11th ECPR Summer School in Methods and Techniques, 27th July to 12th August, 2017
Central European University, Budapest, Hungary
Course Description Form [underline]short course[/underline], 15 hours] (27th – 29th July)

1. Course title
Introduction to NVivo for Qualitative Data Analysis

2. Instructor details
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3. 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.

4. Prerequisite knowledge
No prerequisite knowledge of NVivo required. Knowledge of qualitative research necessary.

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This course uses NVivo 11 Pro for Windows

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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 underline 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 used as no technical assistance will be provided at the Winter School by the instructor, teaching assistant, ECPR staff, or the University of Bamberg IT services. Please see the software installation instructions in the section Software and Hardware below.

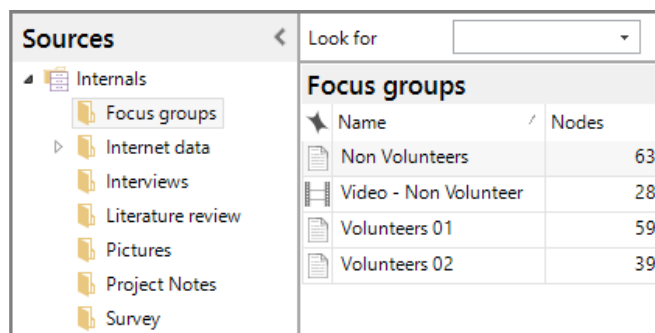**5. Short course outline (approx. 150 words)**
This course is designed for participants who plan to use NVivo for the management, coding, analysis and reporting of qualitative data. The course content is spread over four modules and includes to set up a project, organise, and classify data; manage a literature review; code and analyse data, multimedia and internet data; and report qualitative findings using visualisations. The course is entirely hands-on and uses sample data to learn NVivo's basic and advanced functionalities. The course does not cover how to analyse qualitative data using specific analytic methods such as thematic analysis, grounded theory, or content analysis. If you are looking for such course, see the course *Advanced Qualitative Data Analysis* at the ECPR Winter School in Bamberg.

6. 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, and PDFs; open-ended surveys from Excel and Survey Monkey; bibliographic meta-data from reference manager software; social media data from Facebook, Twitter, LinkedIn, YouTube as well as webpages; notes taken with Evernote and OneNote; and emails of 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 evidence 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, organise, and classify data; manage a literature review; code and analyse text, multimedia and internet data; seek patterns and discover relationships; and report qualitative findings using visualisations. Details of the four modules is presented below.

Module 1 Data Management

The course opens with an introduction on CAQDAS in general, and on NVivo in particular. We move in NVivo, create a project, import, organise, and classify qualitative data. We learn the features to manage a literature review such as annotations, cross-references, and memo links for easy access and retrieval. Our attention turns to handling multimedia data starting with the generation of verbatim

transcripts and then the creation of video and audio file summaries. When working with pictures we look at the possibility to work with a log or to comment on only regions of a picture. We then touch on the use of externals, which link a NVivo project to outside information, as well as memos where the analytic process is recorded. Module 1 concludes with lexical queries, which search for frequency and context of keywords in textual data. We analyse the outputs with word clouds, dendograms, and word trees.
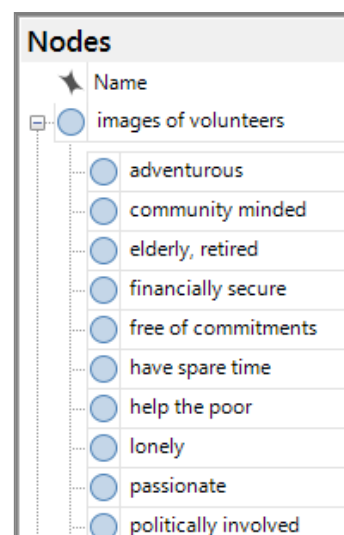
Module 2: Data Coding

Module 2 introduces the different techniques to automatically and manually code qualitative data in NVivo. We start by autocoding data from structured interviews which allows to sort large sections of data in thematic sections. Such data sorting - known as 'broad-brush' coding - is very useful when one wants to examine everything that was said about a specific question or theme across a dataset without having to open every piece of interview where the question was asked. Key formatting tips in Word accompany this topic.

We move on with manual coding and learn the different techniques to code data using a bottom-up approach. Key notions underlying the coding process, such as coding unit, semantic exclusiveness, and semantic exhaustiveness, are exemplified with the material at hand. The use of relationship nodes is tried out when one wants to formalise associations between the codes for hypothesis generation and/or falsification. Module 2 concludes with visualisations that map the coding process and compare coding across sources and cases.

Module 3: Data Analysis

Module 3 covers the range of functionalities to prepare and conduct qualitative analysis. Since social research frequently gather qualitative data as well as descriptive information in the form of variables so comparisons can be made across cases, settings, and contexts, we first look at the procedures to create classifications, cases, and assign variables to cases from Excel. We then turn to the NVivo Find bar tool that efficiently retrieves cases that match a specific sociodemographic profile. This allows us to create sets of respondents for cross-case comparative analysis.

	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

We then move on with coding-based queries which retrieve data based on boolean operators that search for data overlap, inclusion, proximity, or exclusion. We start with a coding query that searches for data coded at some nodes but only when mentioned by cases that match specific attributes. For

	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

cross-case analysis, we run a matrix query which cross-tabulates cases with codes, and we interpret the results using different outputs: coding density, case number, and relative percentage. 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.

Module 4: Data Visualisation
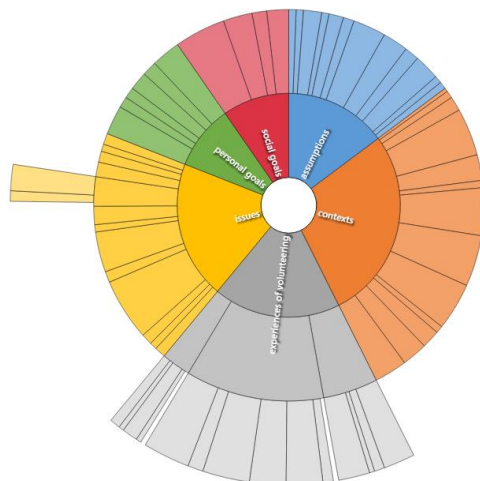
Module 4 proposes different graphic displays to effectively communicate one's research findings. We first discuss the rationale for choosing certain displays against others. We learn to generate maps, charts, diagrams, and dendograms. Moving on to building a solid audit trail to back up results and substantiate 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 node summary reports, which provide a 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 between coders.

7. Day-to-day schedule (Friday 3 March to Saturday 4 March)

	Topic(s)	Details
Friday afternoon	Data organisation and exploration	1. Import, organise, and classify data 2. Manage a literature review 3. Transcribe multimedia files; work with pictures 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. Formatting rules of structured data 3. Code text, multimedia, and social media data 4. Generate and falsify hypotheses 5. Map and compare codes 6. Work with cases and variables
Saturday afternoon	Data analysis and visualisation	1. Search, locate, and group items 2. Run coding and matrix queries 3. Present findings with visualisations 4. Generate summary reports 5. Export content out of NVivo 6. Coordinate team work

8. 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

9. 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. You must ensure that NVivo works well on your machine regardless of the OS used as no technical assistance will be provided at the Winter School by the instructor, teaching assistant, ECPR staff, or the University of Bamberg IT services.

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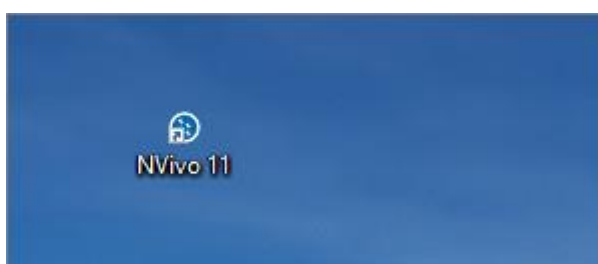
2. On the Start screen, in the **New** section, click **Sample Project**.
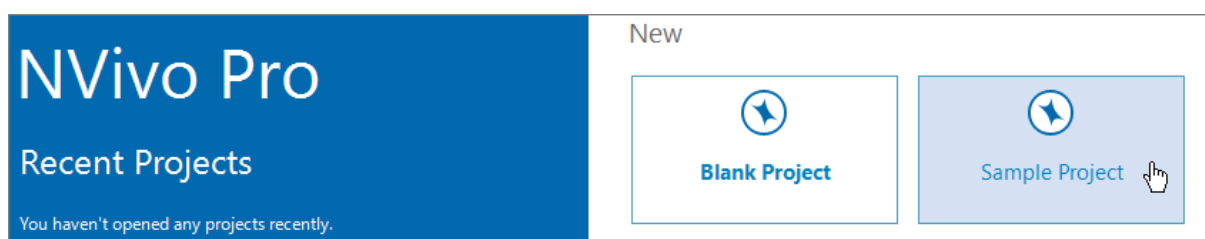
3. NVivo opens a copy of the sample project which is stored in your default project location.
4. If you can't open the Sample project, contact QSR international by submitting a support request form online (see section **Contact Us Online** at the bottom).

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)

10. Literature and studies that used 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.

Davidson, J. (2012). The Journal Project: Qualitative Computing and the Technology/Aesthetics Divide in Qualitative Research. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 13*(2), Art. 15. Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/1848/3376.

Hays, R., & Daker-White, G. (2015). The care.data consensus? A qualitative analysis of opinions expressed on Twitter. *BMC Public Health, 15*, 838. doi: 10.1186/s12889-015-2180-9.

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.

Welsh, E. (2002). Dealing with Data: Using NVivo in the Qualitative Data Analysis Process. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 3*(2), Art. 26. Retrieved from http://www.qualitative-research.net/index.php/fqs/article/viewArticle/865/1880.

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. Lab requirement

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