

11th ECPR Summer School in Methods and Techniques, 28th July to 13th August, 2016
Central European University, Budapest, Hungary
Course Description Form [short course, 15 hours] (28 – 30 July, 2016)

Course title

Introduction to NVivo for Qualitative Data Analysis

Instructor details

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Short Bio (approx. 50-70 words)

Marie-Hélène Paré is an eLearning consultant who lectures program evaluation in the Master in Health Social Work at the Open University of Catalonia, and a freelance lecturer and consultant in qualitative data analysis. She was educated in Quebec, Beirut and Oxford. She is a registered social worker who worked and conducted research in violence against women and community participation in humanitarian interventions. She taught social work at St-Joseph University in Beirut, Lebanon, and has lectured qualitative data analysis in more than forty universities and research centres worldwide. Her methodological interests lie in qualitative data analysis, qualitative evidence synthesis, emancipatory social sciences, indigenous epistemologies, and participatory methodologies.

Prerequisite knowledge

This is an introductory course on NVivo with no prerequisite knowledge. Knowledge of qualitative research is necessary.

This course uses NVivo 11 Pro for Windows

This is a bring-your-laptop course. You must run NVivo 11 Pro for Windows on your laptop or NVivo 10 for Windows. The 14-day free trial of Windows 11 Pro for Windows can be downloaded [here](#). DO NOT COME TO THE COURSE WITH NVIVO FOR MAC. NVivo for Mac is incomplete compared to NVivo for Windows and has a different interface. To run NVivo 11 Pro for Windows on your Mac, see the compatibility options [here](#). It is your responsibility to ensure that NVivo 11 works well on your laptop as no troubleshooting will be provided during or outside teaching hours. See section Software and Hardware requirements below for software installation instructions.

Short course outline (approx. 150 words)

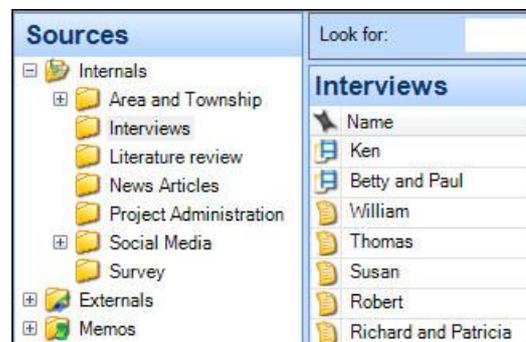
This course is designed for participants who plan NVivo for the management, coding, analysis and visualisation of qualitative data. The course's content is spread over four modules and includes: setting up a project and organising data in NVivo; preparing text and multimedia sources, managing a literature review, coding and analysing data; seeking patterns and identifying relationships, and presenting findings using graphic displays. The course is entirely hands-on and uses sample data to learn NVivo's basics and advanced options. This course does not cover how to analyse qualitative data in NVivo based on specific methods such as thematic analysis, grounded theory, or content analysis. If you are looking for such course, see the outline of the course *Advanced Qualitative Data Analysis* of the next ECPR Winter School in Bamberg in February 2017.

Long course outline (approx. 800-1200 words)

NVivo is a software programme for qualitative data analysis. It is a powerful platform that supports text, video, audio, picture data, PDF, surveys, bibliographic libraries from Endnote and the like, internet data from Facebook, Twitter, LinkedIn, YouTube and Survey Monkey, and notes taken using Evernote and OneNote. NVivo supports a range of inductive and deductive methods to analyse qualitative data such as thematic and content analysis, within and cross-case analysis, discourse, conversational and narrative analysis, grounded theory, analytical induction, and qualitative research synthesis. The objective of this course is to provide participants with knowledge and skills on how to use the basic and advanced features of NVivo in their own research project. The course's content is spread over four modules and includes setting up a project and organising data in NVivo; preparing text and multimedia sources, managing a literature review, coding and analysing data; seeking patterns and identifying relationships, and presenting findings using graphic displays. More on the four modules is presented below.

Module 1 Data Management

The course opens with guidelines on how to apply one's research design in NVivo: type(s) of data collected, unit of analysis, cases and variables (when applicable), coding approach, and choice of analytic method. We then create an NVivo project, import and organise a interview and focus group transcripts, audio and video recordings, PDF from literature review, survey data, Tweets and Facebook posts, and bibliographical meta-data. When using NVivo for literature review, we learn to cross-reference sources that support or contradict a given line of argument, and learn how to show connections between sources and authors.

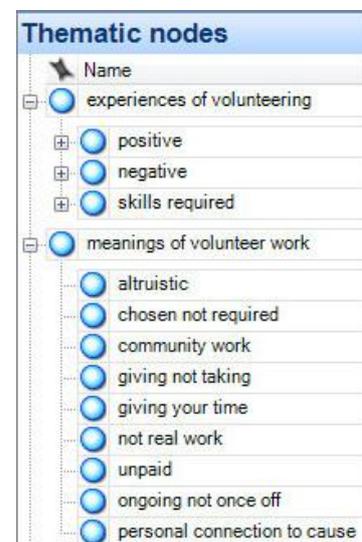


Data organisation in folders

Our attention then turns to the transcribing possibilities of NVivo, starting with transcribing audio and video recordings in-full or working only with sections of sound data. We look at picture data and explore the possibility to comment on a whole picture or only regions of it. We move on to create externals that link an NVivo project to outside information, as well as creating memos to record the analytic process. Module 1 concludes with lexical queries which search for the most cited words, as well as the occurrence and context in which keywords are mentioned across textual sources. We analyse the outputs in word clouds, dendograms, and wordtrees.

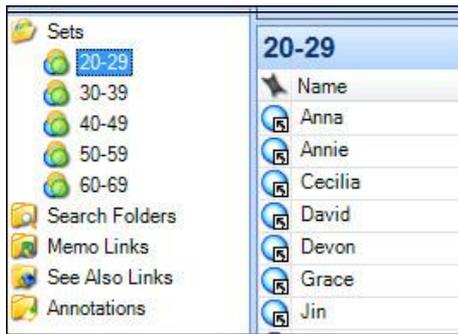
Module 2: Data Coding

Module 2 presents the different techniques to automatically and manually code data in NVivo. We start by autocoding questions from structured interviews so the responses of each question are gathered in one node. Such data sorting, known as broad-brush coding, is very useful when one wants to examine everything that has been said about a question or theme across a dataset. But the analytic task of coding really starts with the creation of categories which may derive from theory or be inductively created from the data. Accordingly, we create a coding scheme where different types of codes co-exist and which capture ideas in text data, video transcripts, audio recordings, pictures, and social media data. The use of relationship nodes is introduced to formalise relationships between codes when working towards hypothesis generation or falsification. Module 2 concludes with mapping the coding process in models and graphs.



Development of a coding scheme

Module 3: Data Analysis



Grouping cases in sets based on attributes

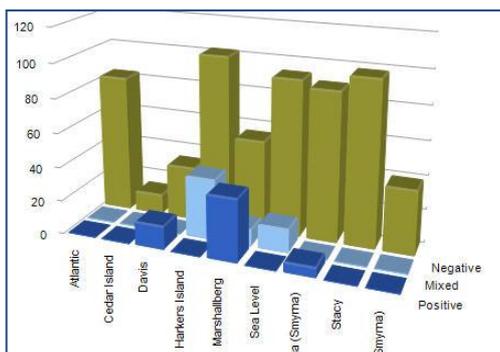
Module 3 is concerned with the preparation and the conduct of qualitative data analysis through seeking patterns and identifying relationships across the data. We first set up the case and variable structure from Excel which results in the cases being listed in a case structure with their variables assigned. With the case list set-up, we turn to the NVivo search tool which is time-saver functionality when one wants to quickly locate project items based on their name, creation date, or attribute values. We search for cases that match specific sociodemographics and grouped these in sets so we can later compare what, and how much, was said for specific codes across sets of respondents.

We then move on with coding-based queries which retrieve data based on patterns of codes co-occurrence, proximity, sequence, or exclusion. We first run coding queries that search for data coded at some nodes but only when mentioned by respondents of a given profile. For cross-case analysis, we run matrix queries which cross-tabulate cases with codes and we interpret the results using different numerical readings: coding density, number of cases, relative percentage, etc. Our interpretation is recorded in memos and is linked back to theory. Module 3 concludes with running group query to find out association between items across the data.

Attitudes on commercial fishing by			
	A: Positive	B: Mixed	C: Negative
1: Atlantic	0	0	82
2: Bettie (Straits)	73	0	84
3: Cedar Island	0	0	12
4: Davis	14	0	32
5: Gloucester (Straits)	34	8	144
6: Harkers Island	0	36	101
7: Marshallberg	37	10	54
8: Otway (Straits)	4	8	58
9: Sea Level	0	14	92
10: Smyrna (Smyrna)	6	0	88
11: Stacy	0	0	97
12: Straits (Straits)	3	0	40
13: Williston (Smyrna)	0	0	38

Cross-case comparison using matrix query

Module 4: Data Visualisation



Presenting findings with charts

Module 4 proposes different graphic displays to effectively communicate one's research findings. We first discuss the rationales for choosing certain displays against others. We learn how to generate models, charts, graphs, dendograms, and maps. Moving on to building a solid audit trail to back up results and substantiate one's claims, we learn how to export results out of NVivo so these can be used in Word, Excel, and PowerPoint.

The usefulness of generating nodes summary reports, which provide detailed synthesis of the scope of a node in a project, is also covered. When working with colleagues who don't use NVivo, the possibility to export project data in mini websites using HTML files is presented. Module 4 concludes with the ABC of coordinating team work with a particular emphasis on the golden rules for successful data management, splitting and merging project files in a master project, and the measurement of intercoder reliability.

Day-to-day schedule (Thursday 23 July – Saturday 25 July)

	Topic(s)	Details
Day 1	Data management Data coding	<ol style="list-style-type: none"> 1. Apply your research design in NVivo 2. Import and organise data in an NVivo project 3. Manage a literature review 4. Discover lexical structure of textual data 5. Link a project to external information 6. Record the analytic process in memos
Day 2	Data coding Data analysis	<ol style="list-style-type: none"> 1. Autocode structured data 2. Generate codes from the data 3. Manage a coding scheme 4. Build / falsify hypotheses from data or theory 5. Depict relationships across codes in networks 6. Work with cases and variables
Day 3	Data analysis Data visualisation	<ol style="list-style-type: none"> 1. Use search functions to locate items 2. Aggregate similar items in sets 3. Run coding and matrix queries 4. Present findings with visualisations 5. Generate summary reports 6. Export content out of NVivo 7. Coordinate team work

Day-to-day reading list

This course uses the book by Bazeley & Jackson (2013). *Qualitative Data Analysis with NVivo* (2nd ed.). Sage: London to learn NVivo's basics and advanced features. Please make sure you obtain a copy of the book before arriving to the summer school as I can't guarantee that CEU library's copy will be available at the time of the course.

	Readings
Day 1	Data Management <ol style="list-style-type: none"> 1. Format interview and FG data: chapter 3 pp. 59-61 2. Download data from internet: chapter 7 pp. 173-177 3. Set up a project and organise data: chapter 2 pp. 24-34; 45-46; chapter 3 internals pp. 61-67; chapter 9 survey pp. 195-204; social media pp. 209-216; chapter 11 framework matrices pp. 259-260 4. Transcribe multimedia data: chapter 3 pp. 56-59; chapter 7 pp. 154-177 5. Link to external data and memos: chapter 2 pp. 36-38; chapter 3 pp. internals 62-63; chapter 4 p. 87 6. Import literature review sources: chapter 8 pp. 178-194
Day 2	Data Coding <ol style="list-style-type: none"> 1. Autocode structured data: chapter 5 pp. 108-110; chapter 9 survey : 207- 208 2. Create codes and coding: chapter 4 pp. 68-94 3. Manage a coding scheme: chapter 5 pp. 95-106; 117-119 4. Build relationship nodes: chapter 10 pp. 230-234 5. Insert annotations and link data: chapter 2 pp. 34-45 6. Create case nodes and classifications: chapter 3 pp. 47-56; chapter 6 pp. 122-139; chapter 9 survey : 204-207
Day 3	Data Analysis <ol style="list-style-type: none"> 1. Search and group items: chapter 5 pp. 106-107; chapter 6 sets pp. 146-153 2. Run lexical, coding and matrix queries: chapter 5 word frequency / text search

pp. 110-117; chapter 6 matrix query pp. 141-146; chapter 11 pp. 242-259; 260-265

Data Visualisation

1. Present findings with visualisations: chapter 10 pp. 217-230; 234-241; chapter 2 pp. 28-30
2. Generate reports: chapter 11 pp. 265-269
3. Export content out of NVivo: chapter 5 pp. 119-121; chapter 6 pp. 139-140
4. Coordinate team work: chapter 12 pp. 270-296

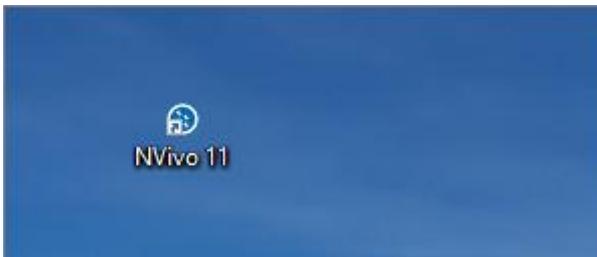
Software and hardware requirements

This course requires that you run **NVivo 11 Pro for Windows** on your laptop or, alternatively, NVivo 10 for Windows. The 14-day free trial of Windows 11 Pro can be downloaded [here](#). Alternatively, you can run NVivo 10 for Windows on your laptop.

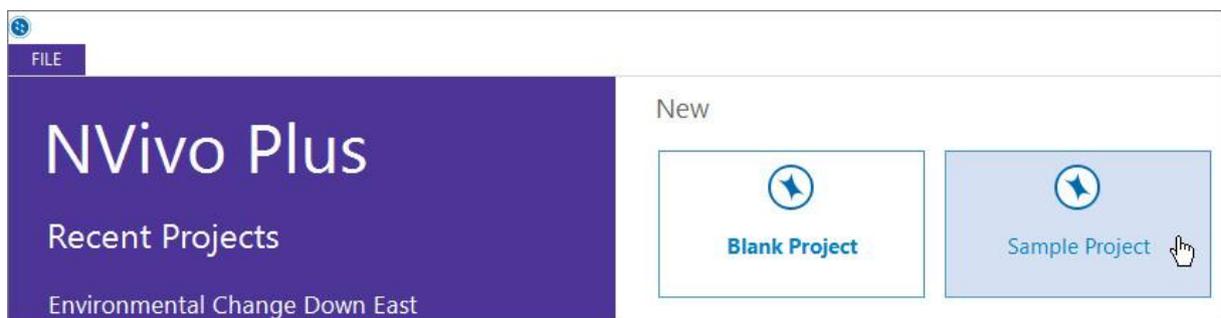
DO NOT COME TO THE COURSE WITH NVIVO FOR MAC. NVivo for Mac is incomplete compared to NVivo for Windows and has a different interface. Participants with Mac laptops should consult the compatibility options [here](#) to run NVivo 11 Pro using Boot camp, Parallels, or VMware Fusion. It is your responsibility to ensure that NVivo 11 works well on your laptop as no troubleshooting will be provided during or outside teaching hours.

Once NVivo is installed on your laptop, verify that it works properly. Follow the instructions below.

1. On your Desktop, launch NVivo by clicking on the **NVivo 11 shortcut icon**.



2. On the Start screen, in the **New** section, click **Sample Project**.



3. NVivo opens a copy of the sample project which is stored in your default project location.
4. If you can't open the Sample project, contact QSR international by submitting a [support request form](#) online (see section **Contact Us Online** at the bottom).

NVivo hardware requirements - as per [QSR International](#)

	Minimum	Recommended
Processor	1.2 GHz single-core processor (32-bit) 1.4 GHz single-core processor (64-bit)	2.0 GHz dual-core processor or faster
Memory	2 GB RAM or more	4 GB RAM or more
Display	1024 x 768 screen resolution	1680 x 1050 screen resolution or higher
Operating system	Microsoft Windows 7	Microsoft Windows 7 or later
Hard disk	Approximately 5 GB of available hard-disk space (additional hard-disk space may be required for NVivo project data)	Approximately 8 GB of available hard-disk space (additional hard-disk space may be required for NVivo project data)

Literature on NVivo

Auld, G. W., Diker, A., Bock, M. A., Boushey, C., J, Bruhn, C. M., Cluskey, M., . . . Zaghoul, S. (2007). Development of a Decision Tree to Determine Appropriateness of NVivo in Analyzing Qualitative Data Sets. *Journal of Nutrition Education and Behavior, 39*(1), 37-47.

Bringer, J. D., Johnston, L. H., & Brackenridge, C. H. (2004). Maximising transparency in a doctoral thesis: the complexity of writing about the use of QSR* NVIVO within grounded theory study. *Qualitative Research, 4*(2), 247-265.

Bringer, J. D., Johnston, L. H., & Brackenridge, C. H. (2006). Using computer-assisted qualitative data analysis software to develop a grounded theory project. *Field Methods, 18*(3), 245-266.

Hutchison, A. J., Johnston, L. H., & Breckon, J. D. (2010). Using QSR-NVivo to facilitate the development of a grounded theory project: an account of a worked example. *International Journal of Social Research Methodology, 13*(4), 283-202.

Johnston, L. H. (2006). Software and method: Reflections on teaching and using QSR NVivo in doctoral research. *International Journal of Social Research Methodology, 9*(5), 379-391.

Leech, N. L., & Onwuegbuzie, A. J. (2011). Beyond Constant Comparison Qualitative Data Analysis: Using NVivo. *School Psychology Quarterly, 26*(1), 70-84.

Rich, M., & Patashnick, J. (2011). Narrative research with audiovisual data: Video Intervention/Prevention Assessment (VIA) and NVivo. *International Journal of Social Research Methodology, 5*(3), 245-261.

Siccama, C., & Penna, S. (2008). Enhancing Validity of a Qualitative Dissertation Research Study by Using NVIVO. *Qualitative Research Journal, 8*(2), 91-103.

Wainwright, M., & Russell, A. (2010). Using NVivo Audio-Coding: Practical, Sensorial and Epistemological Considerations. *Social Research Update, 60*(1), 1-4.

Wiltshier, F. (2011). Researching With NVivo 8. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 12*(1). Retrieved from <http://www.qualitative-research.net/index.php/fqs/article/viewArticle/1628/3146>.

Wong, L. P. (2008). Data analysis in qualitative research: a brief guide to using NVivo. *Malaysian Family Physician 2008, 3*(1), 14-20. Retrieved from http://www.e-mfp.org/2008v3n1/pdf/NVivo_in_Qualitative_Research.pdf.

Zapata-Sepúlveda, P., López-Sánchez, F., & Sánchez-Gómez, M. C. (2012). Content analysis research method with Nvivo-6 software in a PhD thesis: an approach to the long-term psychological effects on Chilean ex-prisoners survivors of experiences of torture and imprisonment. *Quality & Quantity, 46*(1), 379–390

NVivo videos on YouTube

General videos	'How to' video
NVivo 10 Tutorial: Get up and running with NVivo 10 What's new in NVivo 10 Introducing NVivo 10 for Mac Introducing NVivo	Importing a document Create a new project Importing audio files
Literature review with NVivo NVivo and Endnote: improving your literature review Literature review with NVivo	Importing videos Importing images Importing PDFs Importing datasets
Tutorial videos Working with YouTube data Working with Twitter data Capturing web data in NVivo Work with audio, video and images Work with survey results Work with interviews, articles and other documents Organize material into themes with coding Work with information about people, places and other cases Explore your coding Find themes and analyze text Visualize your project	Creating nodes Coding a document Coding an audio file Coding a video Coding an image Coding PDFs Coding a dataset Importing classifications and attributes Creating nodes from sources Classifying nodes Matrix coding query Word frequency query Text search query

Lab requirement

None - the class will not be held in a computer lab.