information, its meaning, and its importance.	Explain	Arenas of direct exchange organised with a targeted audience (meetings, encounters, targeted emails, etc.).
Target audience is not interested in the issue, or disagrees with findings.	Influence, persuade, negotiate, overcome resistances	Arenas of direct exchange organised with people in question, preferably individually. Data producers and potential users must meet and discuss the issue.

### 3-3- How? Dissemination channels (media)

The question here is: How can targets be reached?

Selected dissemination channels must be adapted to the people/groups targeted by the messages: general public, undefined group (such as a specific community), defined group (composed of people from various institutions, yet with a common interest), or designated individuals (Figure 5).

**Figure 5: Dissemination channels for different targeted audiences**



<sup>258</sup> See the next section of this chapter for further information.



## Gender and disability sensitive dissemination strategies

There are a variety of initiatives that can be taken to ensure that dissemination strategies are accessible to all. Some examples:

- If a public restitution is organised, make sure the information is made widely and equitably available. Feel free to use more informal channels if necessary. Also, select a place and a time that will enable everyone to participate.
- Civil society organisation networks, partners in the study in question (or in other projects, if the subject of the study in question interests them) can be solicited for assistance for wider dissemination.



## Information dissemination: Ethical precautions

Studies are also conducted in crisis situations (especially in zones of conflict). In such cases, particular care must be exercised during the use-of-findings phase. Study outputs (report, photographs) must always respect the dignity, and guarantee the protection, of the persons involved (this may require anonymity). The potential adverse effects on people must never be overlooked.

## 3-4- When?

The question here is: Must a particular time frame be followed when disseminating information?

Studies may feed topical debates, or findings may contribute to strategic or political agendas (national or international). In such cases, the study outputs and findings must be shared, made available at a specific time. The notion of temporality is particularly important when it comes to advocacy or lobbying activities.

Example: The World Humanitarian Summit, held in Istanbul in 2016, was an opportunity to present the findings of a study on the inclusion of persons with disabilities in humanitarian contexts, conducted with this specific event in mind<sup>259</sup>.

It is advisable not to wait too long between data collection, data analysis and the dissemination of findings, and this, irrespective of whether dissemination has operational or accountability (donors, partners, and beneficiaries) goals. Data “ripeness” contributes to its relevance, and relevance is a fully-fledged study quality criterion<sup>260</sup>.

<sup>259</sup> Handicap International. **Disability in humanitarian context: Views from affected people and field organizations**. 2015. Handicap International Advocacy Collection.

[https://consultations.worldhumanitariansummit.org/fr/whs\\_disability](https://consultations.worldhumanitariansummit.org/fr/whs_disability)

<sup>260</sup> As a reminder, the six quality criteria are: objectivity, reliability, validity, relevance, utility and ethics.

## 4- Application and monitoring

When the study's goal is to educate and inform in order to influence attitudes, to train and educate in order to change practices, or to put advocacy actions into place in order to evolve the legal framework, the findings application process itself will ultimately be in the hands of the use-of-findings strategy target audience. The synthesis and exchange phases create a conducive environment for this application process, by ensuring the provision of adapted information, to the right people, at the right time.

In monitoring terms, it is important to make a clear distinction between activities that are related to the study itself, and activities that can be developed using the study's outputs.

### **Activities related to the study itself:**

- Objectives are of the following type: “explore, observe, describe, inform, document, explain, understand, evaluate/assess...”;
- Research findings ultimately contribute to advocacy actions, operational strategies, accountability activities, etc.;
- Associated activities follow the study cycle (methodology design, data collection, data processing, data analysis and interpretation, sharing and use of research findings);
- In this case, the indicators associated with these activities are generally performance (or output) indicators.

Often, the use-of-findings strategy is reduced to a bare minimum. The bare minimum being the creation and dissemination of technical written supporting media (to an undefined group, via internet sites or to defined groups via one or two restitution events or workshops). However, as discussed above, this can be taken further. Indeed, data sharing and use can be approached as a fully-fledged activity, just like data production.

### **Activities developed independently from the study, using generated information:**

- In this case, objectives are of the following type: “educate, influence, persuade...”;
- Activities that meet this objective are more familiar to field teams (organisation of multi-stakeholder meetings, development of community awareness sessions, etc.);
- In this case, associated indicators can assess outputs (number of awareness sessions, etc.). However, these activities also enable effect (or outcome) and impact indicators to be defined. These types of indicators can measure changes that relate to knowledge, attitudes and behaviours among individuals, communities and institutions, and that can be attributable to the implemented activities (increased mobilisation, policy change, etc.). Such indicators are measured over the long term and require more ambitious methodological mechanisms (than output indicators).



### **Collective deliberation on practical applications and monitoring**

Using a presentation of the study as the starting point, workshops involving target group representatives can define tangible avenues of actions that will facilitate the transition from the informative phase to the active phase. Such an exercise does more than formulate

recommendations. Indeed, the point here is to reflect in real terms on a set of interventions that will ensure data use, with a specific change in mind<sup>261</sup>.

Once the strategy is defined, it is possible to discuss and define indicators to track change (or progress). For example, you may suggest a group deliberation process to address expected results, hoped-for results, and desired results. All these results are then discussed and prioritised collectively. Thanks to points of reference such as these, it is possible to track what has been achieved using the study's data<sup>262</sup>.

This exercise can be conducted from the outset of the study design phase. Indeed, although results are as yet unknown, objectives and goals have been defined in the study's framework, and can serve as a preliminary ground for discussions. With this type of time management, the budget required for use-of-findings strategy deployment can be included. Such exercises can also be conducted once research outputs are finalised. This deliberation will then fuel future activities. However, funding will then need to be found quickly.

## 5- Resources required for implementation

Deploying a use-of-findings strategy requires competencies, time and budget. Budget will vary depending upon the goals of the use-of-findings strategy.

The external and/or internal experts responsible for study implementation and monitoring can prepare the technical reports (full report, brief, summary, etc.). The finalisation of such study outputs may take from one week to several months. This time frame depends upon the study's breadth and number of expected documents. It includes the time required for feedback from all stakeholders involved. Experts can also give oral presentation(s) of findings during seminars or conferences, or facilitate training modules for stakeholders. However, experts do not have the competencies required to develop supporting media that are more "communication" oriented.

Therefore, the creation of popularised written formats and of photo or multimedia (particularly video) formats requires more specific competencies, as well as specialised profiles (communications officer/knowledge management officer, graphic designer, professional photographer, film director and crew, etc.). These types of formats also require significant time and budget, which must be anticipated when one is defining the study's budget.

**Example 1:** A communications officer or knowledge management officer can be insourced (full-time over 2 to 3 months), in order to manage the communication strategy (understand target audience needs and how to talk to target audience, choose and elaborate adapted communication formats, manage communication, etc.).

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<sup>261</sup> The theory of change can be a useful tool. A document addressing the theory of change is available in the PME toolbox ([GRAASP](#)) managed by the Impact, Monitoring & Evaluation Unit.

<sup>262</sup> A few useful references, for further information:

- Handicap International's practical guide: **Making it work : Good practices for disability-inclusive development and humanitarian action** – See Tool 20 "How to set progress markers": [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/MIWGuidelines\\_PG17.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/MIWGuidelines_PG17.pdf)
- The Handicap International CD-Rom: **Advocacy for inclusion** – See Tool "Advocacy Impact Assessment": [http://www.hiproweb.org/fileadmin/cdroms/Advocacy\\_for\\_Inclusion/index.html](http://www.hiproweb.org/fileadmin/cdroms/Advocacy_for_Inclusion/index.html)

**Example 2:** A photo essay requires time for preparation, meeting the teams, being in the field, processing photos, making a final selection and organising one or more events.

In terms of budget, a photographer may request anywhere between 250 Euros and 1,000 Euros per day, depending on their reputation. Additional costs that must be anticipated include equipment purchases, one or more field trips (per diem, extra baggage weight for air travel), a companion in the field, and photo processing. For a photo essay covering 4 countries, a budget of 50 to 60,000 Euros is not unreasonable<sup>263</sup>.

**Example 3:** A web documentary, combining photographs, videos and testimonials, will require several months for preparation, elaboration, development and finalisation (depending on number of countries), and a budget of 30,000 to 35,000 Euros<sup>264</sup>.

The examples given above require significant budgets. However, if budgets are limited, you will need to use your creativity and resourcefulness to find cheaper ways to share data and ensure that it can be used. **Example:** Making a short video with a smart-phone in order to present key information. Mobilising beneficiaries and using your partners' social networks to disseminate to a wide audience.

Additional costs to be budgeted include translation, document prototyping and printing costs (vary with geographical zones), sign language dubbing and/or videos subtitles, etc.

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<sup>263</sup> Project information, international service provider.

<sup>264</sup> Project information, international service provider.



### Key points to remember

- There are considerable challenges involved in the transition between knowledge and practice(s).
- The use-of-findings strategy must be thought through at the outset of the design phase.
- The use-of-findings strategy includes three phases: synthesis, sharing and application.
- Target audiences, dissemination supporting media, content, dissemination channels, timing must all be considered together in order to define the strategy most adapted to the study's goals.
- Sharing data and ensuring that it is used can require the combination of a number of different competencies (technical, communication, artistic, etc.).
- Do not underestimate the time required for supporting media development and finalisation.



### At the end of this step you have...

- ➔ Defined a use-of-findings strategy to ensure that data generated during the study will be synthesised, shared and applied.



### Now we suggest that you...

- ➔ Navigate within the guide based on your needs.
- ➔ Consult the "[Toolbox](#)" section
- ➔ Consult "[Managing secondary data](#)"
- ➔ Consult "[Managing quantitative data](#)"
- ➔ Consult "[Managing qualitative data](#)"



## Chapter 7 – Resources required for study implementation

### Preamble

Different factors must be considered in order to quantify required resources, be they time, budget or human resources (competencies, number of people, etc.). Defining necessary resources is not a linear process. It is necessary to go back and forth, and make adjustments, especially during the design phase.

Guidance concerning resources required for implementation has already been given in previous chapters<sup>265</sup>.

The following table presents the factors influencing duration, budget and human resources. This list of factors is not exhaustive. Other factors may play a role, on a case-by-case basis.

	Factors to consider	Time	Budget	HR	Comments
1	Study duration		x	x	
2	Budget to mobilise	x		x	
3	Human Resources				
	<input type="checkbox"/> Insourcing or outsourcing of implementation and monitoring	x	x		E.g. Consultancy or academic partnership
	<input type="checkbox"/> Outsourcing of specific phases	x	x		E.g. Collection and analysis of outsourced data
	<input type="checkbox"/> Dedicated work time of study managers (internal or external)	x			E.g. Full-time or management of a portfolio of activities
	<input type="checkbox"/> Total payroll, number of stakeholders involved	x	x		E.g. Number of surveyors, interviewers or observers

<sup>265</sup> Information concerning resources can be found in the following sections of this guide:

- Chapter 3 “Managing secondary data” – Section 3 “Resources required for implementation”
- Chapter 4 “Managing quantitative data”:
  - Section “C – Conducting a quantitative interview” – Section “[3- Resources required for implementation](#)”
  - Section “D- Processing quantitative data” – Section “[6- Resources required for implementation](#)”
  - Section “E- Analysing quantitative data” – Section “[4- Resources required for implementation](#)”
- Chapter 5 “Managing qualitative data”:
  - Section “B3- Conducting a qualitative interview” – Section “3- [Human resources: profiles, responsibilities and competencies](#)”
  - Section “B4- Processing (narrative/discursive) qualitative data: Transcription” – Section “3- [Resources required for implementation](#)”
  - Section “B5- Analysing qualitative data” – Section “3- [Resources required for implementation](#)”
  - Section “C3- Conducting observation sessions” – Section “[2- Human resources: profiles and responsibilities](#)”
- Chapter 6 “Sharing and using study findings” – Section “[5- Resources required for implementation](#)”

	<input type="checkbox"/> Salary grid	x	x		E.g. Budget for senior or junior personnel. Note: time is saved when an expert is recruited
<b>4</b>	<b>Selected methodology</b>				
	<input type="checkbox"/> Selected approaches	x	x	x	E.g. Repercussions on collection and analysis duration, or on competencies to mobilise
	<input type="checkbox"/> Geographical coverage	x	x	x	E.g. Number of zones to survey
	<input type="checkbox"/> Sample size	x	x	x	E.g. Presence of a control group increases required budget
	<input type="checkbox"/> Desired level of participation	x		x	E.g. Organisation of a workshop with participant representatives
<b>5</b>	<b>Adaptation of collection tools to participant's specific needs (development of visual supporting media)</b>	x	x	x	
<b>6</b>	<b>Logistical issues</b>				
	<input type="checkbox"/> Remoteness of communities from homebase/point of departure, and time required to reach communities	x			
	<input type="checkbox"/> Time to get from one site to another	x			
	<input type="checkbox"/> Type and number of vehicles required	x	x		
	<input type="checkbox"/> Accessibility of roads	x			
<b>7</b>	<b>Availability of informants</b>	x			
<b>8</b>	<b>Required ethical authorisations</b>	x	x		
<b>9</b>	<b>Use-of-findings strategy:</b>				
	<input type="checkbox"/> Number of supporting media to create	x	x		
	<input type="checkbox"/> Type of supporting media to create	x	x	x	E.g. Time and budget required for prototyping and document printing
	<input type="checkbox"/> Number of translations required	x	x	x	
	<input type="checkbox"/> Dissemination channels	x	x		E.g. Organisation of a workshop with partners, or restitution to communities
	<input type="checkbox"/> Adapted supporting media	x	x	x	E.g. Video subtitling

# 1- Time

## 1-1- Factors

As illustrated in the previous table, the duration of a study is determined by:

- Available budget;
- Human resource factors, such as human resource organisation (insourcing or outsourcing), study manager expertise, or number of surveyors/interviewers/observers made available for data collection;
- Methodology used (data collection and analysis technique, sample size, participatory approach, etc.);
- Need to adapt collection tools to participant profiles;
- Field organisation and logistical factors;
- Availability of informants (if participants are only accessible over short time windows, data collection may take longer);
- Obtention of required authorisations (ethical committee or other authorities);
- Use-of-findings strategy (depending upon type of supporting media required, translations required).

## 1-2- Phases to consider and estimates

At least 6 weeks<sup>266</sup> are required for study preparation, implementation and closure (based on a 5-day work week, data collection over a single week and a minimalist use-of-findings strategy). However, this time frame can be greatly multiplied, depending upon the listed above. Realistically, at least 14 weeks (3 to 3.5 months) are required for a data collection period of two weeks, study preparation, study deployment and sharing and use of study findings.

	Weeks (5-day work week)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Identify and decide	Define study issue, objectives and goals (study framework)	● □													
Plan and initiate	Plan resources required for study execution	● □	□												
	Perform a situation analysis to apprehend the issue/perform a literature review	● □	□												
	Draw up finalised protocol	● □	● □	□											

<sup>266</sup> This time frame can be reduced in the case of emergency response diagnoses (to 1 or 3 weeks for data collection and analysis, if terms of reference have been prepared ahead of time).

	Create and validate data collection and entry tools		●	□	□	□													
	Define study use-of-findings strategy	●	□	□	□														
	Obtain approvals required for implementation		●	●	□	□	□												
Collect	Recruit surveyors/interviewers/observers			●	□														
	Train surveyors/interviewers/observers			●		□													
	Collect data				●		□	□											
	Ensure collection quality control				●		□	□											
Process and clean	Recruit data entry clerks and/or audio typists (if necessary)			●	□														
	Enter or transcribe data				●	●		□	□										
	Clean, verify data entered					●			□										
Analyse and interpret	Analyse and interpret data					●				□	□								
Share and use	Write and validate final report						●					□	□						
	Format final report						●										□		
	Distribute final report to target audiences (by email)						●										□		
	Distribute final report to target audiences (during a workshop/conference)																	□	
Archive and pool	Gather in one place all material related to the study (terms of reference, protocol, data collection tools, database, outputs, etc.)						●											□	
	Archive all study materials						●											□	

## 2- Budget

### 2-1- Factors

As illustrated in the previous table, the budget of a study is determined by:

- The time available to conduct the study;
- Human resource factors, such as human resource organisation (insourcing or outsourcing), study manager level of expertise, or number of surveyors/interviewers/observers made available for data collection;
- Methodology used (data collection and analysis technique, sample size, number of zones to cover, etc.);
- Logistical factors;
- Obtention of required authorisations (submitting a project to a national ethical committee often incurs expenses);
- Use-of-findings strategy (depending upon type of supporting medium required, translations required, etc.).

### 2-2- Budget categories

A financial checklist is provided in this guide's Toolbox, which will enable you to build your study's budget.

The four major financial categories to consider are:

- Human resources (for study implementation and monitoring);
- Travel and associated expenses (for the study manager, data collection teams, as well as internal technical support staff – technical advisers, technical coordinators and/or the technical studies and research coordinator);
- Field logistics and equipment necessary;
- Use-of findings strategy:

However, the following types of expenses must also be considered:

- Training needs (e.g. of surveyors/interviewers/observers or partners);
- Expenses related to coordinating the study with the various partners;
- Expenses related to submitting the project to a national ethical committee;
- And, finally, the administrative costs of all the organisations involved in the project (including HI).

 See [Tool 13](#): “Checklist of financial categories to include in a budget for study implementation”.

## 2-3- Examples of different budgets for different studies

The amounts shown in Figure 6 are indicative, and must be adapted to your study's specific context (local salaries, etc.).

Figure 6: Indicative budgets for different studies



### Study cost-reduction strategies

Cost-reduction strategies can be adopted. Here are some examples<sup>267</sup>:

- Simplify study design (e.g. reduce the approach to only qualitative or only quantitative).
- Select the essential information required to meet the objectives and serve the study's goals at the time of data collection tool development (judicious information selection shortens data collection tools, and therefore reduces data collection time).
- Reduce number of surveyors and sample size.
- Prefer collection at the community level rather than at the individual level.
- Reduce interview costs by recruiting students, working with trained partner teams, or opting for telephone interviews.
- Share costs (e.g. with other partners).

<sup>267</sup> World Bank Independent Evaluation Group & The Thematic Group for Poverty analysis, monitoring and impact evaluation & Evaluation Capacity Development. **Conducting quality impact evaluations under budget, time and data constraints.** 2006:

<http://documents.worldbank.org/curated/en/255551468178129539/Conducting-quality-impact-evaluations-under-budget-time-and-data-constraints>

### 3- Human Resources

#### 3-1- People and competencies to mobilise

The study must be coordinated by a single individual (much like an orchestra conductor): **the study manager**. This is the person who is responsible for preparation, implementation and supervision of the study.

Study manager profile	
Social skills	<ul style="list-style-type: none"><li>• Desire to promote capacity-building</li><li>• Desire to be in the field regularly</li><li>• Able to dialogue with stakeholders, and to establish personal contact with diverse individuals in a short time</li><li>• Able to adapt to a variety of investigation contexts</li><li>• Communication skills (active listening, adaptation to a diversity of profiles)</li><li>• Dynamic, responsive, curious, motivated</li></ul>
Technical competencies	<ul style="list-style-type: none"><li>• Versed in the methods selected for the study (quantitative and/or qualitative and/or secondary data collection, processing and analysis)</li><li>• Understands the issue under investigation</li><li>• Planning abilities (monitoring of budget, field organisation, etc.)</li><li>• Personnel management skills (field team)</li><li>• Data analysis and/or brainstorming workshop facilitation, with diverse audiences</li></ul>
Other recommended competencies	<ul style="list-style-type: none"><li>• Knowledge of the local culture</li><li>• Versed in working languages</li><li>• Recommended experience in conducting surveys with persons with disabilities (adaptation of tools and means of communication)</li></ul>

Several human resources configurations are possible:

**1/ A Handicap International employee** is especially recruited for the study, and the competency is therefore insourced at the programme level. In this case, a job profile must be written by the programme's executives, and the recruitment process activated. The person will sign a fixed-term contract with Handicap International (with volunteer status, supervisor status or another status on a case-by-case basis).

**2/ An external consultant** is hired. In this case, the programme receives technical support from an expert, but the technical competency remains external. This consultant may be national or international, be attached to an academic institution or independent, work alone or as part of a team, as determined by the needs of the study.

In this case, terms of reference must be drafted.

Several configurations are possible:

- The desired methodology may already be completely defined or only the desired orientations may be defined (e.g. quantitative rather than qualitative). In the second case, the methodology must then be fleshed out by the consultant, and then validated by the Handicap International team.
- The consultant may be contracted throughout the study or for certain specific phases (e.g. data processing and analysis). This option is useful when certain competencies are missing in the study team. However, it has limitations because the consultant will have a partial vision of the study, reduced understanding of the issues and no control over the preceding, crucial phases (protocol development, tool development, etc.).

A proposal evaluation grid is developed in order to enable impartial consultant selection. The consultant then signs a provision of services contract.

**Example:** A study in Bangladesh conducted in partnership with the Nossal Institute. The Institute responded to a call for tenders issued by the programme, and a provision of services contract was signed.

➔ See [Tool 2](#): “Study terms of reference template”.

➔ See [Tool 3](#): “Example of a methodological proposal evaluation grid”.

➔ See contract example: [Tool 11 2](#): “Contract for the provision of consultancy services – Bangladesh”.

### 3/ An academic partner accompanies the team throughout study execution.

Again, several configurations are possible:

- Research teams approach Handicap International and propose a study project.  
**Example:** the emergency research project submitted in 2016 to Research for Health in Humanitarian Crises (R2HC) with the CRIMEDIM (Research Center in Emergency and Disaster Medicine)<sup>268</sup>.
- Or, the study idea comes from Handicap International teams. The project is then formally presented on two pages, and partners are actively sought (via different networks, or through direct contact with pre-identified teams).  
**Example:** the GROw project<sup>269</sup> developed by the West Africa Desk, and executed in partnership with the Brussels School of Public Health and LASDEL.
- Or, the project is co-developed with an academic partner.  
**Example:** the HandiVIH project.

In the case of a partnership, a collaboration contract is signed between Handicap International and the academic organisation. Such contracts may address funding requirements and the search for funding (e.g. GROw); include research product implementation, monitoring and use-of-findings strategy (e.g. ScoPeO Kids); or, final option, negotiate the mission of a human resource shared by both institutions (e.g. CIFRE<sup>270</sup> scholarships and the example of partnership).

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<sup>268</sup> Project entitled: Ethical guideline-based global training program for management of the entrapped and mangled extremities in sudden onset disasters.

<sup>269</sup> GROw = Guiding innovative Research-action to prevent disabling sequelae and Overcome delays in malnourished infants development.

<sup>270</sup> *Conventions Industrielles de Formation par la Recherche* (Industrial agreements for training through research).



↪ See contract examples: [Tool 11 1](#) (only in French): “**Handicap International/Brussels School of Public Health collaboration agreement: GRANDIR project**”; [Tool 11 2](#): “**Contract for the provision of consultancy services: Bangladesh**”; [Tool 11 3](#) (only in French): “**Doctorate research collaboration contract**”.

However the study manager is recruited, the following staff will also be mobilised:

- **Programme teams and Desks**, who know the context (project officer, operational or technical coordinator, project manager, etc.).
- **Head office teams**, who can provide technical support on the subject (technical adviser, Innovation and Knowledge management Unit or Impact, Monitoring and Evaluation Unit).

Furthermore, we have seen in this guide that **specific profiles** must also be recruited, as required by the selected methodology (surveyors, translators, collective interview facilitators, audio typists, etc.) and use-of-findings strategy (communications officer, photographer, etc.).



### **Mobilising the best experts: the target population!**

As we have seen in this guide, there are a number of ways to mobilise target population representative (e.g. youth or persons with disabilities) competencies. Indeed, target population representatives can take on a number of roles:

- Advisers, providing comments on study objectives, framework, methodology or findings during workshops,
- Researchers, collecting and analysing data (in particular in the case of emancipatory research<sup>271</sup>),
- Proof-readers,
- Agents of change, disseminating new knowledge and participating in dissemination.

Finally, a **steering committee** can be created, bringing together stakeholders/partners from various organisations, with a mission to monitor the proper progress of the study.

↪ See [Tool 12](#): “**Terms of reference template for study steering, scientific or ethical committees**”.

## **3-2- Defining roles and responsibilities**

When multiple stakeholders are involved, the roles and responsibilities of each stakeholder must be clearly and consistently defined in order to avoid misunderstandings and reduced effectiveness (in terms of time and budget). This definition process also enables better planning of everybody’s work, especially at the head office support level.

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<sup>271</sup> Emancipatory research is the highest level of collaboration between researchers and beneficiaries. Beneficiaries have complete control over the research process, and researchers mainly play a supporting role. Emphasis is placed on the policy change process. See Guidance Note: **Research at Handicap International**. 2014, p. 10: [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/Research\\_GN01.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/Research_GN01.pdf)

Given its importance and impact, role and responsibility definition is an integral part of study protocols and partnership contracts.

➡ See [Tool 1](#): “Study protocol template”.

According to the selected human resource organisational structure, people involved and roles assigned will vary. The following table provides some specific pointers, in the case of a quantitative study conducted by a consultant, with partners involved in a steering committee.

Who	Missions
<b>Programme team</b>	
Study manager	<ul style="list-style-type: none"> <li>• Define study framework (issue, objectives, goals)</li> <li>• Plan budgetary needs</li> <li>• Mobilise head office technical assistance when needed</li> <li>• Manage overall study coordination: general supervision, monitoring, decision-making, arbitration</li> <li>• Ensure that implementation complies with administrative, temporal and financial conditions</li> <li>• Ensure implementation of administrative and accounting monitoring systems</li> <li>• Coordinate terms of reference drafting and contract signing</li> <li>• Contribute to the dissemination of study outputs</li> </ul>
Project manager	<ul style="list-style-type: none"> <li>• Contribute to study framework definition (issue, objectives, goals)</li> <li>• Contribute to terms of reference drafting</li> <li>• Coordinate activities with the consultant and/or technical advisers</li> <li>• Identify and federate partners</li> <li>• Obtain authorisations if necessary</li> <li>• Participate in methodology development (protocol and questionnaire)</li> <li>• Monitor the study timeline and budget</li> <li>• Recruit main study stakeholders/agents, and supervise their activities</li> <li>• Organise surveyor training (schedule + organisation + logistical assistance)</li> <li>• Organise and monitor data collection (focal point)</li> <li>• Contribute to data interpretation</li> <li>• Validate finalised deliverables</li> <li>• Disseminate study outputs</li> </ul>
Administrator	<ul style="list-style-type: none"> <li>• Track spending</li> <li>• Stay in regular contact with team</li> <li>• If an independent project expenditure audit is required by the funding agency</li> </ul>
<b>Head office technical support</b>	
Technical adviser	<ul style="list-style-type: none"> <li>• Contribute to terms of reference development</li> <li>• Share from similar experiences in other contexts</li> <li>• Contribute to and validate methodology (protocol and data collection)</li> <li>• Contribute to data interpretation</li> <li>• Review and validate study outputs</li> <li>• Contribute to the dissemination of study outputs</li> </ul>
Impact, Monitoring & Evaluation Unit or	<ul style="list-style-type: none"> <li>• Contribute to terms of reference development</li> <li>• Share from similar experiences in other contexts</li> <li>• Offer remote technical support for protocol and data collection tool(s)</li> </ul>

Innovation & Knowledge Management Unit	<ul style="list-style-type: none"> <li>development</li> <li>Review and validate study outputs</li> </ul>
<b>Expert consultant</b>	
Consultant	<ul style="list-style-type: none"> <li>Respect Handicap International's technical standards and principles of action</li> <li>Develop methodology (protocol and data collection)</li> <li>Coordinate data collection tool translation</li> <li>Recruit study team (surveyors, translators, audio typists, etc.)</li> <li>Train data collectors</li> <li>Manage data collection logistics</li> <li>Coordinate data collection</li> <li>Monitor data collection (field visit(s), debriefing session facilitation, etc.)</li> <li>Coordinate data processing</li> <li>Analyse data</li> <li>Interpret and draft a report (50 pages) and a synthesis (10 pages)</li> <li>Contribute to study findings dissemination by facilitating a workshop for partners</li> <li>Send final report and raw databases to project manager</li> <li>Ensure regular exchanges with Handicap International representatives/ focal points and/or partners</li> </ul>
<b>Partners/Steering committee</b>	
Partners	<ul style="list-style-type: none"> <li>Participate in committee meetings</li> <li>Contribute to methodology (protocol and data collection)</li> <li>Contribute to data interpretation</li> <li>Contribute to study output dissemination and sharing</li> <li>Ensure promotion of the study within partner institution</li> </ul>
<b>Other</b>	
Translators	<ul style="list-style-type: none"> <li>Translate questionnaires</li> </ul>
Surveyors	<ul style="list-style-type: none"> <li>Participate in training</li> <li>Collect data (conduct individual interviews, etc.)</li> <li>Check questionnaires each day</li> <li>Submit completed questionnaires to focal point</li> <li>Participate in debriefing sessions with the study manager/consultant</li> </ul>
Data entry clerk	<ul style="list-style-type: none"> <li>Enter data</li> <li>Clean database</li> </ul>



## Key points to remember

- Estimates of study duration and budget are influenced by many factors. It is a question of finding the right balance in order to conduct a study that reliably responds to the defined objectives and goals.
- A study may last anywhere from a few weeks to several months depending upon subject, objectives, geographical coverage, use-of-findings strategy, etc.
- A study is never free: it incurs costs that can range anywhere between several thousand to several hundred thousand Euros!
- A number of human resource configurations are possible, and the key is to anticipate the budget necessary in order to gather the required competencies to conduct the study.
- When external stakeholders are involved in conducting a study, each stakeholder's roles and responsibilities must be clearly and consistently defined, and validated by all stakeholders.



## At the end of this step you have...

- ➔ Defined the resources necessary for execution of the study.



## Now we suggest that you...

- ➔ Navigate within the guide based on your needs.
- ➔ Consult the "[Toolbox](#)" section
- ➔ Consult "[Managing secondary data](#)"
- ➔ Consult "[Managing quantitative data](#)"
- ➔ Consult "[Managing qualitative data](#)"

# Toolbox

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## Guideline sheets

[Guideline Sheet 1](#): Suggested approaches for interviewing persons with disabilities and children/youth

[Guideline Sheet 2](#): Selecting data collection methods suitable for specific needs (disability and age)

[Guideline Sheet 3](#): Supporting media for child and disability friendly studies

[Guideline Sheet 4](#): Pointers for engaging target groups

[Guideline Sheet 5](#): Ensuring data management process quality: A few practical examples

## Online tools

[Tool 1](#): Study protocol template

[Tool 2](#): Study terms of reference template

[Tool 3](#): Example of a methodological proposal evaluation grid

[Tool 4](#): Sample consent form for adults

[Tool 5](#): Sample consent form for children

[Tool 6](#): Verbatim and edited qualitative interview transcription nomenclatures

[Tool 7](#): Quantitative questionnaire template

[Tool 8](#): Study use-of-findings strategy template

[Tool 9](#): Study technical report template

[Tool 10](#): Oral presentation template

[Tool 11](#): Contract examples: [Tool 11\\_1](#) – Handicap International/Brussels School of Public Health collaboration agreement: GRANDIR project; [Tool 11\\_2](#) – “Contract for the provision of consultancy services – Bangladesh”; [Tool 11\\_3](#) – “Doctorate research collaboration contract”

[Tool 12](#): Terms of reference template for study steering, scientific or ethical committees

[Tool 13](#): Checklist of financial categories to include in a budget for study implementation

**For further information:** [Bibliography](#)

## Guideline Sheet 1 – Suggested approaches for interviewing persons with disabilities and children/youth

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**Note:** This tool presents the specific characteristics of two types of participants: persons with disabilities (depending upon difficulty type – auditory, visual, motor, intellectual, mental and language disorder related)<sup>272</sup> and children and youth (depending upon age – under 5 years of age, 6 to 11 years of age and 12 to 17 years of age)<sup>273</sup>, and provides suggestions on how to approach interviews in an adapted manner. The suggested attitudes, postures and adjustments are intended to simplify interview execution, and ensure collected data reliability.

### General information

As has been explained in the practical section of this guide, it is advisable to:

- choose a reassuring place for the interview;
- ensure accessibility of all venues used during the study<sup>274</sup>;
- use simple vocabulary<sup>275</sup>;

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<sup>272</sup> The information concerning disability was drawn from several sources, including:

- Tessari Veyre A, Petitpierre G, Gremaud G. **L'entretien de recherche avec des personnes ayant une déficience intellectuelle**, in Revue francophone de recherche en ergothérapie, 2016, 2 (2).  
<http://www.rfre.org/index.php/RFRE/article/view/58>
- Handicap International. **Using testimony: supporting our denunciation and advocacy actions**. 2012. See p. 29 (« Ensuring interviews are accessible for people with disabilities ») and p. 80 (« Guidance on understanding the various types of impairment »).  
[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PP07Testimony.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PP07Testimony.pdf)
- United Nations Human Rights. **Monitoring the Convention on the Rights of Persons with Disabilities: Guidance for Human Rights Monitors**. Professional training series No 17. 2010. New York et Geneva, 68 p. [http://www.lan.ohchr.org/Documents/Publications/Disabilities\\_training\\_17EN.pdf](http://www.lan.ohchr.org/Documents/Publications/Disabilities_training_17EN.pdf)
- Metro Access & Maroondah City Council's. 2011. **Communicating with People with a Disability**. 13 p. [http://www.maroondah.vic.gov.au/common/files/CommunityHealthServices/Communicating\\_with\\_People\\_with\\_Disabilities.pdf](http://www.maroondah.vic.gov.au/common/files/CommunityHealthServices/Communicating_with_People_with_Disabilities.pdf)

<sup>273</sup> The information concerning youth and children was drawn from several sources, including:

- Shaw C, Brady LM, and Davey C. **Guidelines for Research with Children and Young People**. 2011. National Children's Bureau (NCB) Research Center. 59 p.  
<https://www.nfer.ac.uk/nfer/schools/developing-young-researchers/NCBguidelines.pdf>
- Kolucki B, Lemish D. **Communicating with children: Principles and practices to nurture, inspire, excite, educate and heal**. 2011. UNICEF New York. 80 p.  
[https://www.unicef.org/cwc/files/CwC\\_Final\\_Nov-2011\(1\).pdf](https://www.unicef.org/cwc/files/CwC_Final_Nov-2011(1).pdf)

<sup>274</sup> Handicap International. **Making it work: Good practices for disability-inclusive development and humanitarian action**. 2015. See Tool 10: "How to ensure that interviews and meetings are accessible to all".  
[http://www.hiproweb.org/uploads/tx\\_hidrtdocs/MIWGGuidelines\\_PG17.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/MIWGGuidelines_PG17.pdf)

<sup>275</sup> Simple language does not mean naive or condescending language. Words and wording must be adapted to the individual's developmental age, as well as to their chronological age. See Tessari Veyre A, Petitpierre G, Gremaud G. **L'entretien de recherche avec des personnes ayant une déficience intellectuelle**, in Revue francophone de recherche en ergothérapie, 2016, 2 (2).

- before an interview, check that the spatio-temporal context is understood by the interviewee (e.g. by performing a short informal pre-interview, or asking relatives);
- reformulate and repeat for clarification purposes what participants say;
- respect the person's rhythm;
- gain the trust of accompanying relatives or other third parties;
- manage the presence of third parties during data collection.

In addition, it is advisable to:

- **Release all preconceived ideas**
  - All individuals have different abilities. Example: Do not believe that all persons with hearing impairments can lip-read.
  - Children and disabled persons with intellectual difficulties have their own unique perception and understanding of the environment. They can share and express this perception and understanding, which means that they can be direct informants. However, the techniques and supporting media used must be adapted to their needs.
  - Understand the participant's abilities and disabilities: for example, a person with cerebral palsy has difficulties moving, but does not necessarily have associated intellectual difficulties. Therefore, this person will understand the questions, be able to choose a response, but may have trouble pronouncing it.
  - Persons with disabilities are people just like other people, do not treat them differently. However, if you offer your support, expect this support to be accepted. If you do not know how to provide this support, ask the concerned individual directly.
- **Put the participant at ease**

This recommendation applies to all types of audiences! Possible ways of putting participants at ease include clearly defining interview rules (objectives, expectations, functioning, etc.) and being attentive to how the surveyor/interviewer is positioned in relation to the participant (on the side, opposite, at the same height). An interview must therefore be prepared beforehand, and the necessary adjustments thought through before entering the interview room.
- **Be creative, flexible and interactive!**

This applies to the methods selected, to how the interviews are conducted and to the supporting media used. There is no unique strategy for interviewing persons with disabilities or children. One must therefore remain attentive to the needs of each participant.

## Suggested approaches suitable to different types of participant difficulty/ies

Type of difficulty/ies	Participant characteristics	Interviewer/facilitator approach
Auditory	<p>A person may have a hearing impairment or be deaf. It will therefore be necessary to adapt to their needs. Generally speaking:</p> <ul style="list-style-type: none"> <li>• People who are deaf or who have hearing impairments take in the world primarily through vision.</li> <li>• They have trouble receiving or cannot receive verbal communication. Therefore, they will not hear your question, and may miss words, or misunderstand questions.</li> <li>• They can communicate: they may be equipped with a hearing aid and be able to speak (although the sound will be unusual) or sign (sign language) or lip-read. Some people cannot use any form of standardised communication (gestures or written).</li> <li>• It is important to be attentive to any anger manifested, as this anger may express a misunderstanding.</li> <li>• Ambient sounds may reduce the quality of their hearing and therefore of their understanding.</li> <li>• People who are deaf or who have hearing impairments can in theory do anything without risk, and have full intellectual and physical capacities.</li> </ul>	<ul style="list-style-type: none"> <li>• To obtain the interviewee's attention, gently touch them on the shoulder or make a sign with your hand.</li> <li>• Sit in a quiet, well-lit room, facing the interviewee or on the side where their hearing is best.</li> <li>• Speak slowly and articulate words clearly, both for the interviewee, and for the translator.</li> <li>• Speak normally (do not whisper or shout).</li> <li>• Use short sentences, simple words, and feel free to repeat.</li> <li>• Take breaks and check motivation/fatigue levels (translator and participant).</li> <li>• Be expressive: your gestures and movements will also help them understand you.</li> <li>• Use visual supporting media (pictures, photos, drawings) to simplify communication, and give the person enough time to look at these supporting media.</li> <li>• Do not put your hands in front of your face, and do not eat while speaking...</li> </ul> <p>If you use a translator :</p> <ul style="list-style-type: none"> <li>• Translation into sign language must be prepared in advance, as some words can be difficult to translate.</li> <li>• Whilst people are signing, respect the ongoing exchange and do not do anything else: just listen and observe. Indeed, a large amount of tacit information is communicated through the translator and participant's facial expressions and body language</li> </ul>



Type of difficulty/ies	Participant characteristics	Interviewer/facilitator approach
Visual	<ul style="list-style-type: none"> <li>You are a stranger to the person, who may be suspicious and refuse to talk to you.</li> <li>Depending on their abilities, the person may have a varying degree of perception of moving (or static) objects, and a varying degree of perception of the surrounding environment in daylight, in bright light, or in darkness.</li> <li>All people with a visual impairment perceive the environment differently. However, whatever their perceptions, they may need time to become familiar with a new environment. This requires high concentration and may create fatigue.</li> <li>Do not interpret facial expressions, as they do not necessarily mean what you think.</li> <li>Some blind people may display unusual behaviour, such as snapping their fingers or vigorously shaking their head, especially when anxious or confronted with a difficult question.</li> <li>Be aware that some people may repeat what the interviewer says. This is not their response, but part of the process!</li> <li>A person with visual difficulties may also show signs of strain, or not understand that you need more information: never underestimate the impact of their not being able to see your facial expressions or body language.</li> <li>In theory, this person has full intellectual and physical capacities.</li> </ul>	<ul style="list-style-type: none"> <li>At the beginning of the interview, introduce, and maybe even describe, yourself. The person may also ask to touch you, to identify your features.</li> <li>Take the time to explain how the interview will proceed, and the themes that will be addressed. This will give the person a framework.</li> <li>If you need to guide the person's movements, feel free to ask them how they want to be guided (behind you or at your side, holding your elbow, your shoulder, etc.)</li> <li>When you offer the interviewee a seat, put their hand on the back or arm of the chair. Place objects directly into their hand. Tell them about nearby objects that might get in their way when they are walking or sitting.</li> <li>Inform the person if you change places, if there is any movement around you (someone arriving or leaving), or if you are silent for a while: "I am taking a few notes before continuing"</li> <li>If the location is unfamiliar to the interviewee, avoid leaving them alone. If you do leave them alone, inform them of your absence and your return. It is always preferable to choose a familiar place.</li> <li>If the person has a dog, do not play with the dog, as this cause distraction.</li> <li>Do not speak loudly. The person cannot see, but can hear perfectly well!</li> <li>Avoid all interference noise.</li> <li>Take breaks and check motivation/fatigue levels (translator and participant).</li> <li>Make it clear when the conversation is over.</li> </ul>

Type of difficulty/ies	Participant characteristics	Interviewer/facilitator approach
Motor	<p>The range of possible types of difficulties is wide, and degrees of severity of difficulties encountered are variable. Therefore, associated needs will vary according from one individual to another. And therefore:</p> <ul style="list-style-type: none"> <li>• It may prove difficult for a person to get to the meeting place.</li> <li>• Some people cannot stay seated for long periods of time, and therefore need to move.</li> <li>• Some people also experience bladder and/or intestinal control difficulties, and therefore need breaks.</li> <li>• Some people may make involuntary movements during the interview.</li> <li>• Some people may have difficulty speaking. This is caused by a lack of coordination or weakness of the muscles of the mouth (e.g. people with cerebral palsy)</li> <li>• People with motor difficulties may tire easily.</li> <li>• They can in theory do anything without risk, and have full intellectual capacities.</li> </ul>	<ul style="list-style-type: none"> <li>• Do not show signs of surprise or impatience.</li> <li>• Do not avoid terms such as walking or running, which come up in day-to-day conversation.</li> <li>• Take breaks and check motivation/fatigue levels (translator and participant), as needed.</li> <li>• If the person is in a wheelchair, do not lean forward. Sit or place yourself at the same level.</li> <li>• Do not lean on wheelchairs (wheelchairs are an integral part of their kinesphere).</li> <li>• If you use objects, make sure that they are within arm's reach and within eyesight.</li> </ul>

Type of difficulty/ies	Participant characteristics	Interviewer/facilitator approach
Intellectual	<p>Difficulties are very variable from one individual to another. These can express themselves in various ways:</p> <ul style="list-style-type: none"> <li>• Mistrust, because interactions with others are generally complex (due to stigma, discrimination), or because of stress.</li> <li>• Lack of concentration during the interview.</li> <li>• Difficulty communicating (however, language difficulties vary significantly from one individual to another).</li> <li>• Difficulty remembering dates and the order of events and difficulty naming people and places.</li> <li>• Difficulty apprehending their relationship to time, frequency and quantity.</li> <li>• Some people may have particular reactions (e.g. repeat what you say or touch you).</li> <li>• Some people prefer to walk rather than to remain seated.</li> <li>• Sensitivity to stress and to anxiety.</li> </ul> <p>Depending upon the methodologies used, you might observe:</p> <ul style="list-style-type: none"> <li>• Difficulty with open questions (coherence between words, discourse structure)</li> <li>• Difficulty expressing nuances: ideas may arrive in bundles, which results in dissociation difficulties. Familiar vocabulary repertoires are often limited, which results in limited ability for expression.</li> <li>• A tendency to answer yes to closed yes/no questions, or to be taken by surprise by multiple-choice questions.</li> <li>• Wanting to give the correct answer, and looking for signs that their answer is correct (strong social desirability).</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate the person's ability to understand before beginning the interview.</li> <li>• Take the time to explain response modalities (e.g. "It is possible not to answer a question", "There is no right answer").</li> <li>• Begin only if the person feels safe, and is ready to speak with you.</li> <li>• Use short, clear and simple sentence. Feel free to repeat.</li> <li>• Avoid overly abstract questions, such as questions that are hypothetical ("If you were younger..."), introspective ("How do you feel when...") or that refer to past events.</li> <li>• Ask a single question at a time, and wait for the answer. Give the person enough time to elaborate their response.</li> <li>• Ask questions in the affirmative (e.g. "Did you avoid contact with them?"). Prefer the active grammatical form.</li> <li>• Confirm responses by repeating, and reformulating them.</li> <li>• Plan plenty of time for the interview.</li> <li>• Let the person move when and as they want.</li> <li>• Stop the interview if necessary, if the person is no longer actively participating.</li> <li>• Take breaks.</li> <li>• Use visual supporting media (images, symbols, etc.), or tangible examples to simplify communication. Give the person enough time to take in the supporting media.</li> </ul> <p>If an accompanying caregiver is present:</p> <ul style="list-style-type: none"> <li>• Speak directly to the interviewee and not to the caregiver.</li> <li>• Ask the interviewee if you can ask questions to the caregiver.</li> <li>• Tell the caregiver precisely what their role is during the interview.</li> </ul>

Type of difficulty/ies	Participant characteristics	Interviewer/facilitator approach
Mental/ Psychosocial	<ul style="list-style-type: none"> <li>• These difficulties express themselves in a diversity of ways. However, these people often suffer from paranoia, depression, anxiety, panic attacks and/or attention deficit, as well as difficulty following through with plans of action.</li> <li>• They can shift quite suddenly from great calm to extreme tension.</li> <li>• Treatment side-effects can affect the person's ability to communicate, to concentrate and/or to remember past events.</li> <li>• People affected by such disorders may be medically “stabilised” (medication, therapy). However, they sometimes have deep psychological after-effects that can be exacerbated at any time, in particular during an interview.</li> <li>• Mental and psychosocial disabilities do not imply intellectual impairment.</li> </ul>	<ul style="list-style-type: none"> <li>• Stay calm and patient if the person displays inadequate behaviour.</li> <li>• Do not make fun; do not show what you think.</li> <li>• Avoid contact (eye contact and physical contact).</li> <li>• Do not take things personally.</li> <li>• In order to avoid confusion, use clear, short, direct sentences.</li> <li>• Maintain a normal tone of voice.</li> <li>• Remain attentive to the person's behaviour and to any change in mood.</li> <li>• Do not insist on talking about an event, if it appears to bewilder the person.</li> <li>• If the person experiences a crisis, help them extract themselves from danger, and entrust them to competent individuals: friend or relative, team, doctor, etc.</li> <li>• If considered relevant, use visual supporting media (images, symbols, etc.) or tangible examples to simplify communication. Give the person enough time to take in the supporting media.</li> </ul>

Type of difficulty/ies	Participant characteristics	Interviewer/facilitator approach
Language disorders	<ul style="list-style-type: none"> <li>• You may not understand what the person is saying because of how they speak and pronounce certain sounds or words (stuttering, slowness or acceleration of speech).</li> <li>• Speaking is an effort. Therefore the interview is very tiring.</li> <li>• The person may drool uncontrollably when speaking.</li> <li>• Remember that the situation will deteriorate if the person is nervous.</li> </ul>	<ul style="list-style-type: none"> <li>• Take the time to introduce yourself, the person must feel safe and be relaxed.</li> <li>• Avoid pressing the person for an answer. Do not display impatience.</li> <li>• Do not interrupt the person, and do not finish their sentences.</li> <li>• Give them extra time to respond.</li> <li>• Do not pretend to understand. Reformulate their response to make sure you have understood.</li> <li>• Use short, simple and clear questions.</li> <li>• If the person drools or stutters, do not make them uncomfortable by pointing this out.</li> <li>• If necessary, ask for support from a relative or someone familiar to the person to help you understand.</li> <li>• Use visual supporting media (images, photos, drawings) to simplify communication, and give the person enough time to take it in.</li> </ul>

## Suggested approaches suitable to participant age

Type of participant	Participant characteristics	Interviewer/facilitator attitude
Related to age	<p>Children under 5 years of age:</p> <ul style="list-style-type: none"> <li>• Have primarily physical self-image.</li> <li>• Think dichotomously.</li> <li>• Have limited vocabulary to describe emotions.</li> <li>• Have still limited social experience, which often depends upon a third party.</li> <li>• Have volatile concentration and shorter attention spans.</li> <li>• Are bored quickly.</li> <li>• Are very sensitive to their environment.</li> </ul> <p>Children between 6 and 11 years of age:</p> <ul style="list-style-type: none"> <li>• Often have a rich and vivid imagination. Therefore, things in the realm of experience must be separated from things in the realm of the imagination.</li> <li>• Have volatile concentration and shorter attention spans.</li> <li>• Are not always aware that they know things.</li> <li>• Are beginning to reflect upon their relationships with others, use their experience to express their opinions and understand the concept of cause and effect.</li> <li>• Remain impressionable, especially by adults or elders.</li> <li>• Are very sensitive to their environment.</li> </ul> <p>Youth between 12 and 17 years of age:</p> <ul style="list-style-type: none"> <li>• Are able to formulate complex ideas, thoughts about the future, reason deductively and think about more abstract concepts.</li> </ul>	<ul style="list-style-type: none"> <li>• Involve someone familiar to the child in the interview(s), at least for the introduction (parent, teacher, etc.).</li> <li>• Do not stay alone with a child in a closed room. You can, for example, leave the door ajar.</li> <li>• Choose a reassuring environment that the child is familiar with.</li> <li>• Place yourself at the child's height, preferably at their side rather than in front of them.</li> <li>• From the outset, present interview objectives clearly, explain why you are interviewing them and what is going to happen.</li> <li>• Do not place the child with their back to the door.</li> <li>• Be flexible: within an age bracket, needs may vary from child to child.</li> <li>• At the outset of the interview, assess the child's spatio-temporal bearings.</li> <li>• Provide regular breaks, for example using games (puzzles, drawings, etc.).</li> <li>• Use short, simple questions, adapted to chronological age, literacy level and understanding of abstract concepts.</li> <li>• If you notice signs of hesitation, make sure the child understands the question, even when the answer is "I don't know". The child may not know what to say, because they did not understand.</li> <li>• Confirm responses by reformulating, repeating answers, by asking another question on the same subject, a little differently, or by asking the child to keep going, to share a concrete example.</li> <li>• Use visual supporting media (images, photos, drawings) or objects (puppets, dolls, etc.) to simplify communication, and give the child enough time to take in the supporting media.</li> <li>• Vary the supporting media to reduce the risk of boredom.</li> <li>• Regularly check that the child is still attentive and motivated.</li> </ul>

## Guideline Sheet 2 – Selecting data collection methods suitable for specific needs (disability and age)

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**Note 1:** This tool provides recommendations on selecting suitable data collection methods for two participant profile types: persons with disabilities (depending upon difficulty type – auditory, visual, motor, intellectual, mental and language disorders)<sup>276</sup> and children and youth (depending upon age – under 5 years of age, 6 to 11 years of age and 12 to 17 years of age)<sup>277</sup>.

**Note 2:** Data collection technique appropriateness is indicated and rated using the following three levels of appreciation:

- 1: - = Inadvisable
- 2: + = Applicable
- 3: ++ = Appropriate

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<sup>276</sup> The information concerning age was drawn from several sources, including:

- Farmer M and Macleod F. **Involving disabled people in social research – Guidance by the Office for Disability Issues**. 2011. 35 p.  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/321254/involving-disabled-people-in-social-research.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/321254/involving-disabled-people-in-social-research.pdf)
- D'Eath M and the National Federation Research Sub-Committee Members. **Guidelines for Researchers when Interviewing People with an Intellectual Disability**. 2005:  
[http://www.fedvol.ie/fileupload/File/Interviewing%20Guidelines\(1\).pdf](http://www.fedvol.ie/fileupload/File/Interviewing%20Guidelines(1).pdf)

<sup>277</sup> The information concerning age was drawn from several sources, including:

- Bragg S. **Consulting young people: a literature review**. 2010. Newcastle: Creativity, Culture and Education. 2<sup>nd</sup> ed.  
<http://www.creativitycultureeducation.org/wp-content/uploads/cce-lit-review-consulting-young-people-256.pdf>
- Coyle KK, Russell LA, Shields JP and Tanaka BA. **Collecting data from children ages 9-13**. Lucile Packard Foundation for Children Health. 2007.  
[http://www.peecworks.org/peec/peec\\_inst/01796209-001D0211.0/Coyle%20et%20al%202007%20collecting%20data%20from%20children.pdf](http://www.peecworks.org/peec/peec_inst/01796209-001D0211.0/Coyle%20et%20al%202007%20collecting%20data%20from%20children.pdf)
- Fargas-Malet M, McSherry D, Larkin E, Robinson C. **Research with children: methodological issues and innovative techniques**, in Journal of early childhood research, 2010, 8 (2): 175-192.  
<http://journals.sagepub.com/doi/pdf/10.1177/1476718X09345412>
- Shaw C, Brady LM, and Davey C. **Guidelines for Research with Children and Young People**. 2011. National Children's Bureau (NCB) Research Center. 59 p.  
<https://www.nfer.ac.uk/nfer/schools/developing-young-researchers/NCBguidelines.pdf>
- Flanagan MF, Greenfield S, Coad J, Neilson S. **An exploration of the data collection methods utilized with children, teenagers and young people (CTYPs)**, in BMC Research Notes, 2015, 8: 61.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4359510/>

## Methods depending upon participant type of difficulty/ies

Type of difficulty/ies	Qualitative			Quantitative
	Individual interview	Collective interview	Observation	Closed questionnaire
<b>Auditory</b>	<p>+</p> <p>However, interviews can quickly become tiring, especially if you are using a translator. So be attentive to the length of the guide.</p>	<p>-</p> <p>Difficulties in facilitating the interview. Requires a reduced number of participants, and significant coordination work with the translator.</p>	<p>++</p> <p>As auditory function is not mobilised. However, it is necessary to obtain the person's consent.</p>	<p>++</p> <p>As possible to use visual supporting media (for questions and response categories). Questionnaire translation must be prepared with translators beforehand.</p>
<b>Visual</b>	<p>++</p> <p>As the exchange is based upon words and does require visual function.</p>	<p>+</p> <p>However, facilitation must be prepared in order to encourage interaction, and systems must be in place to enable all participants to express themselves verbally. Also avoid all exercises and workshops using drawings and/or visual representations.</p>	<p>+</p> <p>Applicable. However, unless they are told, individuals will not know that the observation is in process. It is therefore necessary to obtain their consent.</p>	<p>++</p> <p>As the exchange is based upon words, and does not require visual function.</p>
<b>Motor</b>	<p>++</p>	<p>++</p> <p>However, be attentive to location accessibility.</p>	<p>++</p>	<p>++</p>
<b>Intellectual</b>	<p>++</p> <p>A more intimate, cared-for space for exchange allows the interviewer to adapt to the individual's needs (breaks, rewording, etc.), and the individual to take their time, find their bearings and their confidence.</p>	<p>+</p> <p>However, be attentive to group size and to participant profiles. The facilitator must demonstrate flexibility and adaptability, especially since these exchanges are often managed in</p>	<p>-</p> <p>The presence of the observer can be perceived as a factor of stress, and influence the person's behaviour.</p>	<p>+</p> <p>However, be attentive to questionnaire length. Questions must be formulated simply, avoiding all abstract notions. Multiple-choice response modalities must provided a limited number of responses. Be mindful</p>



		the presence of relatives. Number of questions must be limited.		of desirability and lack of concentration.
<b>Mental/ psycho-social</b>	++ A more intimate, cared-for space for exchange allows the interviewer to adapt to the individual's needs (breaks, rewording, etc.), and the individual to take their time, find their bearings and their confidence.	++ However, pay attention to participant profiles (types of difficulties, stabilisation phase, etc.).	- The presence of the observer can be perceived as a factor of stress, and influence the person's behaviour.	++ As these people have no difficulty in understanding. Therefore, if they are in a stabilised phase, there is no problem.
<b>Language disorders</b>	- Exchanges will require time and may be a source of frustration for the person. Questions must call for short responses. It can be helpful to use a written format, as this helps people keep their bearings within their history and narrative.	- Difficult elocution may limit interactions between participants.	++ As speech is not required.	+ As these people have no difficulty understanding. Assistance will however be necessary to express and share responses. Be attentive to questionnaire length.

## Methods depending upon participant age

Age	Qualitative			Quantitative
	Individual interview	Collective interview	Observation	Closed questionnaire
Under 5 years of age	<p>++</p> <p>Interviews can be assisted by the presence of a familiar person or the use of visual supporting media, objects or verbal stimuli. Indeed, justifications can then be requested to confirm data and questions can be adjusted to the child.</p>	<p>-</p> <p>These children are too young to express themselves in a group.</p>	<p>++</p> <p>Possible from birth onwards, as no active solicitation of the child's language or cognitive abilities (observation of development, of relationship with others, etc.).</p>	<p>-</p> <p>A questionnaire is too structured, too formal for a child of this age. Questionnaires must be addressed to caregivers.</p>
6-11 years of age	<p>++</p> <p>However, be mindful of the stress that a face-to-face interview with an adult can generate. Vocabulary and supporting media must be adapted to the child's communication capacities, as must the interview modalities (breaks, rewording, etc.). The presence of a familiar third party or close relative may be advisable. Justifications can then be requested to confirm data and questions can be adjusted to the child.</p>	<p>+</p> <p>Possible from the age of 6. However, be mindful of the size of the group and the number of questions. Feel free to take breaks using games. Collective interviews can also be co-facilitated with someone familiar (e.g. a teacher).</p>	<p>+</p> <p>As no active solicitation of the child's cognitive abilities. However, be mindful of the potential effects of the eyes of elders.</p>	<p>+</p> <p>If wording, vocabulary and response categories are adapted (e.g. avoid rating scales with over 3 response categories), and questionnaires are administered with the help of supporting media to simplify sharing of responses.</p>

12-17 years of age	<p style="text-align: center;">+</p> <p>However, be mindful of the stress created by face-to-face relationships and by being asked to share opinions and feelings with an unfamiliar adult.</p>	<p style="text-align: center;">++</p> <p>Young people are more relaxed. Collective interviews are more fun and reassuring, less intimidating. However, pay attention to group composition (e.g. do not mix ages or sexes, in certain contexts or for certain subjects). The interview can be co-facilitated with a young person of the same age, trained in collective interview techniques (a “buddy”).</p>	<p style="text-align: center;">-</p> <p>The presence of the observer can be perceived as intrusive, as a judgement, and influence the youth's behaviour. The eyes of the other take on importance and can “disturb” data collection.</p>	<p style="text-align: center;">++</p> <p>However, questionnaires must use wording and vocabulary that are appropriate to the youth’s level of understanding.</p>
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## Guideline Sheet 3 – Supporting media for child and disability friendly studies

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**Note 1:** The following examples relate primarily to the data collection phase and are based on visual approaches. They are not exhaustive, but are intended to give you ideas for adapting data collection tools. Other types of supporting media can also be used (narratives, forum theatre) but will not be developed here.

**Note 2:** The supporting media presented mainly concern children. However, they can be extended to people with auditory, concentration, comprehension and/or expression difficulties, or with low literacy levels.

### General information

Images, symbols, drawings, maps, paintings, collages, photographs and/or objects can simplify exchanges between interviewer and participant.

The key rule is to adapt images and other expression modalities to:

- Study context: they must represent something that is familiar and speaks to participants (e.g. piles of rice or sticks, instead of abstract cubes).
- Participants' chronological age: e.g. using a baby bear image is unsuitable for interviewing a teenager or young adult<sup>278</sup>.

In addition, pay attention to image diversity in terms of gender, age or disability type!

### Use and examples of visual supporting media

Supporting media can be used for a number of purposes:

**1- To assist understanding:** they are then vehicles that convey meaning and enable issues or concepts to be explained. This approach is often used with people who have difficulties understanding. Indeed, drawings and photographs are the building blocks of the photo-language technique.

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<sup>278</sup> Tessari Veyre A, Petitpierre G, Gremaud G. **L'entretien de recherche avec des personnes ayant une déficience intellectuelle**, in Revue francophone de recherche en ergothérapie, a French language occupational therapy research journal, 2016, 2 (2).

<http://www.rfre.org/index.php/RFRE/article/view/58>



Figure: Two images respectively representing the home and the market, used in the Congo in 2013, during a rehabilitation project for children with cerebral palsy

**2- To assist the response process:** their purpose is then to clarify and, explain suggested responses. **Images/symbols** are particularly useful when using scales that provide the respondent with a multiple number of ordered responses. Visual representations help children see the possibilities better, so it is easier to place their response and show it to the interviewer.

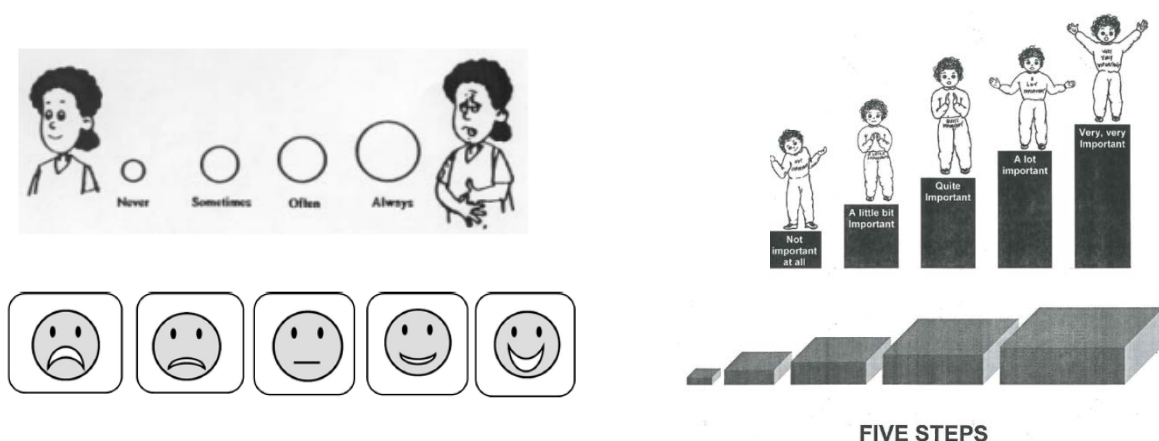


Figure: Examples of scale representations (various sources)

## When stimuli have their limits

When the ScoPeO tool test was performed in Senegal with people with intellectual disabilities<sup>279</sup>, a scale with coloured smileys was used. However, this system had limits: people made their choices based on symbol colour and not on their opinion. The smileys themselves were not understood, and not associated with levels of satisfaction.

Feel free to draw upon the tactile nature of **objects**: cubes, bags of beans of various sizes, uncooked pasta, etc. all make it easier to grasp scales used for multiple-choice questions relating to quantities.

<sup>279</sup> Handicap International. **Measuring quality of life, safety, and social and family participation of project beneficiaries: The ScoPeO tool – Tool tests and validation** (Appendices), 2014, 2016 revision. [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PG15Scopeo.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PG15Scopeo.pdf)

### 3- As vehicles for responses and exchanges: enabling the child to answer a question.

**Images** must then be manipulated, classified in order to share an opinion, a feeling. They stimulate/simplify communication between the child and the interviewer. This approach can be used in particular to identify needs, or to discuss difficulties encountered.

**Examples:** Children are given a set of images that represent different objects or situations (depending upon the subject and question). Several options are possible depending on the question:

- Images can be placed on or in a tangible supporting media that enable what is going well to be differentiated from what is not going well (e.g. in two columns).
- Images can be distributed into 3 piles, representing small, medium and big problems for the child,
- Or, images can be spread out over a diamond ranking grid.

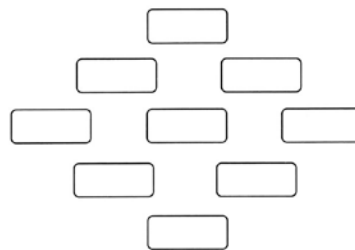


Figure: The Diamond Ranking Model:  
A visual tool used to rank ideas

The child may also be invited to choose a number of images, which are then used by the interviewer as the interview guide. This gives the child the chance to explain the choices made.

**Drawings, paintings and collages** (often familiar activities for children) may also be used as supporting media to gather data on perceptions or experiences. It is then essential to be clear about what you expect (e.g. “Can you draw how you feel when you are with your father?”). Then, the challenge is to analyse this material.

Children can also be asked to take and share their own **photographs**. They are lent a camera, with which they can photograph elements of their daily lives, and must respect precise rules. Afterwards, interviews are conducted on the basis of these photographs. This technique has the advantage of placing the child in an active position. However, it also requires significant resources and raises ethical issues (entourage consent, photograph ownership and printing, etc.).

Photographs can also be used to help children respond. On the back of each picture/photograph, children are invited to share their reaction or interpretation of the situations represented in writing (technique inspired by photovoice).

Finally, **objects** (puppets, dolls, everyday objects, etc.) can be used to enable children to take some distance from the issue being addressed. Indeed, the use of and play-acting with transitional objects enable situations to be conceptualised. In order to observe a practice, for example, the interviewer may ask a child to perform an action on a doll, and then observe how the child reacts and performs this action.

## Guideline Sheet 4 – Pointers for engaging target groups

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**Note 1:** Using the study cycle as a template, this tool provides an overview of the key moments at which target group representatives (children, persons with disabilities or others) can participate in a study. For each study cycle phase, the following table recapitulates the ways in which target groups can be engaged (What?), with examples of activities that can be organised to achieve this (How? Examples).

**Note 2:** When proposing workshops or task groups, remember that facilitation techniques can simplify exchanges (brainstorming, problem trees, etc.). These techniques are not developed here, but you will find further information and advice in other guides<sup>280</sup>.

**Note 3:** In order to involve target group representatives, you must identify the right stakeholders. Depending upon the missions to which they will be assigned, these representatives must be mature, with personal and technical competencies that are adapted to expectations. They must also show an interest in the study, as well as strong motivation.

**Note 4:** Involving target group representatives requires resources, in terms of:

- Budget. e.g. to cover the travel and other expenses that enable participants to attend workshops, or the additional costs incurred by accompanying individuals or translators/interpreters, when necessary.
- Handicap International team time. e.g. for communicating with participants, planning and organising meeting and workshop logistics, facilitating workshops, etc.

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<sup>280</sup> You will in particular find ideas on SkillWeb, in the Training Rubric:

<http://www.hiproweb.org/en/home/trainings-methods-and-technics/tools-for-trainers.html>

In terms of external resources:

IFAD. **A Guide for Project M&E (Monitoring and Evaluation)**. See Annex D: **Methods for monitoring and evaluation**. <https://www.ifad.org/en/evaluation/reports/guide/tags/16075915>

	What?	How? Examples
Identify and decide	<ul style="list-style-type: none"> <li>• Participating in reviewing what exists: what information is already available on the subject?</li> <li>• Identifying a specific need, generating ideas: the objective here is to introduce new perspectives, new questions.</li> <li>• Participating in study framework definition: choice of theme and selection of specific elements to address, definition of study goals.</li> <li>• Confirming the study's value, and its adequacy in relation to needs and/or context.</li> <li>• Contributing to the assessment of a study's associated risks, or to the analysis of stakeholders involved and to involve.</li> </ul>	<ul style="list-style-type: none"> <li>• Conducting collective interviews (focus groups or community meetings), or individual exploratory interviews, with stakeholders chosen because of their connection to the issue. e.g. groups of women, representatives of persons with disabilities, children (after authorisation from their tutor)</li> <li>• Organising a collective workshop in order to work in a group, using appropriate facilitation techniques (brainstorming, problem trees, story circles, storyboards, etc.)</li> </ul>
Plan and initiate	<ul style="list-style-type: none"> <li>• Participating in the selection of an appropriate methodology (e.g. What collection method for what issue? What adjustments are advised to ensure everyone's participation?)</li> <li>• Defining optimal data collection conditions (e.g. defining data collection hours to reach women during the day, choosing a venue for conducting interviews on a sensitive subject)</li> <li>• Contributing to data collection tool development, in particular through vocabulary validation by peers (e.g. adapting question wording for children).</li> <li>• Developing adapted supporting media to facilitate understanding of issues and formulation of responses.</li> <li>• Testing the tools.</li> <li>• Identifying key informants.</li> </ul>	<ul style="list-style-type: none"> <li>• Organising a workshop to launch the study with all partners, in order to explain objectives, bring together different stakeholders, clarify roles and responsibilities, and discuss when and how identified partners will be involved.</li> <li>• Organising a collective workshop in order to develop a guide for a semi-structured interview with children Facilitation example: explain that there is an objective to reach by placing pebbles to get there. Each pebble is a question. How can we reach our goal? Making a list of questions, grouping questions together if necessary, and then prioritising and selecting a maximum of 5 questions.</li> <li>• Organising a collective workshop in order to adapt data collection tools: interacting directly with the concerned persons with disabilities concerning their adaptation needs (visual supporting media, breaks, etc.). They are the experts, they will tell you!</li> </ul>
Collect	Being involved as interviewers or collective interview co-facilitators	<ul style="list-style-type: none"> <li>• Training future interviewers, to remind them of study objectives, clarify their role, provide know-how. Workshop example: think about the ingredients of a good interview, ask the question: "What makes an interview bad?", and discuss an</li> </ul>



		<p>interview's factors of success with participants.</p> <ul style="list-style-type: none"> <li>• If women or persons with disabilities are directly involved in data collection, ensuring that working conditions are favourable (e.g. schedules and number of hours worked).</li> <li>• In the case of a study on a non-sensitive issue, access to surveyor/interviewer recruitment must be equitable in terms of gender and disability. In the case of a sensitive issue, recruitment can be designed in accordance with needs and constraints (e.g. women to interview women in relation to water management in the domestic sphere, and specifically the intimate domestic sphere)</li> </ul>
Treat and clean	Being involved as data entry clerks.	Access to data entry clerk recruitment must be fair in terms of gender and disability.
Analyse and interpret	<ul style="list-style-type: none"> <li>• Developing hypotheses.</li> <li>• Proposing sensitive interpretations.</li> </ul> <p>As well as:</p> <p><b>For quantitative studies:</b></p> <ul style="list-style-type: none"> <li>• Commenting on descriptive results.</li> <li>• Proposing additional analyses.</li> </ul> <p><b>For qualitative studies:</b></p> <ul style="list-style-type: none"> <li>• Assisting in theme identification to guide the analysis.</li> <li>• Commenting and prioritising the themes proposed by the team.</li> </ul>	Organising a collective workshop in order to work in a group, using appropriate facilitation techniques (brainstorming, problem trees, story circles, storyboards, etc.).
Share and use	<p><b>Communication media:</b></p> <ul style="list-style-type: none"> <li>• Finding a title.</li> <li>• Co-drafting sections of the report.</li> <li>• Providing testimonial relating to a result.</li> <li>• Illustrations (cover page, photos, etc.).</li> <li>• Developing adapted dissemination media.</li> <li>• Producing supporting media (summaries in their own words).</li> <li>• Improving accessibility of produced documents.</li> </ul>	Organising a collective workshop in order to work in a group, using appropriate facilitation techniques (brainstorming, problem trees, story circles, storyboards, etc.)

	<ul style="list-style-type: none"> <li>• Submitting photos that do not convey stereotypes.</li> </ul> <p><b>Dissemination:</b></p> <ul style="list-style-type: none"> <li>• Identifying targets.</li> <li>• Identifying adapted communication channels (including social networks).</li> <li>• Distributing flyers or other types of briefs or summaries.</li> <li>• Giving conferences.</li> <li>• Organising seminars, meetings, etc.</li> </ul> <p><b>Operationalisation of findings:</b> Providing pointers for the definition of hypotheses and/or action proposals based on findings.</p>	
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## Guideline Sheet 5 – Ensuring data management process quality: A few practical examples

**Note 1:** Quality control procedures can be implemented at all stages of the study process, from problem identification to sharing and using study findings.

**Note 2:** This tool presents factors that “threaten” study quality, at each phase, and provides solutions to manage, or at least limit, these factors. The list presented in the following table is not exhaustive. Other initiatives exist and can be implemented.

**Note 3:** Any remaining biases must be presented in the final report, in order to inform future readers of the study’s limitations, so they may be “enlightened” users of the study.

	Examples of risks	Examples of procedures
Identify and Decide	The study’s objectivity is compromised: <ul style="list-style-type: none"> <li>• Ambitions too high</li> <li>• Too many themes</li> <li>• Too much information expected</li> <li>• Poorly targeted population</li> <li>• Imprecise objectives</li> </ul>	Take time with teams and partners to discuss and define study contours (thematic coverage, targets and desired level of analysis) and goals (i.e. to what end will study findings be used?). e.g. organise a multi-stakeholder meeting
	Study repeats what already exists.	<i>A minima</i> , make a swift inventory of existing studies, and available information (on the same theme, locally or elsewhere) at the outset of the initial phase.
	The study meets no identified need, its utility is compromised.	Involve target group representatives at the outset of the initial deliberation phase.
	The study is unrealistic.	Objectively analyse study feasibility (in terms of competencies, resources, security, etc.) from the outset.

	Examples of risks	Examples of procedures
Plan and initiate	The study is not reproducible. The methodology is not presented anywhere, and its reliability is compromised.	Draft the study protocol, in order to: <ul style="list-style-type: none"> <li>• Create a record of the applied methodology (essential elements will be presented in the comprehensive technical report).</li> </ul>
	The validity of the study is compromised because the proposed methodology is not adapted to the objectives.	<ul style="list-style-type: none"> <li>• Discuss and present methodological choices, and specify “how” each step of the cycle will be performed.</li> <li>• Anticipate needs in order to ensure that the study will be gender, age and disability</li> </ul>

Individual selection modalities are unclear. Procedures are not presented.	<p>sensitive, and will foster a participatory approach.</p> <ul style="list-style-type: none"> <li>• Anticipate necessary requirements, in particular for the data collection, processing, analysis and use-of-findings phases (in organisational, HR, time and budgetary terms).</li> </ul>
The study is neither gender, age or disability sensitive	
Resources required for study implementation and monitoring are not all available (insufficient time and/or budget, poorly planned/organised equipment and logistics, lack of required competencies, etc.)	
The study brings together a number of stakeholders/partners whose roles and responsibilities are not clearly defined, thereby generating communication and implementation difficulties.	<ul style="list-style-type: none"> <li>• Use the protocol as a working and communication tool with all stakeholders.</li> <li>• Above all, negotiate and validate the protocol section on role and responsibility distribution.</li> <li>• Avoid changing the staff assigned to the investigation once implementation has begun.</li> <li>• Provide short further training modules, if a need to improve competencies is identified.</li> </ul>
The subject is sensitive or targeted individuals are hard-to-reach.	Increase sample size (by at least 10%) in the case of quantitative studies.
<p>Data collection tool bias(es). Data collection tools:</p> <ul style="list-style-type: none"> <li>• are not adapted to the context</li> <li>• and/or are too long: too many questions to address over too short a time (often the case in focus groups): participants get tired.</li> <li>• and/or are incomprehensible to participants: questions are unclear, ambiguous, use overly technical vocabulary or overly abstract notions. Questions are too difficult for participants or overly prone to inter-cultural bias.</li> <li>• and/or too oriented, too influenced by the interviewer's subjectivity.</li> </ul>	<ul style="list-style-type: none"> <li>• Test data collection tools (guide, observation grid and questionnaire) before deployment, in order to ensure that questions are understood (in terms of participant's ability to understand and cultural context).</li> <li>• In the questionnaires, differentiate "cannot answer" and "does not want to answer" non-responses. Each of these response categories conveys different information.</li> <li>• Propose visual supporting media to simplify understanding of questions and response categories.</li> </ul>

	Useless, irrelevant questions are included in collection tools.	Compare collection tools with study objectives to ensure that data collected corresponds to the variables to be studied, and remove superfluous questions.
	Selection/sampling modalities are subject to representation biases (some subgroups are excluded, because they are inaccessible for social reasons – e.g. stigma, logistical reasons – e.g. monsoon period, cultural reasons – e.g. holiday season)	Identify and present the limits of the selection modalities used.

	Examples of risks	Examples of procedures
Collect	Participants did not consent to participating in the study.	<ul style="list-style-type: none"> <li>• Raise awareness and train surveyors/interviewers in the consent obtention process. Who must be addressed? How? Why?</li> </ul>
	Teams, partners and participants are put in danger by the study (physical, psychosocial).	<ul style="list-style-type: none"> <li>• Identify study benefits and risks from the outset of the design phase.</li> <li>• Train teams to manage difficult situations (E.g. ability to evoke traumatic events with a participant and to manage everyone's emotions, familiarity with referral structures in case a need for support is identified).</li> <li>• Obtain all required administrative authorisations for conducting the study (ethical committee, national or local authorities).</li> </ul>
	In the case of quantitative studies, and non-random sampling, sample composition does not respect the sampling plan.	<ul style="list-style-type: none"> <li>• Clearly inform surveyors/interviewers of their daily collection goal.</li> <li>• Make supervisors responsible for daily monitoring of sample constitution, with the help of adapted monitoring tools.</li> <li>• Promote regular communication between teams and supervisors.</li> </ul>
	Surveyors/interviewers translate questions on-the-spot, during interviews. Wording differs from one surveyor/interviewer to another, from one individual to another – especially in the case of quantitative studies. Reproducibility is compromised.	<ul style="list-style-type: none"> <li>• Stabilise data collection tool translation before collection (recommended method: back-translation).</li> <li>• Include in-situ exercises with the translated version during surveyor/interviewer training.</li> <li>• Supervise the work of the surveyors/interviewers during data collection. A supervisor may, for example, randomly attend interviews during the data collection phase, in order to verify the process.</li> </ul>

	Surveyors/interviewers are struggling to use data collection tools. The tools are not easy to handle, there is not enough space for taking notes, and certain statements are unclear: data validity is compromised.	Test data collection tools (guide, observation grid and questionnaire) before deployment, and consult surveyors/interviewers/observers regarding their practicability.
	<p>Bias(es) related to surveyors/interviewers, who</p> <ul style="list-style-type: none"> <li>• Orient questions.</li> <li>• And/or record erroneous data.</li> <li>• And/or do not use supporting media provided.</li> <li>• And/or do not respect interview execution instructions.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop surveyor/interviewer instructions in the collection tools.</li> <li>• Draft a surveyor/interviewer guide.</li> <li>• Include sessions in surveyor/interviewer training to address: interview attitudes and techniques, interview manipulation (paper or tablets), organisation in the field (participant selection modalities, etc.).</li> <li>• Organise exchanges between data collection teams, and debriefing sessions to ensure questionnaire delivery homogeneity.</li> <li>• Supervise surveyors/interviewers during data collection: <ul style="list-style-type: none"> <li>• A supervisor stands in on a random number of data collection interviews in order to verify their execution.</li> <li>• A supervisor checks collected data quality every evening.</li> <li>• Participants' phone numbers are collected, and a sample of participants is re-contacted later to gather feedback, and check collected data quality (if questionnaire sections are re-administered).</li> </ul> </li> </ul>

	Examples of risks	Examples of procedures
Process and clean	Inconsistent, erroneous data is entered or transcribed.	<p><b>Quantitative studies:</b></p> <ul style="list-style-type: none"> <li>• Train data entry clerk (manipulation of software used for databases, knowledge of questionnaire, etc.).</li> <li>• Use the double data entry process.</li> <li>• Create a form that limits entries to accepted values.</li> <li>• Once errors are identified: refer to the original paper questionnaires. Make corrections according to likelihood hypotheses. Code incorrect values as missing values. Remove questionnaires if serious doubt regarding data reliability persists, or if questionnaires are too fragmented.</li> </ul>

		<b>Qualitative studies:</b> <ul style="list-style-type: none"> <li>Have facilitators reread transcripts.</li> </ul>
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	Examples of risks	Examples of procedures:
Analyse and interpret	Qualitative and/or quantitative analysis techniques are not mastered, or are not suited to collected data, leading to erroneous findings.	<ul style="list-style-type: none"> <li>Ensure that analytical techniques meet the requirements for proper use.</li> <li>Include necessary competencies in the expert team.</li> </ul>
	There is insufficient reliable data to support arguments/findings.	
	Interpretations are oriented, stereotyped and lack objectivity.	<ul style="list-style-type: none"> <li>Define working hypothesis during study framework design.</li> <li>Discuss with stakeholders the interpretations and recommendations that emerge from research findings.</li> </ul>
	There are multiple sources of information, but these sources are not cross-tabulated.	<ul style="list-style-type: none"> <li>Triangulate different sources (informants) and types of information (qualitative/quantitative).</li> </ul>
	Data is not disaggregated or interpreted with gender, age or disability sensitivity.	<ul style="list-style-type: none"> <li>Adopt a gender, age and disability sensitive approach at the outset of the study design phase, in order to ensure that the necessary information will be collected.</li> </ul>
	Recommendations are not appropriate, operational or applicable.	<ul style="list-style-type: none"> <li>Include field teams and partners actively in the deliberation phase, in order to operationalise recommendations.</li> </ul>

	Examples of risks	Examples of procedures:
Share and use	No strategy has been defined.	<ul style="list-style-type: none"> <li>Develop a study use-of-findings strategy at the outset of the design phase, which can be revise/complete as the process unfolds.</li> <li>Evaluate the budget required for sharing and using study findings at the outset of the design phase.</li> </ul>
	Study findings are not shared with the right targets, and the study's utility is compromised.	
	Teams have no time or budget left to share and use study findings.	
	Supporting media are not adapted to the needs of the target audience(s). Findings are not understandable by all potentially interested people. Dissemination media are too technical.	
	Technical reports remain stored in offices, with no prospect of being disseminated.	
	Documents and other communication tools put participants at risk.	Ensure participant protection by guaranteeing information and image confidentiality and anonymity.

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the 1990s, the number of people in the world who are under 15 years of age has increased by 1.2 billion, from 1.1 billion in 1980 to 2.3 billion in 1999. The number of people aged 15 years and over has increased by 1.1 billion, from 1.1 billion in 1980 to 2.2 billion in 1999. The number of people aged 65 years and over has increased by 0.2 billion, from 0.2 billion in 1980 to 0.4 billion in 1999.

These figures show that the world population is growing rapidly, and that the number of people aged 15 years and over is growing rapidly. The number of people aged 65 years and over is growing rapidly. The number of people aged 15 years and over is growing rapidly.

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## **How to conduct a qualitative/quantitative study ? From planning to using findings**

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This guide invites its readers to better plan, execute and monitor the collection, analysis and use of data generated by studies. The invitation applies to all types of projects, contexts (emergency response, chronic crisis, development) and technical sectors (education, health care, arms-related risk reduction, emergencies, etc.). It offers effective and practical guidance for study design, implementation, monitoring and use of study findings. In particular, it provides implementation modality recommendations for the collection and analysis of primary and secondary, quantitative and qualitative data. This guide dispels popular misconceptions, clarifies the advantages and disadvantages of various methods and will reduce a number of biases susceptible of reducing the quality of produced information. This guide is also original as it integrates so-called cross-cutting themes, such as disability, age, gender and participation.

It reflects our commitment to the improvement of the practices and information that serve to increase the effectiveness and relevance of our actions, and to reduce the loss of resources (budget and time), without neglecting the potentially sensitive ethical aspects inherent to data and information management (in particular, team and beneficiary/participant risk prevention).

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