

# First steps

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## Importing data

The first step is to import all data relevant to the project. It may include PDF files, interview transcripts, photos, videos, audio files. NVivo 12 makes it easy to import and analyze multimedia. Just click on “import” to upload your data into the program (Figure 1).



Figure 1: Importing data

Your material can be in .doc, .docx, .rtf, .txt, .pdf, .mp3, .mp4, .mpg, .jpg, and many other formats. It is a good practice to organize the material you import. It facilitates retrieving your data and creates transparency if you are working in teams. NVivo provides folders to store your “sources” (a word NVivo uses to represent your research materials or data).

NVivo 12 allows you to create transcripts of interviews and audio file with the NVivo Transcribing service (note that this is a paid service). You can link particular transcripts to certain sections of the media you are transcribing. You can also use NVivo transcribing service.

Under the **External** file, you can create proxies for materials you can't import in your project. These proxies represent sources that remain outside of the project file, such as physical copies of books. You can code, search, annotate or link these proxies to memos. Bibliographical data are stored under externals (Figure 2).

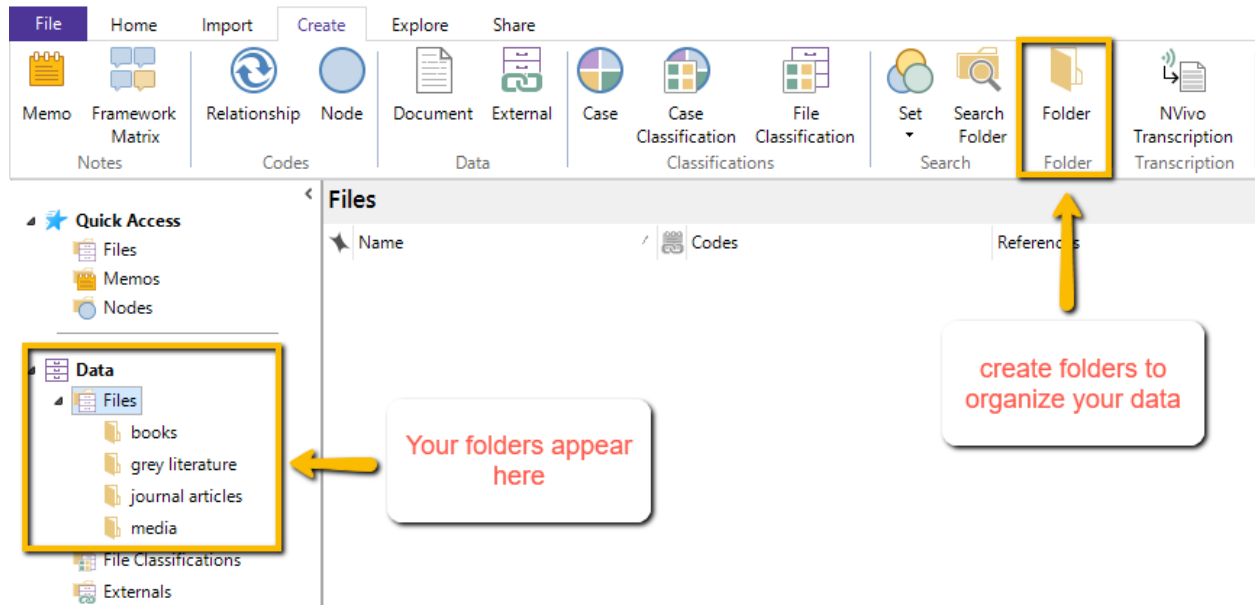


Figure 2: Organize your data

## Coding in NVivo 12

Once your material is in the program, it is time to start coding your data.

There three ways to code qualitative data:

1. With a pre-established set of codes you intend to use. These codes usually derive deductively from your research questions and theoretical approach;
2. With an inspired *Grounded Theory* (Strauss & Corbin, 1998) approach, in which thematic codes emerge as you explore the data;
3. A mix of the two, what Deterding and Waters (2018) call a *flexible coding approach*, which consists of first identifying the main story in the data, and then reducing the data into analytical codes that can be applied across the cases to increase reliability.

It is not the intention of this tutorial to teach about qualitative methods and techniques. Instead, I depart from the assumption you are well-versed in these matters. Having decided on how you are going to code your material (with pre-established or emerging codes), it is time to create your codes based on the approach you have chosen.

## Creating and storing codes

In NVivo, **Nodes** is the term for what qualitative researchers usually understand by codes. Nodes are simply a place to store ideas or emerging themes from your analysis of the qualitative material. A code - or a node in NVivo terminology - is a tag or a mark up of part of the document you are analyzing.

You can tag parts of a picture, an audio file or a written document under the same node. There is no limit to the amount of data you can store under a node.

Suppose you have chosen to work with pre-established codes. To create them, under the tab **Create**, click on **Nodes**. A window, called **New Node**, will open where you can name and describe your code. Click on **OK**.

If you intend on working with hierarchical coding, that is, subcodes, you must right click on the node and then choose **New Node** (Figure3).

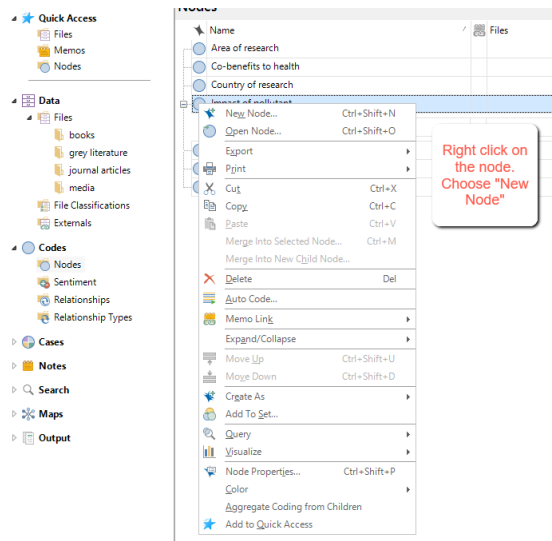


Figure 3: Creating subnodes

A new window will open up where you can create the subnode (Figure 4).

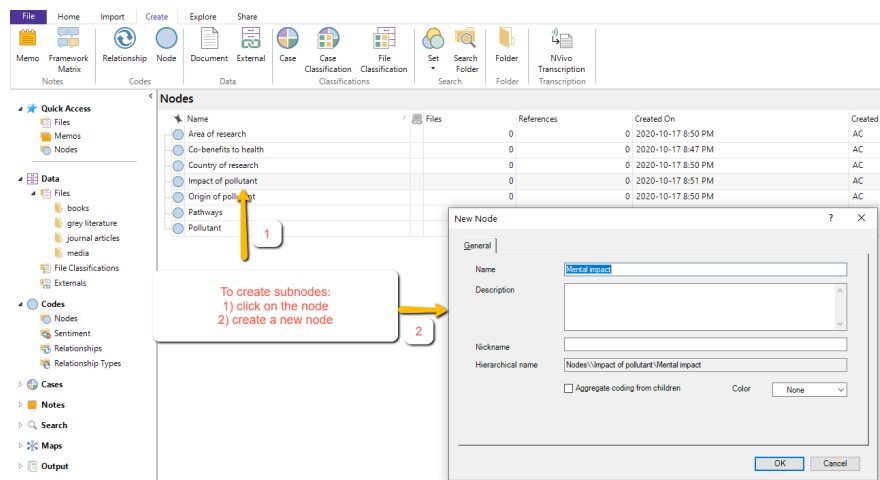


Figure 4: Subnodes

It is good practice to organize you nodes. One way of doing so is by creating folders. For example, you can create a *thematic* folder for nodes representing ideas in your data. You can also create a *bibliographical* folder to tag relevant biliography, and so on (Figure 5).

## Coding your material

On the left side of your screen, you must open the file containing the material you will code.

NVivo 12 makes the coding procedure quite simple. As you explore your material, just drag and drop the excerpts into the appropriate nodes. Note that the same excerpt can be dragged and dropped into different nodes.



Figure 5: Creating folders to organize nodes

If a new code emerges, or if your coding approach is more grounded-theory-like, you can always drag the excerpts into the *environment*, that is, underneath the other nodes you already have. A **New Node** window will appear where you can create your new code.

This procedure is the same for all your multimedia files: PDFs, Word documents, images, sound recordings and transcripts.

As you start coding, you will soon realize that qualitative data is messy. To keep track of your codes, under the **Document** tab, click on **Coding Stripes** and then **All Coding**.

NVivo 12 facilitates the organization of messy qualitative data. You can:

- Create subcodes (see above).
- Merge codes
- Uncode an excerpt

**Tip:** [alt + F1] turns navigation view on/off to give you more or less space to view all your nodes

## Relationships between nodes

As aforementioned, a node represents an idea, a category or a concept. Sometimes, these ideas are related either through a correlation or through a causal link. In NVivo 12, you can code a relationship between the nodes.

**Tip:** Coding stripes are good flags to the possible relationships between nodes

When defining the type of relationships between your nodes, you can think about directionality:

- A one way relationship implying unidirectionality (e.g. A *impacts* B or C *is threatened* by D)
- Associative relationship (e.g. A *is friends with* B)
- Symmetrical relationship implying bidirectionality (e.g. poverty *contributes* to inequality)

NVivo 12 has only one type of relationship by default: *Associated*. You must create the others, as your analysis require.

You create these relationships the same way as other nodes: right click on **Relationships**. A **New Relationship** window will appear where you can establish the types of relation between nodes (Figure 6).

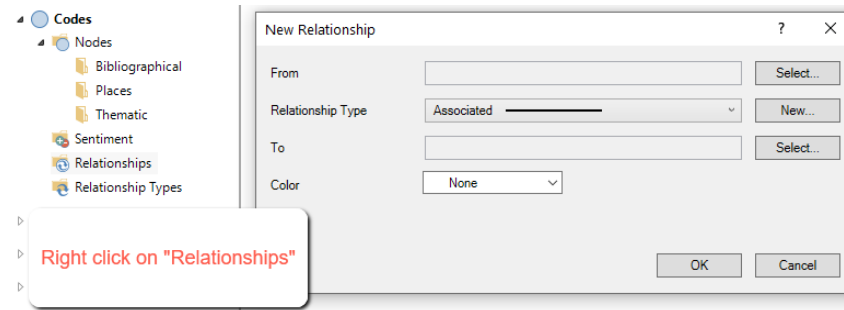


Figure 6: Establishing Relationships

## Auto coding

Qualitative research usually demands an immense amount of time to code the “thick” material. Careful examination is necessary to increase the reliability of qualitative analysis. However, in the case of surveys, structured interviews, and focus groups, auto coding is a good technique to speed up the process of gathering all responses to a particular question or topic.

You can code, for example, an interview by specific questions.

**Tip:** Creating headings in the transcripts facilitates the automation of coding

Under the **Home** tab, in the **Coding** section, click on **Auto Code**. A new window will appear. Choose the available paragraph styles. You can accept the default location to store the auto codes or change the location. Click **OK**, and the Status bar will appear.

## Links to additional resources

FAQ

About the **Externals** folder

Creating research memos

## Youtube tutorials

University of Hull Library tutorials

Dr. Alan Shaw’s tutorial on Content Analysis on NVivo12

University of Hull Library Tutorial on Auto Coding

## References

- Deterding, N., & Waters, M. (2018). Flexible coding of in-depth interviews: A twenty-first-century approach. *Sociological Methods & Research*. doi:10.1177/0049124118799377
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks: Sage.