

Communication for Social and Behaviour Change Learning Module Series

MODULE 1 MODULE 2 MODULE 3 MODULE 4 MODULE 5 MODULE 6 MODULE 7 **MODULE 8** MODULE 9



MODULE 8



Coordinators and leading contributors:

Paolo Mefalopulos is currently UNICEF Representative, Chile. He was the Chief of Communication for Development (C4D) at UNICEF India Country Office from June 2009 to March 2014. His expertise is in participatory communication research and planning. While working for FAO, Paolo was part of a team that developed an innovative methodology known as PRCA – Participatory Rural Communication Appraisal. He also taught at the University of Texas at Austin, where he obtained his Ph.D. in international communication. He authored several articles and books on communication for development. His most recent works, published by the World Bank are: *Development Communication Sourcebook: broadening the boundaries of communication* and *Participatory Communication: A practical guide*.

Mario Mosquera-Vasquez currently works as Regional Advisor, Communication for Development (Social Change); UNICEF's Europe and Central Asia Regional Office (ECARO). He worked as Chief C4D. India from Sept 2014 Mar 2019. He has over 20 years of experience working on a variety of health promotion, health communication, community mobilization interventions and research projects, primarily in Latin America and Asia. His doctorate in public health is from the London School of Hygiene and Tropical Medicine, UK. He worked as a visiting research scholar at Ohio University, USA, and consulted with European universities such as the University of Heidelberg, Germany, and the Liverpool School of Tropical Medicine, UK, in a Latin American Research Center. He has published research articles in international journals and authored in various books chapters.

Dr. Silvio Waisbord is a Professor in the School of Media and Public Affairs at George Washington University. He holds a Ph.D. in sociology from the University of California, San Diego. His most recent book (co-edited with Rafael Obregon) is *Handbook of Global Health Communication* (Wiley). He is editor-in-chief of the International Journal of Press/Politics. Dr. Waisbord has lectured and worked in more than 30 countries, has written or edited 8 books, and published more than 100 journal articles, book chapters, and newspaper columns. He has worked in communication for social change, particularly in program design and implementation, as well as capacity strengthening and training.

Chike Anyaegbunam is a Professor at School of Journalism and Telecommunications, College of Communication and Information in the University of Kentucky. He is the Director, Dissemination and Implementation Sciences Consortium (DISC). He earned a doctorate degree in journalism and mass communication from the University of Iowa. His areas of expertise are: participatory communication and people empowerment, public relations and integrated strategic communication, social marketing, international development and rural health communication. He has published extensively in peer review journals.

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MODULE 8



MODULE 8

Research, monitoring and evaluation



The goal of this module is to familiarise students with the basics of research, monitoring and evaluation (M&E) applied to C4D programme. Although M&E demands specific skills and expertise as well as specialists, it is important for any C4D professional to be cognizant of basic issues that need to be considered in the design and implementation of programmes. The module offers insights into the planning, conducting M&E, and data analysis and feedback.

Key competencies

After this module, students should be able to demonstrate the following competencies:

- Understand the basic principles of research, monitoring and evaluation
- Identify link between programme objectives and indicators
- Know and select appropriate data-gathering techniques
- Analyse M&E data
- Prepare M&E reports
- Understand the uses of M&E data

Unit 1 Starting from the end: Objectives and indicators

Unit 2 Data-gathering techniques

Unit 3 Data analysis

Unit 4 Data reporting, documentation and utilisation

Unit 5 Evaluation & research

MODULE 8

UNIT 1

Starting from the end: Objectives and indicators

General introduction

Measuring progress and impact is critical for the success of C4D programmes. Too often, monitoring development and evaluating impact are an afterthought. They are not integrally incorporated as central activities and steps because they are not sufficiently understood. Also programme managers tend to believe that they demand precious time and resources. Therefore, insisting on the importance of M&E for the overall programmatic success is warranted. Otherwise, much of what is planned may not be effective, or may never be known in terms of whether it effectively contributed to achieving objectives and addressing problems originally identified. Without evidence-based knowledge about progress, programmes cannot assess developments and make adjustments. Without impact data, it is impossible to know what happened, whether the objectives were reached, funds were smartly invested, and so on.

Without M&E data, programmes may flounder or fail to persuasively show their achievements to participants, partners, and other population groups. Sound monitoring and evaluation of data is particularly necessary in the context of persistent questions and debates about the impact of communication on development goals, added-value, and comparative impact. Having persuasive M&E evidence is crucial to demonstrate why C4D programmes make lasting contributions to development objectives.

Understanding expectations in terms of M&E evidence among specific partners is recommended to ensure that the data gathered, and arguments developed are appropriate to demonstrate impact. Not all partners subscribe to similar conceptions of communication impact or C4D contributions to development. Each one may have different 'gold standards' that define quality evaluation data. Some standards do not easily apply to C4D or specific approaches, given the complexity of the issues that typically communication deals with or are at the centre of programmes. The very nature of the social and communicative issues makes it difficult to produce the kind of straightforward conclusions or research design (single causality/attribution) that may be typically expected and used in other development fields. It is important to understand the uses and expectations of various stakeholders to determine M&E indicators.

Monitoring and evaluation is critical to conduct a programme effectively, produce results, and increase accountability vis-à-vis partners/stakeholders. Although frequently mentioned together, monitoring and evaluation are two separate activities with different goals and uses. Both measure programme developments, but whilst monitoring data serves to make adjustment during the programme, evaluation data allows to assess the overall impact and performance towards the end of the programme.

Monitoring is a routine process of data collection and analysis to assess the progress of programmes towards definite objectives. The purpose of monitoring is to track activities and to make sure that they are executed as originally planned; to decide whether changes are needed, and to produce updates/progress reports to inform various constituencies. They give a sense of the quality and results of activities. Activities may be rolled out but not according to plan in terms of schedule, volume, and quality, therefore affecting the overall performance of the programme. Monitoring data informs 'how things are going' with concrete data used to discuss progress and justify key strategic decisions. Without this data, it is difficult to determine progress, identify gaps, and react to unexpected developments. This data should be fed regularly to the programme and shared with relevant partners to make day-to-day decisions in an informed manner.

Monitoring data identifies how activities are being conducted (quality and schedule); different population groups react to activities (number of people reached, frequency, recall, understanding, satisfaction); real and potential problems that need to be addressed and suggested courses of action, and explanations for possible changes (or lack of changes).

Evaluation is the assessment of programme impact based on the objectives and indicators originally identified. Evaluation is an in-depth assessment of performance and activities to assess the progress, quality and impact of the programme based on strategic objectives and workplan. It starts at the beginning of the process when formative research is conducted and objectives are defined. Formative research not only offers insights in strategic planning but also provides a baseline to assess whether changes happened as a result of programme implementation. Objectives provide the basis for evaluation indicators – how do we know that the objectives have been achieved. What outcomes indicate success? Evaluation indicators can be established in terms of percentage and/or the absolute numbers of people that measure change in expected outcomes such as knowledge, attitudes, perceptions, skills, participation, interest and practices.

Programmes need to prepare a M&E plan that establishes indicators, type of data to be collected, data-gathering techniques, timeline and reporting mechanisms. This plan offers the framework for activities that will be implemented simultaneous to the activities included in the programme strategy.

To design the plan, a first step is to incorporate a Theory of Change (ToC) to understand how change happens, the long-term outcomes that an initiative strives for, and the role of context in influencing that initiative. During the inception phase of the project,

ToC identifies direct outcomes, additional driving components such as socio-ecological factors, and the indicators required to monitor and evaluate the initiative. Based on the objectives already identified, programmes need to select adequate indicators – how specific objectives (e.g. increases in knowledge or participation, changes in norms and attitudes) will be assessed. If the objectives are incorrectly designed (for example, they do not meet the “SMART” requirements), it may be difficult to determine suitable indicators. Based on the activities indicated to achieve the objectives, programmes need to decide appropriate indicators. For example, community talks to prompt conversations about children’s rights could be monitored by assessing the number of talks conducted, materials distributed, and community feedback received. Evaluation indicators may include the percentage of people who learned about children’s rights, discussed them with others, made specific decisions based on that gained knowledge and so on.

M&E will be futile without gathering knowledge about the role of context in influencing the initiative. For example, an initiative might work differently for different socio-economic groups. Therefore, ToC provides information about the context and identifies additional components such as new stakeholders that explain either the effectiveness or failure of an initiative.

Moreover, ToC is a participatory process. For example, project managers are involved in identifying the outcomes of their prime concern while people on the ground are able to identify and operationalise indicators and choose the methods of data collection.

It may be helpful for programmes to produce a table laying out all the components of the M&E process in a way that becomes easy to visualise what will happen. The table could include indicators; source of data, who will use the data, methods/tools of data collection, documentation and storage of, frequency/timing of data gathering, responsibilities for data collection and analysis, feedback entry point and timing/frequency.

Knowledge, Attitude and Practices (KAP) indicators can also be effective if integrated into the overall M&E framework. A KAP survey is a quantitative method (pre-defined questions formatted in standardised questionnaires) that provides quantitative information on knowledge, attitudes and practices. KAP surveys can reveal misconceptions or misunderstandings that may represent obstacles to the activities desired for implementation and the potential barriers to behaviour change. Note that a KAP survey essentially records an 'opinion' and is based on the 'declarative' (i.e., statements). In other words, the KAP survey reveals what was said, but there may be considerable gaps between what was said and what is done. A KAP study may need to be supplemented with a qualitative research to understand the reasons why people practice what they do.

Subsequent steps – data gathering, data analysis, and data reporting are discussed in depth in the subsequent units.

Questions for discussion

- What is the purpose of monitoring and evaluation?
- What factors need to be considered when selecting M&E indicators?
- How are M&E indicators integrated in C4D programmes?
- What are some of the challenges for effective M&E?
- How can ToC be used for planning, monitoring and evaluating an initiative?
- Discuss the objectives and uses of KAP indicators.

Reading list

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Supplementary readings

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Case studies

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http://www.ddindia.gov.in/devcom/Program+Column+2/Research_Evaluation.htm

<http://www.endvawnow.org/uploads/browser/files/ls%20this%20Justice%20Evaluation.pdf>

<http://www.surreyplace.on.ca/Education-and-Research/research-and-evaluation/Pages/International-Family-Quality-of-LifeProject.aspx>

Puran Chandra Joshi, Communication And National Development – Television for Development an India Model

Learning activities

The learning activities should be aimed at developing the following competencies:

- Know the importance of monitoring and evaluation
- Understand the uses of M&E data
- Identify M&E indicators
- Draft M&E plan

Lectures, small group discussions, debates and presentations

1. Group review/discussion of M&E plans to assess link between programme objectives and indicators, and appropriateness to measure progress and impact.
2. Group draft M&E indicators for communication objectives based on actual programmes or as proposed by the instructor.
3. Group draft of M&E plan for actual C4D programme.

Unit assessment/evaluation methods

1. In-class exercises
2. Case study/scenario analysis and challenge
3. Assignments: Oral and written presentations

MODULE 8

UNIT 2

Data-gathering techniques

General introduction

There are a variety of M&E data-gathering techniques (DGT). Quantitative and qualitative methods as well as a range of research/study designs are commonly used. Whereas, some techniques in other development programmes may be appropriate, in other cases, the unique complexities and challenges of C4D programmes demand the use of different data-gathering techniques. Techniques that may be adequate for other development programmes may be limited to collect data about the unique dimensions of communication and social issues. Also, techniques that are helpful for monitoring, may not be equally applicable for evaluation. So, instead of having fixed, pre-determined methods, it is important to select them on the basis of the particular objectives and indicators already selected.

Monitoring techniques range from intercept surveys to community dialogues, from community meetings to 'mystery client' site visits, from radio call-ins/quizzes to emails and SMS. Beneficiary assessments include interviews and focus group discussions with project managers, community, or government organisations that provide an understanding of the perceptions of the involved parties regarding the implementation of an initiative. Another data gathering technique is the integration of both qualitative (interviews) and quantitative (surveys, experimental) methods to provide an in-depth reviewing of the initiative. The selection of specific techniques depends on what the programme needs to know about what decisions to make and get regular information about progress. The selection of specific techniques varies according to the selected activities, type of information needed to assess progress, and available opportunities.

Evaluation techniques are generally more complex. Here is a brief sample of data-gathering techniques and designs used for programme evaluation.

One set of studies considers survey research. Surveys can be used to make two different claims. Descriptive claims characterise certain aspects in a population, and are typically used for monitoring. Explanatory claims aim to describe the relationship between two or more variables, and are commonly used for evaluation. Survey data collection demands several steps such as identifying data source and setting,

conducting survey design, sampling strategies, data collection format (questionnaires, interviews), testing formats/procedures, assessing validity and reliability of the collected data, and determining the generalisability of the data to a given population.

Another set of studies include experimental research designs, quasi-experimental designs and non-experimental designs. Non-experimental designs are relatively simple to implement as they try to assess the impact of the programme and its specific objectives. Typically, they measure a correlation between exposure/participation in C4D programme and outcomes. This kind of research, however, does not allow to know for sure whether outcomes/changes can be explained due to programmes or other factors/causes. They can study populations 'before/after' the implementation of the programme to establish differences. Quasi-experimental designs frequently use control group to determine whether differences may be attributed to programmes. Examples of this approach are time series analysis, before/after with the control group, separate sample design, and post-test. Experimental design is usually considered the most rigorous because it controls possible intervening variables/factors. An example of this approach is Randomised Controlled Trials (RCTs) in which participants are assigned to one of two groups: experimental or comparison/control group. This kind of research allows the evaluation of the effectiveness of a programme by comparing groups that received the programme and the ones that did not.

A third type of data-gathering technique is aimed at capturing local knowledge and experiences – the broad social/communication context surrounding a specific programme- that cannot be adequately understood by conventional methods. For example, observation or field notes review operations as they are running and can reveal information of value. These techniques generally fall under the label of participatory M&E. According to Alish Byrne, they refer to "a significant and growing body of comparable methodologies that foreground communication and dialogue... [and which] highlight how evaluation can itself encompass a social change process and can be a stimulant and catalyst for social change." The emphasis is on methods that are not only culturally appropriate but that also offer insights and offer opportunities for broader participation and dialogue. M&E is not conceived as a separate, parallel instance to the overall participatory principles of the programme, but rather as an intrinsic process guided by the same ideals. M&E is an opportunity for participation and inclusion consistent the programme goals. It is focused on dialogues about activities, learning, and feedback. It is not limited to a specific moment of programme implementation, but instead, woven throughout. It is conceived as dynamic, regular opportunities for reflection and discussion rather than simply data production, managed by select specialists.

Moreover, document review is another qualitative approach of evaluation that helps in gathering information such as surveillance data, annual reports, or minutes of the meeting from existing documents.

Many approaches are embedded in these principles. The Most Significant Change (MSC) approach offers a way to collect data through story collection, analysis and filtering. The Outcome Mapping (OM) is aimed at understanding the external factors and events that are affected by a programme.

Newer methods of data gathering include social listening which allows tracking, analysis, and responding to conversations about a particular topic or organisation or issue online. It is a key component of audience research. Social listening is a two-step process. First, social media channels are monitored for mentions of relevant keywords. Next, the information is analysed and ways to put into action what have been learnt is explored. Taking action is what makes social listening different from social media monitoring.

There is growing consensus in the field of C4D that, ideally, M&E data-gathering techniques should offer a flexible mix of methods that include independent evaluation, self-evaluation and full involvement of citizens as they provide different yet complementary insights. Data can be triangulated with the use of various methods. Rigour should not be narrowly associated with specific techniques, but rather, as a requirement for any method. Simultaneously, it is important to advocate for mixed methodologies with various stakeholders to discuss the techniques and needs based on specific expectations regarding programmes. Different data-gathering techniques offer snapshots of different aspects/dimensions of programmes that cannot be fully captured with one approach.

Students should gain familiarity with techniques such as interviews, (participant) observation, focus group discussion, storytelling, questionnaires, comics, card sorting, pocket charts and vignettes.

Questions for discussion

- What are data-gathering techniques?
- What are the differences between techniques?
- What are the strengths and limitations of each technique?
- Why should the C4D programme use a mix of data-gathering techniques?

Reading list

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Learning activities

The learning activities should be aimed at developing the following competencies:

- Know the principles of various data-gathering techniques
- Understand the strengths and limitations of different DGT
- Select and apply DGT
- Determine the suitability of different DGT according to programme objectives and other considerations (stakeholders' expectations/ 'standards', timeline)

Lectures, small group discussions, debates and presentations

1. Group review of case studies using different data-gathering methods to discuss strengths and limitations in terms of the kind of information collected and its relevance/usefulness for monitoring and evaluation, and also the kind of questions that may (or not) be answered with the kind of data collected.
2. Design data-gathering using different research methods and designs. Groups should work on the same C4D programme/objectives/indicators and select different methodologies. If possible, data should be gathered during the course. Then, groups should meet in plenary to discuss the data collected and whether the methods used are complementary.
3. Group design of data-gathering instruments-surveys, questionnaires, dialogue guidelines – and test them either with classmates or with specific populations. The purpose is to learn the requirements and challenges of instrument/format design in data collection.

Unit assessment/evaluation methods

- In-class exercises
- Case study/scenario analysis and challenge
- Assignments: Oral and written presentations

MODULE 8

UNIT 3

Data analysis

General introduction

Data analysis refers to a range of techniques and methods. It is fundamentally a process of learning that feeds on C4D programmes in many ways. Fundamentally, data analysis is an iterative process that permanently offers insights into a range of programmatic issues. It is not a specific moment, relegated to certain phases of the programme. Rather, it is a continuous, dynamic and flexible process of reflection and learning that aims to bring in various stakeholders.

The process of data analysis and its uses are contingent on the techniques and analytical framework used. There is no shortcut or easy way of approaching data analysis. Nor can generalisations be made. Likewise, specific dimensions of data analysis vary between qualitative and quantitative methods. The kind of data produced as well as the methods used, steer the analysis in certain ways. The requirements for making sensible, legitimate interpretations and drawing conclusions vary according to whether the programmes have qualitative/quantitative data. Therefore, a good command of different methods is necessary to understand how the data can be interpreted. Likewise, different paradigms used by the programme lead to different kinds of analysis. Some programmes may be interested in finding causality between two phenomena (an intervention and certain development/social issue). Evidence needs to be assessed on those basis. Despite data differences, the underlying principles should be the same.

Data analysis should be precise, be able to offer powerful/persuasive explanations, and provide parsimonious analysis. Precision is about producing air-tight arguments based on data rather than suppositions, speculations, anecdotes and other sources. Powerful interpretations explain convincingly what happened within the boundaries of the programme and the available data— what can a programme say without a doubt? Parsimonious analysis is accurate in detail yet covers a broad phenomenon. It should not only explain what happened in one programme, but tell us something broader ('If families understand the value of children's education, they are more likely to keep them in school, no matter the difficulties').

The purpose of data analysis is dependent on the overall theoretical and analytical approach taken by a programme. The analytical framework should clearly establish the problems/conditions that the programme aims to change: factors that cause the problems/conditions, actions that influence causal factors based on known relationships between causes and solutions and the expected outcomes.

At a basic level, the purpose of monitoring data analysis is to provide feedback to the programme in ways that help in understanding the progress and make decisions to adjust activities during the process. Likewise, the goal of evaluation data analysis is to understand the impact of the programme according to the objectives. These are the basic goals regardless of the specific methodology used or the framework that guides the analysis. Differences in the purpose of data analysis are embedded in the epistemological and analytical premises of various approaches. Whilst researcher-focused approaches analyse data to provide feedback to programme managers and other partners (e.g. donors), participatory approaches essentially believe that data analysis offers valuable opportunities to promote collective dialogue and learning. The key difference is 'who' does the analysis and for what purpose. Based on these different approaches, programmes need to enable decision-making on who the data should be shared with and how data analysis should be woven into one or many of its phases.

Regardless of what specific approach is taken, a key requirement of data analysis is to define the main questions. What questions should guide the analysis? What does the programme need to know? What questions help understand certain aspects of the programme better? What happened as a result of the activities implemented? What do results mean (whether monitoring or evaluation data)? Any dataset can be analysed in multiple ways depending on the questions asked. Questions, rather than data, should guide the analysis. One could argue that the data must 'speak for itself', but the relevance and meaning of the data depends on programmatic interests. Placing the data in specific contexts is needed to draw interpretations and to support specific arguments. To analyse the data basically in terms of whether the original goals were achieved or not is to miss important considerations. Typically, much more happens in the lifespan of the programme that goes beyond objectives and plans, and hence needs to be carefully considered.

The analysis requires determining the quality of the data. Does it meet the original expectations? Does it provide sufficient basis for drawing interpretations and decisions? What challenges to the programmes are presented by poor data quality? What went wrong? Was it the data gathering method or the actual process of data collection? If the data quality is not adequate, then, decisions need to be made about whether new data should be gathered or discuss alternative options. It is important to remember that even if the data quality is acceptable, quality does not mean that any interpretation is warranted.

Possible interpretations are determined by the analytical framework used by the programme. This framework is based on theoretical premises and experiences that define the overall strategy. This framework defines the parameters of the data analysis process. It tells how the data should be interpreted. Although the process is typically

guided by the questions originally asked (as well as expectations and hypothesis that guided the programme), it is important to keep an open mind. Unexpected, interesting developments may have occurred that cannot be simply analysed using the questions (and categories) originally established. Data can be interpreted in ways that were not considered before. Ultimately, data analysis is about 'what story can we tell' based on available data considering programmatic goals and the specific issues involved.

Data analysis is, in essence, making sense out of data—the set of responses or observations recorded through the research instrument. Data analysis is the crowning step of the research process that leads directly to results and conclusions. Data analysis has two objectives: (1) to summarise and describe the data and (2) to make inferences from the data to the population from which the sample was drawn. Data analysis in quantitative research involves descriptive and inferential statistics. There are three main methods of data analysis. When the researcher focuses on a single variable at a time, he or she is doing univariate analysis. When the researcher examines two variables simultaneously, the researcher is doing bivariate analysis. And when the researcher looks at three or more variables simultaneously, he or she is engaging in multivariate analysis.

For example, let us assume that a communication researcher administered a questionnaire to 150 university students to find out how frequent they read the newspaper. The data has been gathered in seven variables such as: (1) sex, (2) age, (3) year of study (4) discipline or course of study (5) access to newspapers (6) educational level of parents and (7) number of days of the week a respondent reads newspapers. The purpose of the data analysis is to make sense out of the responses to the above variables, one by one, two together, and three or more together. In research, the simplest outcome is a description of some characteristics of a single variable. That single variable may be an independent or dependent variable.

An independent variable is one that elicits changes in others while a dependent variable is one that receives its values from changes in some other variable, usually an independent one. But the researcher must note that what is in an independent variable in one study may be a dependent variable in another. The distinction between them depends on the purposes of the research, that is, how the researcher uses the variables. A single variable may be described by numbers or displayed in some illustration as a table, a graph, or a chart. For example, the researcher can describe a variable by using one of the various measures of central tendency, that is, mean, median, or mode, or all of them. A table of frequency distribution or frequency table can be constructed for the single variable available. On the other hand, the researcher can use measures of dispersion which include the range, interquartile range, variance, standard deviation, and others.

As useful as it may be, univariate analysis serves little scientific value, since it cannot explain anything. Bivariate analysis is the beginning of scientific explanation of phenomena. To this end, the researcher also constructs tables, but he or she relies more on statistical techniques to measure the degree of association or relationship between the two variables under examination. Such statistical techniques produce a single summarising measure of the relationship referred to as correlation coefficient.

Correlation coefficients reflect the strength and direction of association between variables and the degree to which one variable can be predicted from the other. Such single summary statistics, or statistical techniques, include the Chi-square, Kendall's correlation (t), Pearson's correlation and so on.

Multivariate analysis carries the researcher into the world of partial correlation, multiple correlation, multiple regression, analysis of variance (ANOVA) and other techniques. Quantitative data analysis may be daunting but statistical software such as Statistical Package of Social Science (SPSS) and the computer have considerably lessened the tasks. However, without some knowledge of certain fundamentals, the communication researcher cannot make sense out of quantitative data that have been analysed for him or her by the computer. For example, you cannot use the same statistical technique for doing a bivariate analysis of variables that are measured according to different scales. Such things matter.

The rapid increase in generation and distribution of data by organisations and individuals has led to the growth of big data analytics. It deals with large complex data to examine unknown correlations, hidden patterns, market trends, etc. that traditional data analysis techniques are not equipped to process. There are three types of available big data: structured (spreadsheets, consisting information on all kinds of data like employee data), unstructured (tweets, social media posts) and semi-structured (x-ray files). Another analysis called 'predictive analytics' comes under the category of big data. It analyses and identifies patterns to make predictions based on available current or historical facts. Big data is valuable for increasing productivity in businesses and scientific disciplines. However, it also poses challenges such as the high cost of hiring specialists in big data and storage and the visualisation of high volume of data.

When data analysis has been completed, the researcher interprets the data in terms of the theoretical and practical objectives of the study. The interpretation of the data is the search for the broader meaning of the findings. The interpretation of the data could establish continuity in social research by linking the results of one study with those of other studies. Significantly, the interpretation of the data may lead to the establishment of explanatory concepts. Many communication researchers argue that interpretation of data is, in most cases, inextricably interwoven with the analysis of the data. Logically, the interpretation of the data becomes a special aspect of the analysis of data rather than a distinct operation. Other scholars argue that the step is so significant in its own right that it is necessary to separate it from the data analysis. It is then linked to conclusion drawing or generalisation.

Two broad issues are related to data interpretation. They are: (1) covariational versus causal relationship and (2) significant versus important relationship. In interpreting research findings, the researcher must not go beyond the limits of what he or she has found. For example, a causal relationship cannot be assumed from a covariational relationship.

A covariational relationship is one in which the variables have a concomitant and interdependent relationship that may be positive or negative. A causal relationship is one in which a concomitant variable non-spuriously relates to and temporarily precedes the second variable. Before a researcher can assert a causal relationship in his or her interpretation, the researcher must provide evidence that all the three requirements are present in the data.

The researcher should, in his or her interpretation, differentiate between a significant relationship and an important relationship among variables. Statistically, the significance of a relationship indicates only that the relationship rarely occurs by chance. Thus, a significant relationship suggests that the variables involved are probably associated in a non-random pattern. On the other hand, the importance of relationship not only suggests that the relationship among the variables is probabilistically non-random but also suggests that the magnitude of the relationship is substantial. In other words, a significant relationship is not necessarily an important relationship. A relationship is important to the extent that the correspondence of a change in one variable with the change in another is strong and systematic. Interpretation of the data usually leads to conclusions and some generalisation. If the researcher's interpretations are shaky, she or he cannot make any meaningful or valid generalisation.

Questions for discussion

- What is the purpose of data analysis?
- What methods can be used for data analysis?
- What principles should guide data analysis?
- What is the relation between data analysis and the use of various data-gathering methods?
- Are there similar principles in the analysis of quantitative and qualitative data?

Reading list

Academy for Educational Development. 2006. Introduction to Data Analysis Handbook. <http://ece.aed.org/publications/mshs/dataanalysis/WebDataAnalysis.pdf>

Ayers, Jessica, Simon Anderson, Sibongile Pradhan, and Tine Rossing. 2012. Participatory Monitoring, Evaluation, Reflection and Learning Manual: A Manual for local practitioners. http://www.careclimatechange.org/files/adaptation/CARE_PMERL_Manual_2012.pdf

Merrigan, and Gerianne and Carole L. Huston.2009. Communication Research Methods Chapter 6. New York: Oxford University Press

Newton Suter W. 2012. Introduction to Educational Research: A Critical Thinking Approach Second Edition. SAGE

Supplementary reading

The SAGE Handbook of Qualitative Data Analysis Edited by: Uwe Flick

Qualitative Data Analysis: An Expanded Sourcebook By Matthew B. Miles, A. Michael Huberman, Michael A. Huberman, Prof Michael Huberman

Case study

UNICEF 2012, A study to understand reasons for irregular school attendance, Uttar Pradesh Ihttp://www.kcci.org.in/_layouts/ContentManagement/KnowledgeRepository.aspx?Theme=Communication

Tools for data analysis

- SAS, SPSS, PSPP, Stata, MiniTab, and SYSTAT are some of the data analysis tools.
- 'R' statistical software
- Atlas.ti for qualitative data such as interview transcripts, textual data, video, audio.
- Studiocode for video and qualitative data analysis
- Nvivo for qualitative analysis
- Dedoose for qualitative and mixed methods software
- Metrik for evaluation of educational or psychological measures. This open source software that provides methods for item analysis, reliability, test scaling, item response theory, and linking and equating
- Tableau is much more intuitive data analysis than the traditional packages

Learning activities

The learning activities should be aimed at developing the following competencies:

- Know the principles of data analysis
- Understand the relationship between data analysis and analytical framework
- Conduct analysis of different kinds of data (quantitative and qualitative)
- Develop interpretations/arguments

Lectures, small group discussions, debates and presentations

1. Group analyses datasets (both quantitative and qualitative) addressing the following: Questions to be answered, indicators and targets (monitoring and evaluation), data methods and tools used, and data analysis techniques. All groups should be given the same datasets and then present in plenary. The purpose is to understand the kind of arguments that could be made based on different types of data while comparing similarities and differences in the conclusion drawn by different groups.
2. Conduct group data analysis based on different analytical frameworks and programme expectations. What interpretations may be drawn if the programme used different frameworks? What if the expectations from various stakeholders are different?
3. Discuss the three characteristics of interpretations: precision, power, and parsimony. Share the interpretations of different datasets and assess whether they meet these three criteria.
4. Group discussion on data analysis based on expected uses – monitoring and evaluation. How should arguments/interpretations be construed based on different uses? What are the different requirements for a real or hypothetical programme?

Unit assessment/evaluation methods

- In-class exercises
- Case study/scenario analysis and challenge
- Assignments: Oral and written presentations

MODULE 8

UNIT 4

Data reporting, documentation and utilisation

General introduction

Data reporting is about informing others about what was learned in the data analysis phase. It serves various purposes, namely to promote learning and discussion, inform and engage stakeholders about programme progress and achievements, inform external actors on effective strategies, develop ideas for further reflection, re-plan, and replicability. External and internal reporting may demand different types of reports as well as different analysis and presentations. Both data management and record-keeping are essential for monitoring and evaluation. A certain level may be required for legislation, policies and procedures.

Data reporting needs to consider the interests of various population groups. What needs to be reported may not be the same depending on what they expected and care about. Depending on specific groups (e.g. donors), reporting frequency and processes need to be adjusted according to requirements and schedules. Different groups may need reports with varying frequency during the lifetime of the programme given their own work and schedules. Determining schedules early in the programme is necessary to 'back-plan' M&E activities. Data reporting, then, needs to consider the information required by various groups: monitoring, planning, institutional requirements, progress, funding request and impact evaluation. Consequently, there is no single model that would fit various needs and expectations. Programmes should be mindful of these issues.

Data reporting should be focused on the specific questions and programmatic priorities of various stakeholders. Standardised, formulaic reports are unlikely to satisfy myriad needs and interests. Thus, it is important to foreground their priorities in the way that data analysis is reported. Reporting interesting interpretations to people who are interested in different set of issues is not effective. They may be interested in specific aspects of the analysis that others may not care about. Thus, 'tailored' reports are necessary. Likewise, reporting formats and language tend to vary widely. Some stakeholders may have specific formats or prefer if the analysis is presented in specific ways such as type of presentations, reports, data, and visuals. Also, the kind of forums for data reporting may affect decisions – public presentations, news releases, briefings, and so on.

Reports should tell a story about the findings and the programmes that lead to certain conclusions and recommendations. They should restate the original objectives and what was done during the programmes (including challenges and how they were overcome). Highlighting key objectives, underlying strategic premises, activities, main events, key findings and central interpretations is needed. All figures, maps and tables should be linked to the main narrative presented. It is important that data reporting sticks to the central argument/s and that all elements included are integrated in a unified storyline. Population groups should have clear take-home messages, interpretations, and actions. Data reporting is the most important opportunity to bring together a tremendous amount of time and energy spent since the beginning (and even before) a programme, and to communicate results/findings/interpretations effectively.

An effective way to report data is using dashboards. A dashboard communicates information in the form of visual representations by automatically analysing the data. It is more than a simple reporting tool as it also manages information, sets goals, and provides appropriate changes based on the information gathered over a period of time. It prevents hours of manual work and also allows the smooth exchange of information between people.

Data reporting strikes a delicate balance between documenting expected and real achievements. This should be carefully done. Even if the results fall short of the original expectations, there may be important findings that need to be highlighted. Depending on the interests of various groups, different dimensions of the programme can be emphasised. Data reporting, therefore, needs to be informed by the question: What should be the main lessons and implications of the programme? What should various stakeholders learn from it?

Questions for discussion

- What is data reporting?
- What factors affect data reporting?
- What should be the requirements of data reports?
- Why are different 'data reports' produced?
- How are data reports used?
- Why and how different stakeholders' expectations and objectives should be considered in data reporting?

Reading list

Chaplowe Scott G. 2009. Monitoring and Evaluation Planning: Guidelines and Tools http://www.crsprogramquality.org/storage/pubs/me/MEmodule_planning.pdf

Noar, Seth. 2009. Challenges in Evaluating Health Communication Campaigns: Defining the Issues, Communication Methods and Measures 3 (1-2): 1-11.

June Lennie and Jo Tacchi (2011). United Nations Inter-agency Resource Pack on Research, Monitoring and Evaluation in Communication for Development. Prepared for the United Nations Inter-agency Group on Communication for Development. http://www.unicef.org/cbsc/files/RME-RP-Evaluating_C4D_Trends_Challenges__Approaches_Final-2011.pdf

AERA Task Force (2006). Standards for Reporting on Empirical Social Science Research in AERA Publications American Educational Research Association. Educational Researcher, Vol. 35, No. 6, pp. 33–40 http://www.sagepub.com/upm-data/13127_Standards_from_AERA.pdf

Case studies

UNICEF Data report guidelines <http://www.nsd.uib.no/macrodataloguide/index.html>

Monitoring and Evaluation Quick Reference Extracts from the Programme Policy and Procedure Manual Revised May 2005: https://www.unicef.org/evaluation/files/ME_PPP_Manual_2005_013006.pdf

Learning activities

The learning activities should be aimed at developing the following competencies:

- Know the principles of data reporting
- Analyse data reports
- Produce data report for different
- Understand the various uses of data reports

Lectures, small group discussions, debates and presentations

1. Groups produce reports based on data analysis for the same public/stakeholders and compare content and presentation. Discuss the strengths and limitations of each report.
2. Groups produce data reports for various public/stakeholders (e.g. donors, volunteers, affected communities, potential donors) and compare commonalities and differences. Groups need to define the expectations and requirements of each public/stakeholder beforehand.
3. Based on actual data reports, group discussions on how future programmes should incorporate 'lessons learned' and conclusions. How do data reports think to plan future programmes? What should programmes do differently?

Unit assessment/evaluation methods

- In-class exercises
- Case study/scenario analysis and challenge
- Assignments: Oral and written presentations

MODULE 8

UNIT 5

Evaluation & research

General introduction

Much has been researched and discussed about adequate frameworks and models to evaluate C4D programmes. Recent thinking has been that evaluation demands the involvement of communities and dialogue from the beginning of the process/programme, the identification of agreed-upon objectives and outcomes by all stakeholders, and the definition of the purpose of evaluation and research. It is necessary to go beyond the mindset that evaluation is expensive, that it is done at the end of the process as a stand-alone step, that it is conducted by 'experts', and that there are only a few suitable methods to gather data. Instead, it is necessary to integrate evaluation as a process that is central throughout the process, that capitalises on the expertise of all actors involved in a process, and that which is fundamental for learning and achieving goals. Evaluation/research methodologies need to be inclusive and participatory. Evaluation can be conducted for several reasons such as assessing/demonstrating impact, providing feedback information to fine-tune activities or shift directions, learning collaboratively about the process and outcomes, strengthening capacity and collaboration, aiding effective decision-making, or documenting activities and performance for public dissemination.

Decisions also need to be sensitive to specific needs. While some participants may need quick data to assess impact, others may have a different timeline. While some may require quantitative data, others do not. Ultimately, it is incumbent upon stakeholders to decide on the expectations about information they need to know, why they need it, and how they will use it. Ideally, there should be a combination of different kinds of evaluation – some that are intrinsic to the programme that allows participants to learn and move forward, and other reasons related to the specific institutional expectations by various partners. Clarifying these points is necessary to steer the discussion towards specific objectives and data-gathering methods. Evaluation data can be different and may be used for different purposes. Not all stakeholders have similar interests and expectations in terms of necessary evaluation data. Sensitivity to these interests as well as efforts to reach a consensus are important from the beginning. Participants need to identify the common questions and then determine the mix of appropriate methodologies and types of data to be collected. Certainly, these decisions

are contingent on available resources and support. Certain approaches may be too costly or involve too many human resources. This is why it is important to find creative ways of incorporating evaluation/research in many ways along the process/programme and tap into the resources/strengths and the skills of the participating actors. Therefore, evaluation needs to start with a clear idea about why it is necessary and how the results will be put to use. Clear research questions are critical to identify the data that participants need and produce satisfactory answers. Data can be used for several purposes – what matters is what answers to what questions stakeholders believe are important. Any of the methods reviewed in this module can be used. So, it is not about methods, which are ways to collect certain data, but rather about questions and answers that are needed.

As previously discussed, various methods have strengths and limitations. A mix of methodologies may be suitable if this fits the interests and expectations of the parties involved. However, it is important to caution that a mixed strategy may be confusing and render equivocal results. Discussions about the contributions and problems of various methods are important to determine the right approach and avoid duplication. Participants need to discuss whether specific research approaches would provide the kind of information that they need in order to answer important questions. Also, the selection and application of methodologies needs to be embedded in participatory ideas. Too often, stakeholders meet and discuss suitable strategies, but they are not fully involved in the evaluation/research process. Thus, methodologies need to involve participants in various ways – data collection, analysis, presentation, report and so on. Another important condition is that evaluation/research needs to follow a flexible design, open to including data and ideas along the process. Questions may emerge that were not considered at the beginning. Outcomes/impact that were not anticipated may come out during the implementation phase that need to be captured, analysed and documented. Given that participation is central to the overall programme, rigid evaluation approaches are not suitable. Participation means that unexpected developments, priorities and lessons emerge at any time. Therefore, it is necessary to be prepared to assess the significance of expected trends/outcomes that result from people's interaction and actions. This is why realistic and flexible timelines and plans are needed to be able to make adjustments and address issues that may be deemed important.

Any evaluation plan should have a clear list of indicators that are realistic, relatively small in number, and are linked to participants' expectations. They should also provide room for changes if interesting developments emerge that were not originally identified as 'expected outcomes'. This is why adopting an open attitude about what transpires during the process is critical to bring it up as part of the evaluation process. Data should consider important variables and socio-demographic factors (e.g. gender, age, education, caste, income) to be able to provide solid explanations for change (and lack of). Finally, evaluation is an opportunity for participants to learn critically and discuss why change happened or did not happen. As a process of collective reflexivity, it is about drawing lessons to understand specific processes and consider in the future.

Questions for discussion

- What is the purpose of evaluation and research?
- What principles should guide research design?
- Why is it necessary to change conventional approaches to evaluation?

Reading list

Department for International Development (DFID). 2005. Monitoring and Evaluating Information for Communication for Development Programmes
<http://www.oecd.org/dev/communicationanddevelopment/46388330.pdf>

Lennie, June and Jo Tacchi. 2012. Evaluating Communication for Development: A Framework for Social Change. London: Routledge

Case study

UNICEF 2010, Stories of Change, Most Significant Change Technique for Social and Behavior Change Communication in India
http://www.kcci.org.in/_layouts/ContentManagement/KnowledgeRepository.aspx?Theme=Communication

Reference material/resource hub

Better Evaluation: https://www.betterevaluation.org/en/rainbow_framework

Learning activities

The learning activities should be aimed at developing the following competencies:

- Understand basic premises of evaluation research
- Critical thinking about the uses and goals of evaluation research
- Assess strengths and limitations of different approaches to evaluation research
- Develop guidelines for evaluation research

Lectures, small group discussions and presentations

1. Group of students will develop a hypothetical project, based on a scenario. The group will then identify various stakeholders within the project; goals for the stakeholders and indicators for the goals. The group will propose an evaluation research design for the project.
2. Role play of meeting in which various stakeholders discuss institutional needs and expectations and try to agree on common research outcomes and indicators.
3. Critical review of a case study to understand the common evaluation goals/ indicators, flexibility to incorporate new goals, data collection methods, and use of evaluation data in project assessment.

Unit assessment/evaluation methods

- In-class exercises
- Case study analysis
- Assignments: Oral and written presentations

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Key contributors:

1. Abhijit Bora, Professor & Head of Department, Tezpur University
2. Abid Husain, Assistant Professor Jamia Millia Islamia
3. Alka Gadgil (Dr.), Head & Faculty, Xavier Institute of Communication, Mumbai, Maharashtra
4. Alka Malhotra, Communication for Development Specialist, UNICEF Delhi
5. Anant Kumar (Dr.), Associate Professor, Xavier Institute of Social Sciences (XISS), Ranchi
6. Anjali Capila (Dr.), Associate Professor, Dept. of Development Communication & Extension, Lady Irwin College, Delhi
7. Aparna Khanna, Associate Professor, Lady Irwin College, Delhi University
8. Arbind Sinha (Dr.), Advisor, MICA - Centre for Development Management and Communication, Mudra Institute of Communication Ahmedabad (MICA)
9. Archana Kumar, Associate Professor, Development Communication and Extension, Lady Irwin College, Delhi University
10. Arupa Shukla, Communication for Development Specialist, UNICEF Delhi
11. David Mould (Dr.), Professor Emeritus, Media Arts & Studies, Ohio University
12. Diwakar Shukla, Director, Jagran School of Journalism and Communication, Bhopal
13. Elnur Aliyev, Communication for Development Specialist, UNICEF Delhi
14. I Arul Aram (Dr.), Associate Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
15. Ila Patel (Dr.), Professor, Social Science, Institute of Rural Management, Anand, Gujarat
16. Joya Chakraborty, Senior Assistant Professor, Tezpur University
17. Kanchan K. Malik (Dr.), Associate Professor in Communication, University of Hyderabad, Andhra Pradesh
18. Kulveen Trehan, Senior Faculty, University School of Mass Communication, Indraprastha University
19. M. H. Ansari (Dr.), Professor & Head of Department, Rural Management, Xavier Institute of Social Services (XISS), Ranchi
20. Manjaree Pant, Communication for Development Specialist, UNICEF Rajasthan
21. Manukonda Rabrindranath, Dean Faculty of Communication and Media studies, Head of Journalism and Mass Communication, Indira Gandhi National Tribal University, Madhya Pradesh
22. Narendranath Chowdary, Consultant, Monitoring & Evaluation, UNICEF Delhi
23. Neela Saldanha, Director, Center for Social and Behaviour Change, Ashoka University
24. Neelam Yadava (Dr.), Assistant Professor, Mudra Institute of Communication Ahmadabad, Gujarat
25. Purnima Mehrotra, Center for Social and Behaviour Change, Ashoka University
26. R Lavanya (Dr.), Assistant Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
27. Rachana Sharma, Communication for Development Specialist, UNICEF Delhi
28. Raj Shree Verma (Dr.), Associate Professor, Rural Management, XISS
29. Rashmi Jain, Assistant Professor, Department of Social Work, Jamia Millia Islamia
30. Rudrajit Das, Communication for Development Specialist, UNICEF Delhi
31. S. Arulchelvan (Dr.), Assistant Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
32. S. Devaraj (Dr.), Research Assistant, Dept. of Extension Education, Gandhigram Rural Institute, Tamil Nadu
33. Salman Khan, Research Associate, School of Social Work, Jamia Millia Islamia
34. Sanjay Singh, Communication for Development Specialist, UNICEF Madhya Pradesh
35. Sant Kumar (Dr.), Associate Professor, Rural Management, Xavier Institute of Social Services (XISS), Ranchi
36. Santosh Kumar Patra (Dr.), Assistant Professor, Media Studies, Mudra Institute of Communication, Ahmadabad
37. Seema Kumar, Communication for Development Specialist, UNICEF Andhra Pradesh & Karnataka
38. Shivani Saraf, Center for Social and Behaviour Change, Ashoka University
39. Siddartha Shrestha, Chief, Communication for Development, UNICEF Delhi
40. S.K. Gopal (Dr.), Programme Coordinator, Krishi Vigyan Kendra, Gandhigram Rural Institute, Tamil Nadu
41. Sunitha Don, Assistant Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
42. Tisha Srivastav, Assistant Professor, Film and Media Studies, Ashoka University
43. U.T. Rao (Dr.), Professor, General Management, Mudra Institute of Communication, Ahmadabad, Gujarat
44. Uma Maheshwari P., Assistant Professor, Department of Media Sciences, Anna University (AU), Chennai, Tamil Nadu
45. Vaiju Naravane, Professor, Journalism and Media Studies, Ashoka University
46. Vasuki Belavadi, Associate Professor in Communication, University of Hyderabad
47. Vinod Pavarala (Dr.), Professor in Communication, UNESCO Chair on Community Media, University of Hyderabad

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For more copies contact:

**Communication for Development Section
United Nations Children's Fund**

73 Lodi Estate, New Delhi 110 003, India

Phone : +91-11-24690401

Email : newdelhi@unicef.org

Web : www.unicef.org

www.unicef.org/india/

www.unicefiec.org