



QUALITATIVE METHODS FOR PUBLIC
OPINION RESEARCH

A HANDBOOK FOR ECCC STSD

QUALITATIVE METHODS FOR PUBLIC OPINION RESEARCH AND ANALYSIS
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CHAPTER 1. CHOOSING YOUR METHODS

PUBLIC OPINION RESEARCH

- Measurement of public opinion is often survey based, but can include other methods such as focus groups, interviews or public engagement sessions.
- These methods all represent an attempt to understand public opinion.
- Considerations
 - Sampling – use a sampling strategy that best addresses the aims of the research.
 - Question bias – how the questions are designed could influence the outcome.
 - Respondent bias – participants may answer in a way they think “pleases” the researcher.
 - Question design – questions or research methods don’t always measure strength of opinion (strong opinions held by a minority can still be very influential).
 - Elite influence – Respondents may be repeating what they think is the dominant opinion.
- The following section will provide an overview (at a glance) of different common methods for qualitative public opinion research, to help you choose which approach to use.

STRENGTHS AND CHALLENGES OF DIFFERENT APPROACHES

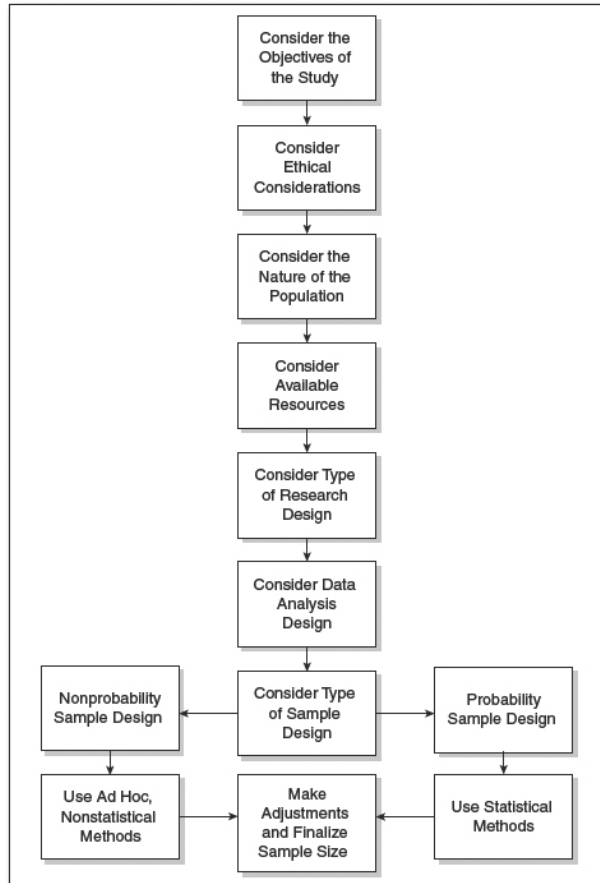
- Surveys:
 - Surveys consist of a series of questions on a topic are delivered to numerous respondents. They can be delivered in person, by phone, online, or on paper.
 - Can reach a large number of people.
 - Can enable both quantitative and qualitative analysis through closed- and open- ended questioning.
 - Response rates may be low.
 - Open-ended questions will not elicit the degree of detail compared to other methods.
 - Best used in conjunction with other approaches.
- Focus Groups:
 - Focus groups are when a small group of people are asked a series of open-ended questions on a topic. They are usually recorded.
 - Allows you to see group opinion formation.
 - Permits the observation of non-verbal cues.
 - Can offer participants incentive for participation (coffee and doughnuts).
 - Participants are fully focused on the research question(s) during the time of the focus group.
 - Facilitates the collected of very rich data.
 - Some participants may dominate the conversation.
 - Transcription may be difficult/time consuming.
 - Analysis may be time consuming.
- Appreciative Inquiry:
 - Appreciative Inquiry can be used in conjunction with many other methods. Using AI means that research questions are framed to inspire positive and future-focused responses.

- Good for program development and evaluation.
- Encourages participants to focus on the positive, so avoids the group research becoming an opportunity to air grievances.
- Facilitates the collection of very rich data.
- Some participants may dominate the conversation.
- Transcription and analysis may be difficult/time consuming.
- Indigenous Methodologies:
 - Indigenous methodologies are relational methodologies for research that are employed in partnership and in working with indigenous communities.
 - Important for working with indigenous communities.
 - Gaining ground in the academic and scientific community.
 - Could be time consuming; often considered worth the time.
 - Transcription and analysis may be difficult or time consuming.
- World Café:
 - World Café is an informal method of collecting data from multiple groups of people. It is similar to a focus group, but aimed at generating stakeholder engagement specifically.
 - Considered an effective method to engage stakeholders.
 - Structured to generate conversation.
 - Question design is paramount.
 - Data may be difficult to transcribe.
 - Data may be time consuming to analyze.
 - Great method for government engagement sessions.
- Individual Interviews:
 - Interviews can be one-on-one or group-based. They involve asking respondents a series of questions, many of which are open ended (though closed questions can also be used).
 - Allows you to get very rich data from each participant.
 - Allows you to collect verbal as well as nonverbal cues.
 - Ensures every participant has equal ability to speak.
 - Very time consuming data collection.
 - Transcription and analysis also difficult/time consuming.
- Email Interviews:
 - Allows you to get rich data from each participant.
 - Does not require transcription.
 - Does not allow the recording of non verbal cues.
 - May require a large amount of follow up.
 - May be more difficult to get responses due to email overload.
- Mixed methods – triangulation:
 - Mixed methods occur when you use multiple methods to collect your data.
 - Allows you to verify findings across different data collection methods.
 - Allows you to collect both generalizable data from a broad population and also richer data from a subgroup.
 - Allows you to identify themes using one approach and then explore those themes via a different approach.
 - Increases the trustworthiness of your data.
 - Adds complexity to your research design.
 - Adds time to the process – may not work if a quick turnaround is required.

CHAPTER 2. CONDUCTING YOUR RESEARCH: PRACTICAL ADVICE

SAMPLE SIZE

- Sample sizes can and should vary depending on many different factors. Johnnie Daniels’ book Sampling Essentials (2012) suggests using the following flowchart when considering sample size:



- When conducting qualitative study, the following guidelines are helpful:
 - Case study research: 3 to 5 participants.
 - Individual interviews: 6-30 participants.
 - Indigenous methods: varies, 5+ participants.
 - Focus group research: 3 to 12 focus groups depending upon type of participants, 6 to 12 participants per group.
 - World Café: 15-30 participants.
 - Survey research, single topic community or national study: 400 to 2,500 participants.
 - Survey research: multiple topic, national study: 10,000 to 15,000 participants.
- When conducting quantitative research with random sampling, use statistical formulas and probabilities to assess sample size.
- In qualitative sampling, one can also continue to collect data until data saturation is reached
 - Researchers agree on an understanding of data saturation as meaning “that no new themes, findings, concepts or problems were evident in the data.”

- Data saturation: Principle 1: First, researchers should specify *a priori* at what sample size the first round of analysis will be completed (in order to identify a basis for progressive judgements about data saturation). Francis et al. refer to this as the *initial analysis sample*.
- Principle 2: Researchers should specify *a priori* how many *more* interviews will be conducted, without new shared themes or ideas emerging, before the research team can conclude that data saturation has been achieved. Francis et al. refer to this as the *stopping criterion*.
- Principle 3: The analysis would ideally be conducted by at least two independent coders and agreement levels reported to establish that the analysis is robust and reliable.
- Principle 4: Data saturation methods and findings ideally would be reported so that readers can evaluate the evidence. *A priori* criteria could be part of a paper's 'Methods' section.

SAMPLING STRATEGIES

- Nonprobability (qualitative):
 - Quota sampling: set a target number of participants from each subgroup of interest.
 - Purposive sampling: Non-random sampling designed to mimic the characteristics of the broader population under study.
 - Convenience sampling: Based on ease of obtaining sample – for example seed and snowball approaches, or sampling from a population already available to the researcher.
 - Convenience sampling is the least reliable of the three approaches, but sometimes is unavoidable (for example, asking visitors to a website if they'd like to complete a survey).

TIME AND LOCATION

- The timing, time commitment and location of your data collection may influence the type and number of people who are able to participate.
- Consider the following:
 - Work days/times may be difficult for most people to attend, at the very least can you schedule your data collection on people's lunch hour or at the end of a late starting work day?
 - The length of time participation takes will impact whether people feel like participating.
 - Ideally an interview should be less than an hour.
 - Ideally focus groups should be approximately 90 minutes to 2 hours.
 - Ideally world café should be half a day, but this will limit who is able to attend
 - Some methods of data collection, like surveys or email interviews are more flexible for participants.
- Location can impact access and also impact trust building with participants.
- Consider the following:
 - Using a location familiar to participants helps them to feel comfortable.

- Access for people with disabilities – including where appropriate availability of accessible materials (large print or ASL interpreters).
- Public locations may be more or less comfortable for people – scout locations before you choose one.
- Location may also be an issue of reputation for the GoC. It is better to choose a community location than a private company location; similarly it is better to be seen as not using a location that is too expensive.
- Interviews can also occur over telephone or skype – when scheduling these, make sure you have a quiet place with minimal interruptions and ask your participants to use headphones when possible to avoid audio feedback.

CHAPTER 3. COLLECTING DATA

SURVEYS

- Why would we use this?
 - Potentially allows research to reach a larger number of people.
 - Data collection can occur independent of researcher availability.
- Data gathered from a survey can be qualitative, quantitative, or both.
 - Open ended questions produce qualitative data, this is generally more time consuming to analyze, but produces more detailed results.
 - Data will tend to be in text form.
 - Scale-based (likert scale) true/false, or rating questions produced quantitative data. These can be analyzed using basic or inferential statistics.
 - Data will be numeric or yes/no, t/f.
 - In both cases, the way you structure your questions matters. Garbage in = garbage out, so crafting questions well is key, and test them if possible.
- Wording of survey questions is challenging, so create a draft and pilot the survey before launching.
 - Questions need to be clear and easy to understand for different kinds of people.
 - In our case, they also need to be clear in both official languages.
 - Avoid leading questions.
 - Make questions specific and detailed:
 - For example, asking someone the age of their spouse, will not work if the respondent has no spouse.
 - What is your income? Seems simple, but may not be – do you mean family income? Personal income? Before tax? After tax? Etc.
 - Avoid double-barreled questions – that is avoid asking two questions in one.
 - Avoid asking questions that imply an alternative.
 - For example, “Do you think most manufacturing companies that lay off workers during slack periods could arrange things to avoid layoffs and give steady work right through the year?” suggests that layoffs are avoidable when they may or may not be.
 - Avoid unintentional bias:
 - For example “did you vote last year” would be better presented as “were you able to get to the polls last year” and may reveal more.
 - Be aware of question order bias, and answer order bias if multiple choice:
 - Be mindful of which questions follow other questions.
 - Keep in mind that most people will tend to choose answers in the middle of a list or the second alternative of two.
 - When possible change the order of responses between participants.
 - Question order:
 - Open with easy, welcoming questions; establish trust.
 - Introduce sensitive topics later.
 - Put classificatory or demographic data at the end.
 - Group similar questions together.
 - Appearance:

- Follow language and accessibility standards.
- Make use of ample white space.
- Don't put too many questions on a page – overwhelming.
- Give participants an estimated time to completion. Also, when possible offer a gauge of how far they are through the survey.

FOCUS GROUPS

- Why would we use this?
 - A good way to consult with experts and/or reach a targeted demographic.
 - Helps to reveal the role of group dynamics.
- Using a researcher-led discussion group to generate data.
- Group nature of discussion can help generate new or additional insight.
 - However group dynamics can both help and challenge data collection.
 - Mostly used to bring together people who share a similar background.
- Can be held over single or repeated sessions.
- Interaction focused, capture the process of opinion formation and help develop recommendations or models.
- Design:
 - Group composition is one of the most important considerations.
 - At minimum, participants need to feel comfortable with one another.
 - Content of questions should be tailored to the background of the group.
 - Group interaction can be more or less structured:
 - More structured: moderator plays a directive role to ensure participants are focused on the research topic – preferable.
 - Considerations, venue, participant recruitment, consent forms, whether or not to record video...
 - If video is not being recorded, a skilled note taker is needed (see moderator guide).
 - Ideal size – keep it small – ie. 6-10.
<http://www.yorku.ca/act/CBR/ElementsofaGoodFocusGroup.pdf>
- Online Focus groups:
 - Can be synchronous (ie via zoom meeting or similar software) or asynchronous (ie. via discussion boards, google docs, or similar).
 - Asynchronous helps to include people from many different time zones and/or work/personal challenges. May also be more accessible.
 - Can be delivered via text only, or via audio and video:
 - If text only, beware – the person who types the fastest will have the strongest say.
 - Accessibility considerations must be considered with every medium.
 - Best to offer multiple avenues of participation (text chat AND video AND audio only).
 - More difficult to build rapport online than in-person. Might also be more difficult to incentivize participation.
 - Other considerations – attracting participants – how to find people?
 - Usability of software – is it user friendly for a wide variety of people?
 - Recording – will results be recorded?

- Anonymity and trolling – the nature of online environments can sometimes result in less sensitivity from participants. Moderator needs to set clear standards of conduct and enforce them.

WORLD CAFÉ

- Why would we use this?
 - Interactive, and fun for participants, good for idea generation in a casual setting.
 - Format encourages open and diverse participation.
- Uses a tightly-controlled format to encourage open discussion and generate a wide variety of perspectives.
- Participants engage in a group discussion in a format intended to maximize participant comfort in order to generate ideas from the participant.
- Thus, it tends to be quite useful for public engagement where perspectives from many stakeholders are sought.
- Principles: The originators of this approach list 7 important design principles:
 1. Set the context.
 2. Create a hospitable space.
 3. Explore questions that matter.
 4. Encourage everyone's contributions.
 5. Connect diverse perspectives.
 6. Listen together for patterns and insights.
 7. Share collective discoveries.
- Environment: It is recommended that the room for data collection be set up like a café, with tablecloths and centrepieces on tables, and with posters around the room which remind participants of the following:
 1. focus on what matters,
 2. listen to understand,
 3. contribute their thinking,
 4. speak their minds and hearts,
 5. link and connect ideas,
 6. listen together for insights and deeper questions,
 7. write and draw on the 'tablecloths', and
 8. have fun.
- Key roles:
 1. The client.
 2. The facilitator.
 3. Presenters.
 4. Hosts.
 5. Participants.
 6. A graphic recorder.
- Process:
 1. Facilitator introduces the process, and guides timing and movement.
 2. Presenters provide short introductions to a series of "powerful questions" (limited to 5 minutes).
 3. Hosts are present at each table.

4. Participants move between tables at the allotted times to engage in various conversations.
5. The graphic recorder observes and records the event in graphic form.
6. Usually there are 3-4 cycles of table conversation on key questions following each 5 minute presenter.

APPRECIATIVE INQUIRY

- Why would we use this?
 - Helps to assess what is currently working about a program or initiative and also pinpoint what can work better in the future.
 - The format helps overcome a potential limitation of focus group research, that is sometimes group interviews can focus on the negative aspects of a program or initiative.
- Appreciative Inquiry (AI) is an approach that focuses on what is positive or good about a current system or initiative, so that what is good can be replicated or increased in the future.
- AI seeks to encourage and start with a place of appreciation, and then draw from that a vision of a positive future state.
- The research participants are considered active in the creation of solutions.
- AI is generally used with interview or focus group type data collection methods.
- For an approach to be AI, the question design is of crucial importance:
 - Questions must be positively oriented.
 - Should focus on the valued factors and forces in the system under study.
 - These factors and forces are identified and used to guide future initiatives.
 - Information from the questions is used to inform recommendations.
 - Time should be taken before data collection to craft “good questions”:
 - Use positive language.
 - Pose questions as invitations.
 - Evoke storytelling.
 - Be conversational.
 - Four types of questions are asked:
 - Deep story – intended to evoke stories about best experiences, and get people thinking positively. Encourage participants to include details.
 - Value – helps participants discover what it is they value about the individual or collective system being discussed. Personalize the factors mentioned in the deep story question.
 - Core factors – used to identify what are the core factors that participants believe are integral to the system under discussion. Asks for specifics.
 - Future – is an invitation for participants to imagine an ideal future, like the deep story question, details are encouraged.
- AI data collection should usually occur face to face and in a semi-structured way where the interviewer is able to probe beyond superficial answers to ensure details are given.
- Sometimes people have difficulty maintaining a positive or appreciative orientation to the question, for this reason, asking the questions in order of deep story, value, core factors, future helps to bring focus back to specific positive experiences.

INDIGENOUS METHODS

- Why would we use this?
 - Helps reach indigenous communities in a respectful and meaningful way.
 - Helps to meet our goals with respect to Truth and Reconciliation.
- There are distinct indigenous methods; in the interests of Truth and Reconciliation, it is very important for public opinion research stemming from Federal Government Ministries consider the importance of incorporating indigenous methods into their processes of engagement.
- Most research comes from a Eurocentric world view and has been traditionally used as a tool for colonization. This can make research a space of struggle between Western and Indigenous worldviews and practices.
- To decolonize research is to conduct research “in such a way that the worldviews of those who have suffered a long history of oppression and marginalization are given space to communicate from their frames of reference” (Chilisa, 2012, p. 14). Decolonization must offer ‘a way out of colonialism’ (Smith, 2012, p. 204) and recognize that most accepted knowledge reinforces assumptions about Western or colonial dominance.
- Indigenous methods are grounded in indigenous knowledges. Indigenous knowledges share the following characteristics:
 - a deep relationship with a particular environment based on lived experience and long term observations.
 - both logos (reason) and ethos (emotion) are equally valued.
 - knowledge is transmitted through practice, instruction and also ceremony.
 - interconnectedness and holism are emphasized.
 - knowledge is acquired through a respectful and long-term apprenticeship with elders. Learners are taught and tested by their observed actions.
 - knowledge is both practical and ethical emphasizing the ways people can thrive in partnership with a particular ecosystem.
- Researchers wanting to work within an Indigenous paradigm should consider the following questions (from Sage, 2018, p.10):
 - How do my methods help to build respectful relationships between the topic that I am studying and myself as a researcher (on multiple levels)?
 - How do my methods help to build respectful relationships between myself of the other research participants?
 - How can I relate respectfully to the other participants involved in this research so that together we can form a stronger relationship with the idea that we will share?
 - What is my role as a researcher in this relationship, and what are my responsibilities?
 - Am I being responsible in fulfilling my role and obligations to the other participants, to the topic and to all of my relations?
 - What am I contributing or giving back to the relationship? Is the sharing, growth and learning that is taking place reciprocal?
- Certain types of qualitative methods, for example, narrative interviews and participatory or community based research, align well with indigenous approaches.
- Researchers can consider the following criteria when wanting to use indigenous methods:
 - Research is grounded in community priorities, and constructed or designed collaboratively between communities and researchers.

- Research conducted is respectful of Aboriginal people's languages, cultural protocols, values, lifecycles and gender(s).
- Research conducted is respectful of Aboriginal people's research approaches and protocols.
- Aboriginal peoples and organizations will be an active participant in the research process at the level of their choosing.
- Principles of USAI (Utility, Self-Voicing, Access and Inter-relationality), (OFIFC), and OCAPTM (Ownership, Control, Access and Possession), (FNIGC) will be looked to as useful and guiding references informing community driven research. (UAKN, 2015).
 - From sage, 2018, p.11

INTERVIEWING

- Why would we use this?
 - Interviews are helpful for producing very detailed data.
 - Interviews allow a back and forth, where the researcher can prompt for additional information or clarify what has been said.
- For interviews, the researcher usually asks questions of the research participants directly. This most often occurs in person, but can also occur by phone, Skype, meeting software teleconference, or by email.
 - The particularities of email interviewing will be covered in the next section.
- Interviews can be individual – where the researcher speaks to one person at a time, or they can be group interviews, where the researcher asks questions of many people at once. A focus group is a common type of group interview.
- Interviews can be structured, semi-structured, or unstructured:
 - Structured questions are carefully crafted and should be asked in exactly the same way, and in exactly the same order for all participants. An interview guide is created by the researcher prior to the interviews and is very closely followed for each participant.
 - Semi-structured questions have an interview guide that is intended to guide the interviewer to common questions, but follow up questions can occur in any manner at as decided by the interviewer. Semi structured interview questions do not have to be asked in the same way or in the same order for every participant.
 - Unstructured interviews are more like a conversation between the researcher and the research participants. They do not even require an interview guide.
- In qualitative research, interview questions should follow the following best practices:
 - Mostly be open ended, though some closed demographic type questions at the end may also be helpful.
 - Begin with easy questions that help participants feel at ease.
 - Include “grand tour questions” that is, questions that encourage the participant to think of the topic or issue as a whole.
 - Include specific and detailed questions, that help uncover the unique details of the participants experience.
 - Include some sort of question aimed at asking if there is anything else about the topic the participant would like the researcher to know.
 - Like surveys, double-barrelled or leading questions should be avoided.
- In general, interviews should be between 45 and 60 minutes in length if possible, and should be shorter than 90 minutes.

- Interviews should be held in a location where the interviewer and interviewee can both feel comfortable, and where anonymity of the interviewee is ensured, if the research is sensitive.
- Interviews take more time than some other methods, but the benefit is a large amount of deep and detailed data from participants.
- Most qualitative studies using interviews do not have more than 10-12 participants. This is due to the fact that data collection and transcription takes a lot of time.
- For public consultation type research, interviews would be most effective if held with specific high value stakeholders or specific expert groups.

EMAIL INTERVIEWING

- Why would we use this?
 - Interview data is needed, but participants are not accessible in person or by phone.
 - Cuts down on time for transcription of interview data.
- In email interviewing, you take your interview questions and deliver them to respondents via email.
 - You can do this one question at a time, with follow up after every question, or you can send all the questions in a single email.
 - Benefits: one at a time – allows the interview to be less structured, meaning you can more easily follow up on an individual answer; also prompts feedback, keeping you in touch with the participant and reminding them to complete.
 - Drawbacks: one at a time – could overwhelm participant, and extends both the data collection period and the amount of researcher time needed.
 - Benefits multiple q's – allows the participant to see the full scope of the work you are asking them to put in at the start; takes less researcher time in follow up.
 - Drawbacks: multiple q's – doesn't permit follow up questions as naturally or easily, a long email may prompt shorter responses from participants.
 - Benefits of email interviewing:
 - Allows multi-national or global sampling.
 - Low administrative cost.
 - Eliminates needs for tape records, transcription.
 - May increase response rate.
 - Provides non-coercive and anti-hierarchical dialogue.
 - Can reach participants who may not otherwise be able to participate; increases accessibility.
 - Participants are in control of the data they contribute, which could make it more trustworthy or reliable as a source of data.
 - Challenges of email interviewing:
 - Emails can feel overwhelming for people, so your email may get lost or overlooked.
 - Participation feels like work, and there is no opportunity to buy the participant a coffee or otherwise offer them a nice experience during the interview process.
 - Follow up questions can be challenging.
 - Sending to multiple participants may prompt spam filters to flag your email.
 - Does not allow for non-verbal or non-text cues.
 - May require several follow up reminders from the researcher.

MIXED OR MULTI METHODS

- Why would we use this?
 - Mixed or multi methods help to ensure the validity of results through triangulation.
 - They also help you collect data from different sides of a topic, to get a fuller picture.
- Mixed or multi methods approaches combine different methods for a few different reasons:
 - To triangulate data, that is, to confirm data gathered one way with data gathered in a different way.
 - To expand on findings, that is, to add either deeper context or enhance the application of findings gained through one method by adding another.
 - To compare/contrast such as when focus groups helps you to see how data from an interview or survey is changed as a result of the dynamics of a group who is asked the same questions.
- Design:
 - Choices for mixed methods often depend on time and resources available.
 - There are as many different ways to do mixed methods as there are methods themselves.
 - Common approaches include:
 - a. Survey, followed by interviews (or vice-versa).
 - b. Focus groups followed by individual interviews (or vice-versa).
 - c. Survey, where the data is used to create questions for a focus group or world café.
 - d. Focus groups, where the data is used to create questions for a survey.
 - e. Text analysis of documents, followed by interviews, focus groups, or surveys.
 - f. Surveys, focus groups or interviews, followed by a text analysis of documents, looking for the themes uncovered in the surveys, focus groups or interviews.
 - In a,d,and e, above, following a small sample approach such as interviews, focus groups, or text analysis with a large sample approach such as a survey allows you to triangulate and verify results to a broader population.
 - In c, e and f, above, following a large sample approach such as surveys with a small sample approach such as interviews or focus groups allows you to gather deeper context for your data
 - In b, above, contrasting two methods like focus groups and individual interviews allows you to consider the role of group dynamics in shaping opinion.

NOTE TAKING BEST PRACTICES

- It's always best to record (audio and/or video) in-person data collection methods and transcribe them.
- When recordings are not possible, however, it is up to the people collecting the data to take detailed notes.
- Note taking should:
 - Aim to collect as much detail as possible.
 - Paraphrase or summarize key ideas without losing meaning.
 - Quote as much as possible, particularly with answers to key questions.
 - If necessary, ask participants to pause or repeat themselves so that you can write or type their responses.
 - Use shorthand, but as soon as the session ends, go over your notes and fill in the blanks so you don't forget what was said.

- At the end of the session, make your own additional notes about key ideas, body language of respondent during data collection, main themes, and anything else that helps you to understand your data better.
- If handwritten, type your notes as soon as possible after the session while it is still fresh in your mind.
- If possible, share your notes with the participant following data collection to ensure you accurately captured their opinions/ideas.
- Best practices:
 - If hand writing – bring multiple pens.
 - If typing on a lap top, ensure device is plugged in and fully charged.
 - Consider not using a laptop at all, as the screen creates a barrier between you and the participant.
 - Tell the participant at the beginning of the session that you will be taking notes, so if you don't respond right away it's because you're trying to accurately record all the great things they say.
 - If taking notes at a group interview or focus group, consider writing them on large sheets of paper and posting them so the group can see your notes in real time.
 - Consider the fact that note taking will probably take more paper than you think. Always bring extra.

CHAPTER 4. ANALYZING UNSTRUCTURED DATA

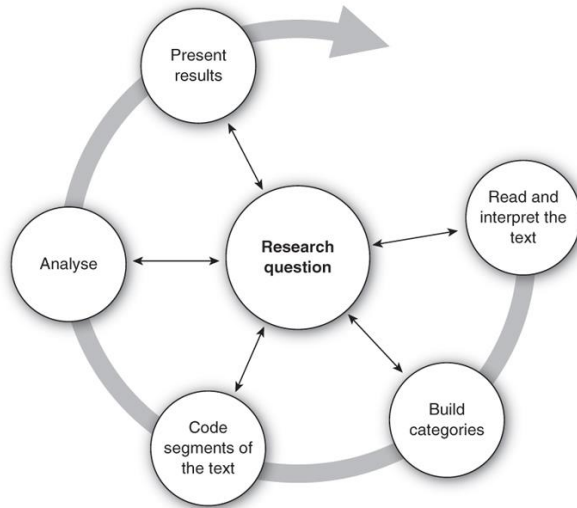
WHAT IS UNSTRUCTURED DATA?

Unstructured data is data that does not have a numerical scale or rating attached to it (or the equivalent). It is the type of data that we most often analyze qualitatively because it is difficult or impossible to analyze with common statistical methods. Unstructured data includes language, visuals and observational data. New qualitative researchers often have difficulty analyzing unstructured data because they need to be trained in the process of recognizing patterns, and they also need to develop an understanding of how to assess the validity of their analysis. Sometimes this type of analysis feels “fuzzy” or invalid because of the fact that it is not statistically supported. A good qualitative analysis, however, will have its own type of validity and rigor. In this case, validity and rigor can come from the following:

- A strong theoretical and methodological framework.
- A detailed coding guide that supports similar results from multiple coders.
- Triangulation of results across multiple methods of analysis.
- Very detailed accounting of results in the reporting of the literature (also known as thick description).
- Verification of the results by the community (if community-based or indigenous methods).

TEXT ANALYSIS

- Text analysis can be used to understand documents (ie. annual reports, communication products, training manuals, websites, online message boards). It is also useful on interview, focus group or open-ended survey question data once the data has been transcribed.
- Most relevant to our analytical needs in ECCC are content analysis and thematic analysis
 - Content analysis refers to an analysis of the content of the text. Simply, it refers to counting words or phrases or categories.
 - Thematic analysis refers to an analysis of broader themes in the text. Simply, it refers to identifying key concepts, metaphors, ideas, or trends in the body of text under study
- When analyzing text, the body of data is divided into segments.
 - Segments are parts of text – “chunks” or “quotations” which contain the categories or themes being studied.
 - The smallest possible unit of analysis is a single word. For example, sometimes the occurrence of specific words will be counted for the purposes of content analysis.
- To ensure validity of the analysis, it’s best to strive for intercoder agreement:
 - Intercoder agreement is a measure of how closely two different coders agree on the categories or themes for a text. You can ensure intercoder agreement, by having two or more coders code portions of the text separately, then come together to discuss and agree upon coding approaches.
- The best process for qualitative text analysis can be summed up in the following diagram:



- Importantly, in qualitative coding, this process needs to start with a research question, but is open to changes as it progressive.
- Furthermore the process is iterative. While it usually begins with reading and interpreting the text, the process can continue as many times as necessary until the researcher feels they have gleaned all possible insights from the data.

DEVELOPING A CODING GUIDE

- The development of a coding guide helps to ensure validity when you are analyzing unstructured data.
- A coding guide is a document in which you keep details about how you are categorizing your text.
- There are many different ways to categorize unstructured data, so a coding guide helps to keep everyone on the same page so that your results are meaningful.
- To be useful, a coding guide should include as much detail as possible and should be tested via different members of the research team.
 - That is, once the coding guide is created, it should be given to a second or third coder who uses the guide to analyse the data.
 - Once the data has been coded by multiple people using the guide, results should be compared and the guide modified if necessary so that everyone has the same understanding of what the categories mean.
 - This process: guide development-testing-iteration may run for a few cycles so the codes and coding guide can be strengthened. Ensure you allow adequate time.
- In developing the guide, the research lead can approach the task in three different ways:
 1. **Deductively:** Codes are developed prior to reading the data, they arise based on what one expects to find after reading the literature or applied knowledge that has been gained prior to the collection of data. Codes are refined with the team using the data to ensure codes are clear, but no new codes are developed after data collection.
 2. **Inductively:** The data is collected prior to the development of the coding guide. The research lead(s) read through the data several times to identify patterns, then the patterns lead to categories which go in the coding guide. This requires less time and effort prior to data collection but requires a greater allocation of time and effort after data collection.
 3. **A combination of inductively and deductively:** In this case the coding guide is partially or mostly developed out of the knowledge of the literature or the applied knowledge gained prior to data

collection, but coders are also on the lookout for additional categories or patterns that they add to the guide as they go.

- The way the coding guide is developed (Deductively or inductively) loosely follows the different types of qualitative theming (deductive or inductive) which will be discussed in greater detail in the following section.

INTERPRETIVE THEMING

- Interpretive theming is a type of qualitative data categorization or coding in which your themes or codes arise out of your data.
- Most of our analysis when dealing with unstructured data is likely to employ interpretive thematic analysis.
- To analyze data interpretively, follow these steps:
 - Read through your data 2-3 times in full to get a sense of broad ideas, themes and recurring patterns.
 - Write notes or memos as you go to keep track of what you are seeing.
 - Slowly go through the text in order to theme or code your data. Using different colored pens, highlight or underline the patterns that you see, color coding different sections of the text to identify categories.
 - Alternately, keep an excel spreadsheet which includes columns for the section of text and the category or theme that you are assigning to it.
 - Keep detailed notes on your theme, and how you identify it. As you go, create a coding guide.
 - Once you have gone through the text and coded the themes that you feel belong together, complete a second pass at your data to ensure you haven't missed anything.
 - Adapt your coding guide as needed.
 - After at least 2 passes of coding, examine your codes or themes – can any of them be merged together? If so merge them and adapt your coding guide appropriately.
 - If possible, have a second coder code a portion of the data using your coding guide.
 - Compare results, and if necessary discuss discrepancies.
 - Amend your coding guide and your data analysis if need be.
 - Continue working with a second coder to code sections until both coders are in agreement.

DEDUCTIVE THEMING

- Deductive theming is a type of qualitative data categorization or coding in which your themes or codes are pre determined through your experience or existing literature.
- In cases where we already have an idea of criteria from which to categorize our data (for example, searching for application of UN Development Goals, or using existing open government best practices) we may want to engage in deductive theming of unstructured data.
- To analyze data deductively, follow these steps:
 - Using insight gained from your previous professional experience or from existing academic or professional literature (or both) develop a list of categories that you expect to find when you collect your data.
 - If data collection includes interviews, make sure your questions are designed so that it is possible to locate your categories in your data.

- Use the categories to put together a coding guide. Make sure you explain them in enough detail so that others can use them to categorize the data once it is collected.
 - Often it is a good practice to include examples of how to identify the category in context.
- Collect your data.
- If possible, multiple coders should use the coding guide to code a portion of the data (~5 to 10 percent).
 - At this stage coders must code the same data.
 - Use an excel spreadsheet with columns for the section of text being coded and the code assigned to it.
- Then the coders meet to compare their results; this is an opportunity to refine the coding guide to make it more clear.
 - If engaging in a hybrid interpretive/deductive analysis approach, this is also an opportunity to add interpretive patterns and themes to the coding guide.
- Coders return to coding and code another 10%, then meet again to discuss.
 - This pattern continues 10% at a time until coders are mainly in agreement – i.e. getting the same results, then the remainder of the data can be coded independently.
 - Once agreement is set, coders no longer have to code the same data but can divide up the remainder of the data.

PARTICIPATORY THEMING

- Participatory theming is a type of qualitative data categorization or coding in which your themes or codes arise through collaboration with your research participants.
- Participatory theming is recommended for public consultation because you are able to empower participants and develop a real sense of community priorities.
- Participatory theming can be especially useful when working with engaged or knowledgeable stakeholders. It is also good for work with underrepresented or marginalized groups since it helps to empower participants.
- You may find a participatory approach to theming is a natural add on to focus groups, world café approaches to data collection and indigenous approaches.
- There are many ways to involve your participants in data analysis. I recommend the following approach as a way to get started:
 - As you collect data, record it in such a way that it is in full view of participants.
 - You can ask participants, for example to write their views on post-it notes when they are responding to questions or other prompts.
 - Alternately, you can record the conversation on whiteboards or large pieces of paper, and then have participants write the ones they feel are most important on post it notes.
 - Ask participants for categories they feel capture the conversation (inductive), or use categories you developed prior to data collection (hybrid or deductive).
 - Write categories on the whiteboard or large pieces of paper stuck to the wall.
 - First pass: Have participants place their post it notes in the category they most feel it belongs
 - Second pass: Have participants walk around reviewing all the post it notes and categories, and moving notes (data) around.
 - This works best when participants have conversations with each other about the data.

- Third pass (optional): Have participants use colored stickers to indicate priorities – use different colors to indicate different degrees of importance.
 - This is especially useful when developing policy or program recommendations.