6th ECPR Winter School in Methods and Techniques, 3-10 March 2017
University of Bamberg, Germany
Course Description Form[1] [preparatory course, 7.5 hours, 3-4 March]

Course title
Introduction to NVivo for Qualitative Data Analysis

Instructor details
Name: **Marie-Hélène Paré**
Department: Health Sciences
Institution: Universitat Oberta de Catalunya
Carrer Dos de Maig, 200, SA 2ª
Barcelona. 08013. Spain.
E-mail: mhpare@pragma-solucions.cat
Web: academia.edu

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
No prerequisite knowledge of NVivo required. Knowledge of qualitative research is necessary.

This course uses NVivo 11 Pro for Windows

This is a bring-your-laptop course for **NVivo 11 Pro for Windows**. You can download the 14-day free trial here. This course is unsuitable for NVivo 11 for Mac as this version is incomplete compared to Windows. You can run NVivo 11 Pro for Windows on a Mac using Apple Boot Camp or Parallels if, and only, your Mac meets the system requirements here. You must ensure that NVivo works well on your machine regardless of the OS as no technical assistance will be provided at the Winter School. You can find more on installation instructions in the section Software and Hardware below.

Short course outline (approx. 150 words)
This course is designed for participants who plan to use NVivo for the management, coding, analysis and visualisation of qualitative data. The course content is spread over four modules and includes to set up a project and organise data, manage a literature review, code and analyse data, and present qualitative findings using graphic displays. The course is entirely hands-on and uses sample data to learn NVivo's basic and advanced functionalities. 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* at the ECPR Winter School in Bamberg in February 2017.

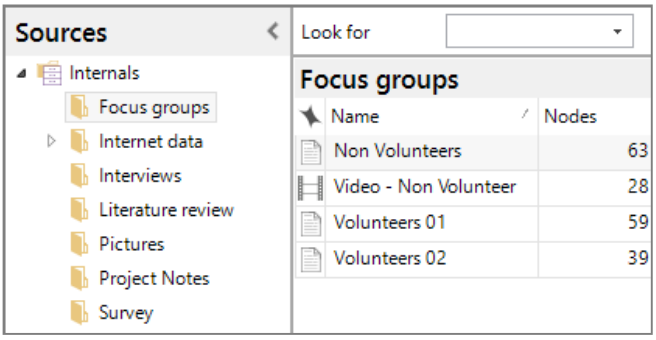
1 *Disclaimer: the information contained in this course description form may be subject to subsequent adaptations (e.g. taking into account new developments in the field, specific participant demands, group size etc.). Registered participants will be informed in due time in case of adaptations.*

Long course outline (approx. 800-1200 words)

NVivo is software programme for qualitative data analysis. It is a powerful platform that supports text, multimedia, pictures, PDFs, open-ended surveys from Excel and Survey Monkey, reference libraries, webpages, social media data from Facebook, Twitter, LinkedIn, and YouTube, notes from Evernote and OneNote, and emails from Outlook. NVivo supports a range of inductive and deductive methods to qualitative analysis 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 to use the basic and advanced features of NVivo in their own research. The course content is spread over four modules and includes to set up a project and organise data, work with multimedia, manage a literature review, autocode and code data inductively, generate hypotheses, seek patterns and discover relationships, and present qualitative findings. Details of the four modules is presented below.

Module 1 Data Management

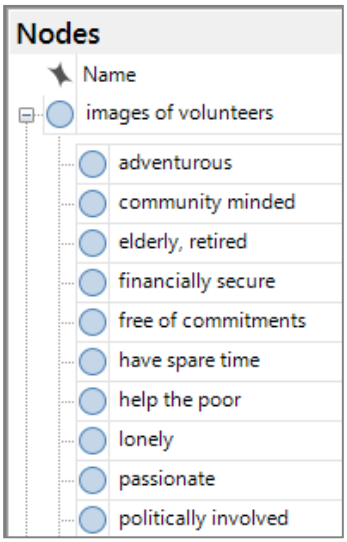
The course opens with notions of qualitative research designs and their application in a NVivo project. In turn, we review how data can be organised in comparative and non-comparative designs, coding approaches developed, and types of analyses conducted. We then move in NVivo and import and organise a range of qualitative data. We learn the key features that support a literature review so sources can be annotated and cross-referenced to highlight a line of arguments and connections across sources.



Our attention then turns to the transcribing possibilities of NVivo, starting with transcribing media recordings in-full or working only with sound and video sequences. Working with still images is further introduced. We see that one can work directly on pictures or generate a log to associate comments with specific picture regions. We move on and create externals that link a NVivo project to outside information, as well as creating memos where the analytic process is recorded. Module 1 concludes with lexical queries which search for frequency, occurrence, and context of keywords in textual data. We analyse the outputs using word clouds, dendograms, and wordtrees.

Module 2: Data Coding

Module 2 introduces the different techniques to autocode and code data inductively 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 was said about a question or a theme across a dataset without having to open each and every source.



We move on with inductive coding and learn the different tools to code data manually. Key notions underlying the coding process such as coding unit, semantic exclusiveness, semantic exhaustiveness, and coding cooccurrence are discussed and exemplified. The use of relationship nodes is introduced to formalise relationships between codes when working towards hypothesis generation or falsification. Module 2 concludes with visualisations that support the coding process from inception to the end.

Module 3: Data Analysis

Module 3 covers the range of functionalities to prepare and conduct qualitative analysis. Since a large number of social research gather qualitative data, as well as variables, so comparison can be made across cases and sub-sets of cases, we first look at the procedures to create cases from interview data, import variables from Excel, and merge these to the cases. We extend our use of cases to policy documents where comparisons are made on document data, and not cases of individuals. In both instances, we use the functionality of source and node classifications to define type of sources and cases in the dataset.

Cases

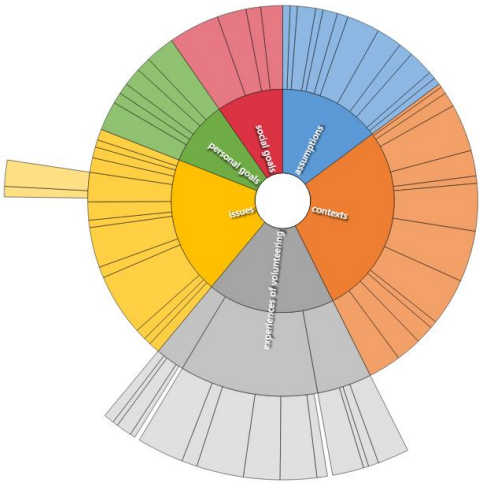
	Age	Country	Current job
Anil	40-49	India	Director
Anna	20-29	Aust	Student
Annette	40-49	US	None
Annie	20-29	US	None
Bela	40-49	India	Director
Bernadette	60+	Aust	Retired
Cecilia	20-29	Aust	Supervisor
Dan	60+	US	Retired
David	20-29	US	Student
Devon	20-29	UK	Student

With the cases created, we turn to the NVivo search tools that efficiently retrieve cases that match a specific search string. This allows us to create sets of cases and documents for comparative analysis.

We then move on with coding-based queries which retrieve data based on codes overlap, proximity, sequence, or exclusion patterns. We first run coding queries that search for data coded at some nodes but only when mentioned by cases 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 coded items across a dataset.

	Cases:Age = 20-29	Cases:Age = 30-39	Cases:Age = 40-49
getting and giving	2	2	2
thanks or recognition	1	3	1
acknowledgement	1	0	0
sense of achievement	3	1	0
skills development	6	0	0
emotions	2	1	3
taken for granted	1	2	3
organisational politics	0	0	0
emotionally difficult	2	0	1
physical endangerment	1	2	0

Module 4: Data Visualisation



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 to generate maps, charts, diagrams, and dendograms. Moving on to building a solid audit trail to back up results and substantiate one's claims, we learn how to export qualitative findings 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 (Friday 3 March to Saturday 4 March)

	Topic(s)	Details
Friday afternoon	Data organisation and exploration	1. Apply your research design in NVivo 2. Import and organise data 3. Manage a literature review 4. Explore context and frequency of textual data 5. Link your project to external information 6. Role of memos in qualitative analysis
Saturday morning	Data coding and comparison	1. Autocode structured data 2. Code text, multimedia, and social media 3. Manage a coding scheme 4. Generate and falsify hypotheses 5. Visualise code and coding 6. Work with cases and variables
Saturday afternoon	Data analysis and visualisation	1. Search and locate items across a project 2. Create sets for admin and analytic purposes 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

The NVivo 11 Pro Started Guide (see here for download) is the main text of the course. Those who wish to deepen understanding of using NVivo in qualitative research can do the optional readings of Bazeley & Jackson (2013) *Qualitative Data Analysis with NVivo* (2nd ed.). Please note that this book was written for NVivo 10 and some functionalities and dialog boxes are now outdated with version 11.

	Readings
Friday afternoon	**Data organisation and exploration** Compulsory text • NVivo 11 Pro Started Guide: pp.5-7; 10-14; 17-23; 37-38 Optional text • Bazeley & Jackson: format data: 59-61; download data with NCapture: 173-177; import data: (internals) 24-34; 45-46; 61-66; (open-ended surveys) 199-203; (social media) 171-176; 209-211; (multimedia) 154-167; transcription: 167-169; externals: 62-63; literature review: 178-194; links and memos: 34-45; text-based queries: 110-117; 249-250
Saturday morning	**Data coding and comparison** Compulsory text • NVivo 11 Pro Started Guide: pp.24-36 Optional text • Bazeley & Jackson: autocoding: 108-110; (datasets) 207-208; codes and coding: 68-94; coding scheme: 95-106; 117-119; relationship nodes: 230-234; cases and variables: 50-56; (from surveys) 122-139; 205-207
Saturday afternoon	**Data analysis and visualisation** Compulsory text • NVivo 11 Pro Started Guide: pp.40-48; 15-16 Optional text • Bazeley & Jackson: sets: 106-107; 146-153; coding-based queries: 141-146; 242-248; 250-257; cross-case analysis and theory-building: 257- 265; visualisations: (model) 28-30; 217-230; 234-241; reports: 265-269; export content out of NVivo: 119-121; 139-140; team work: 270-296

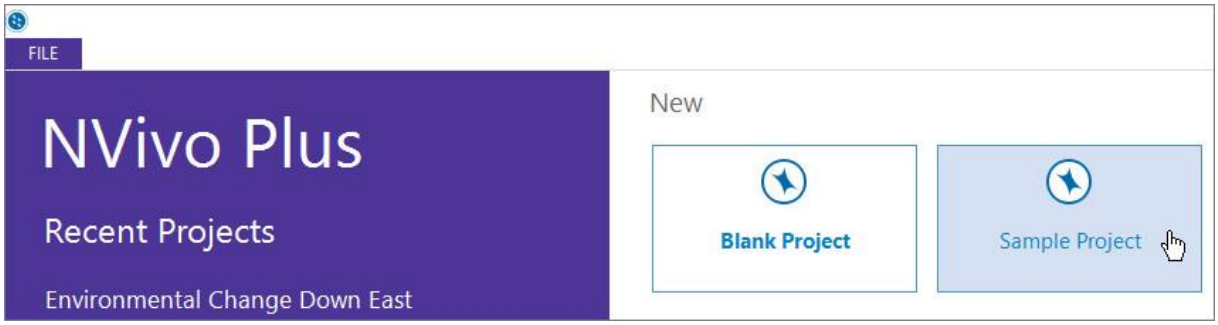
Software and hardware requirements

This course requires that you run **NVivo 11 Pro for Windows** on your laptop or, alternatively, NVivo 11 Plus. You can download the 14-day free trial here. DO NOT COME TO THE COURSE WITH NVIVO 11 FOR MAC as this version is incomplete compared to NVivo 11 Pro for Windows. Mac users should consult the compatibility options and system requirements to run NVivo 11 Pro for Windows using Boot camp or Parallels on their Mac. It is your responsibility to ensure that NVivo works well on your laptop as no troubleshooting will be provided at the Winter School.

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 system requirements

	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., . . . Zaghloul, 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

11. Room requirement

A classroom in U shape please. This course must not be held in a computer lab.

13. Other recommended courses (before or after this course)

The following other ECPR Methods School courses could be useful in combination with this one in a 'training track'. NB this is an indicative list.

Before this course:

	Course title	Summer School	Winter School
1	Research design	X	

After this course:

	Course title	Summer School	Winter School
1	Qualitative data analysis: Concepts and Procedures	X	
2	Expert Interviews for Qualitative Data Generation	X	