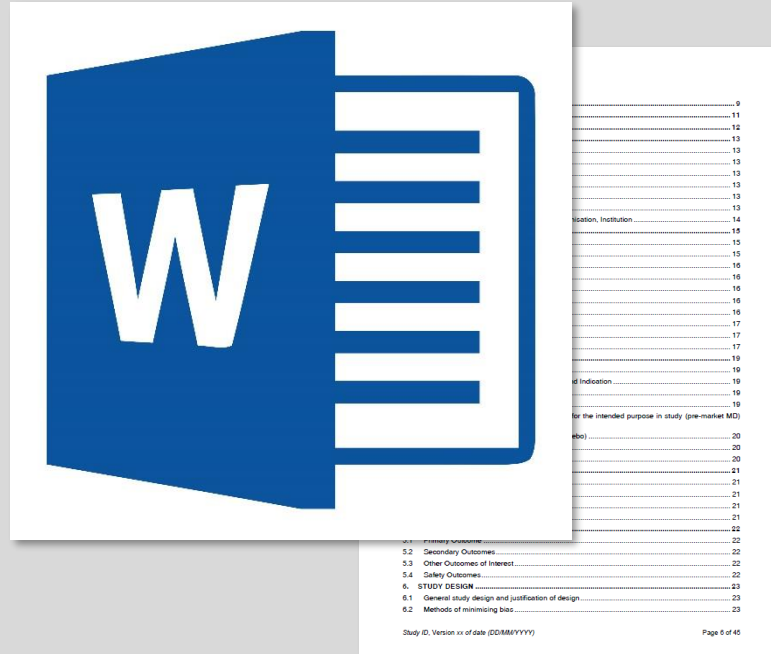


# Technical aspects of writing a study protocol

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# Aim

## of this talk

- Repetition/reminder
- Sensitizer/appetizer
- Make you aware
  
- Details and instructions → Google and YouTube are your best friends

# The study protocol

## The document

– A study protocol is a complex document

→ Use

- Word-processing software/text editor (MS Word, Google Docs, Pages, Latex, ...)
- Reference management software
- Possibly MS PowerPoint/Keynote/...

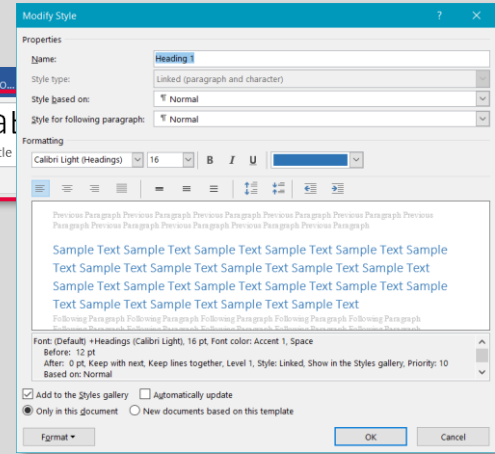
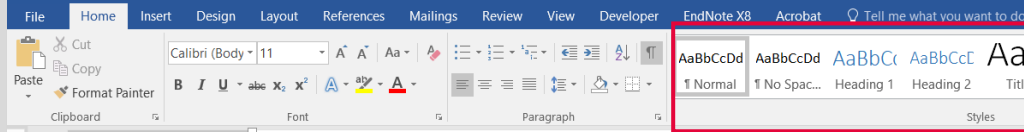
– And use all its functionality!!!

→ Become an expert

# Styles

## Formatting of text

- Never format headings or text individually
- Always use *Styles* →



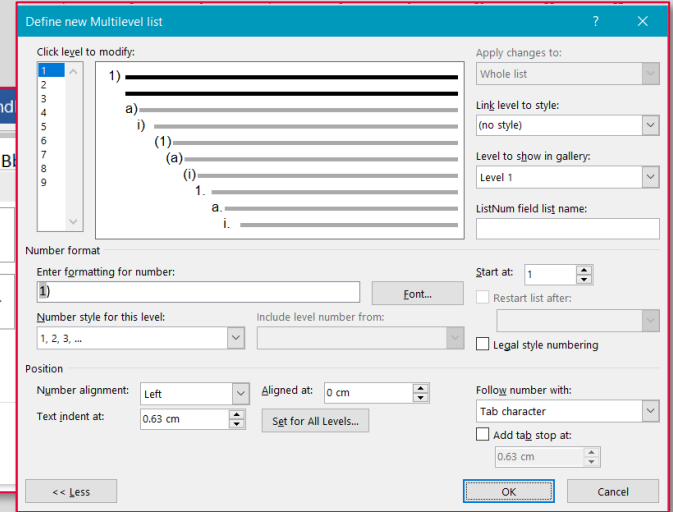
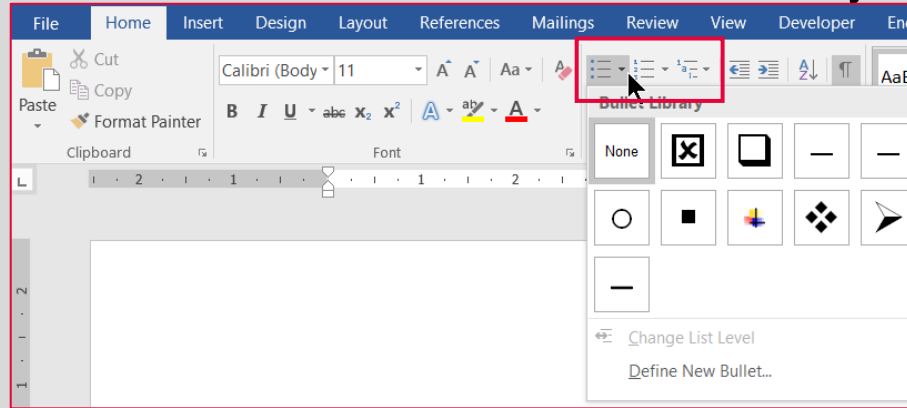
- Know the difference between *Paragraph* and *Character Styles*
- Use *Styles* for the different parts of *Tables*, *Footers*, *Headers*, etc.

# Bullets and Multilevel Lists

## Symbols + Tabs

– Never use multiple *Spaces* or *Symbols+Tab*

→ Use *Bullet Lists* or *Multilevel Lists* – always



– N.B. multiple consecutive tabs are rarely appropriate (format your tabs as appropriate i.e. position, alignment, ...)

## Numbering – a science in itself

- Check YouTube or Google to learn about how to format numbering of headings in MS Word
- You need to define *Heading Styles* first and then define a new *Multilevel List* that is linked to the *Styles*

# Table of Content

Use the power of a computer

- Never ‘generate’ a table of content manually
- Always use *Table of Content* functionality

The image shows a screenshot of the Microsoft Word ribbon with the 'References' tab selected. The 'Table of Contents' group is highlighted with a red box, showing the 'Table of Contents' icon and the 'Update Table' button. Below the ribbon, three dialog boxes are overlaid:

- Table of Contents**: A dialog box with a 'Print Preview' section showing a list of headings (Heading 1, 2, 3) and their page numbers (1, 3, 5). It has checkboxes for 'Show page numbers', 'Right align page numbers', and 'Use hyperlinks instead of page numbers'. The 'Show levels' dropdown is set to 3.
- Table of Contents Options**: A dialog box with a 'Build table of contents from:' section. It has a checked 'Styles' checkbox and a list of available styles (Heading 1 through 6) with corresponding TOC levels (1 through 6). It also has a checked 'Outline levels' checkbox and an unchecked 'Table entry fields' checkbox.
- Table of Authorities**: A dialog box with a 'Web Preview' section showing a list of headings (Heading 1, 2, 3) and their page numbers (1, 2, 3).

## Layout

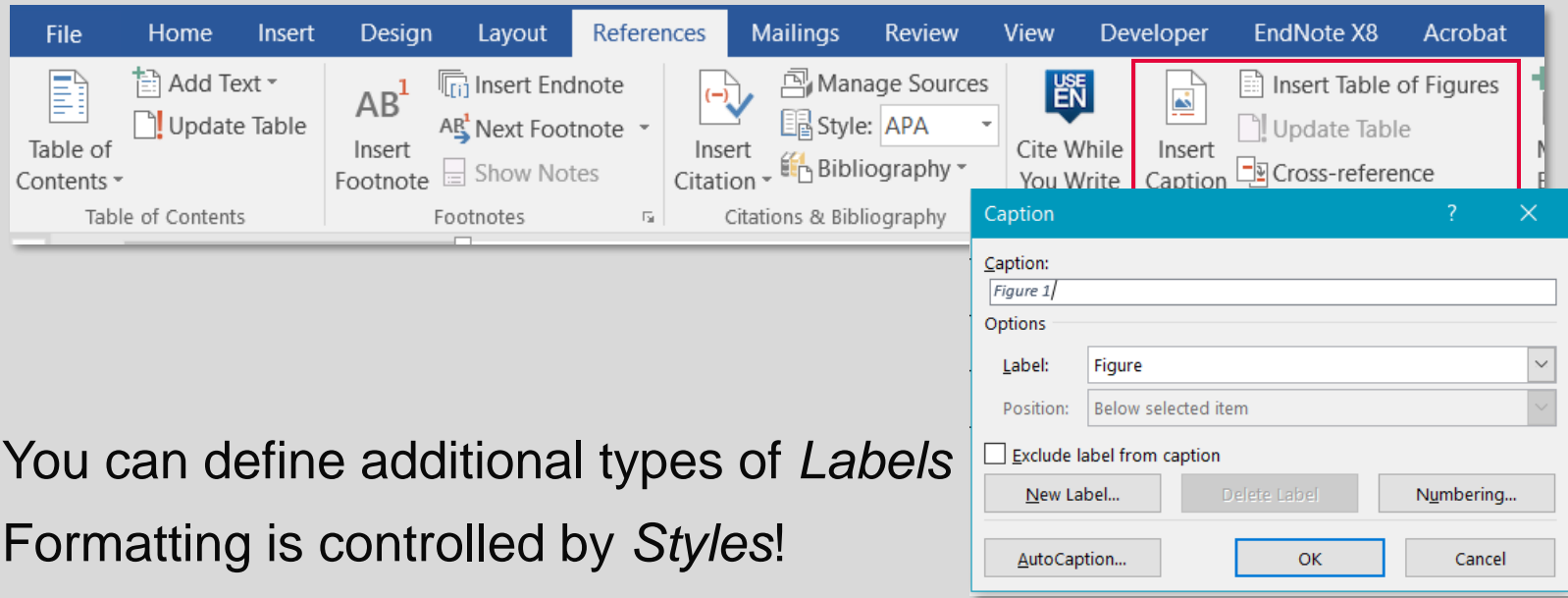
- Control (page) breaks either by paragraph formatting (within *Style – Line* and *Page Breaks*) or by inserting *Page/Section Breaks*
- Never use multiple *line feed carriage return* (‘returns’/‘line breaks’)
- N.B.
  - Line Break i.e. Shift+Return → no section break, no *After Spacing* added
  - Paragraph Break i.e. Return-only → *After Spacing* added (no section)



# Figures and Tables

## Captions

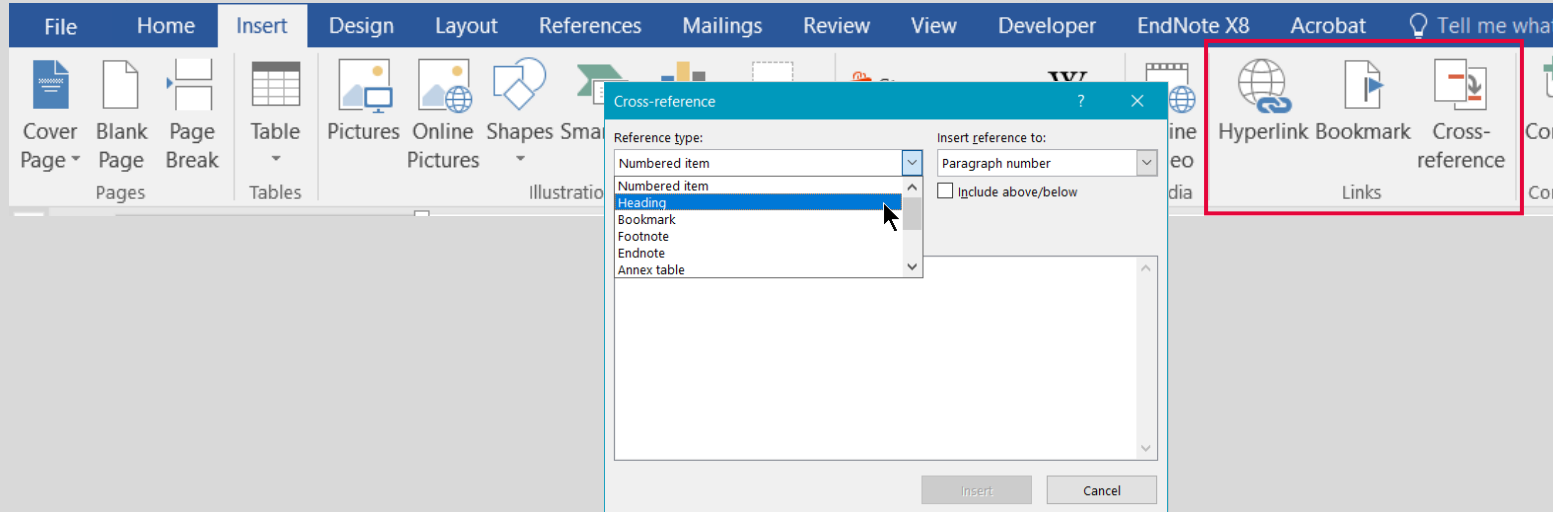
- Use the *Caption* functionality to label and describe tables and figures



- You can define additional types of *Labels*
- Formatting is controlled by *Styles*!
- Automatically generate a *Table of Figures, Tables, ...*

## Automatic updating

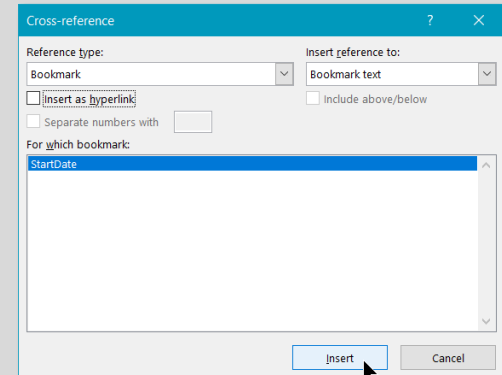
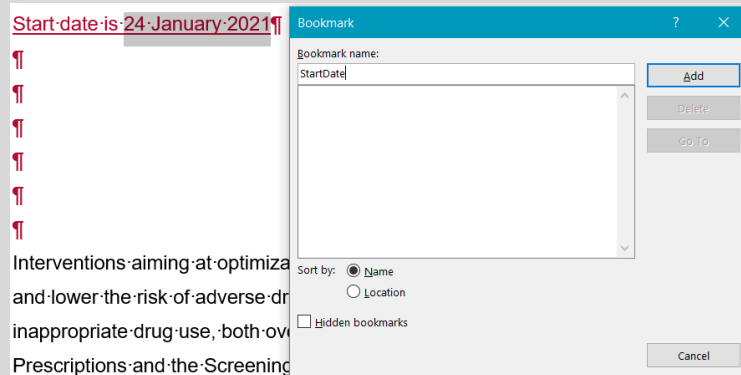
- Never refer to headings, tables, figures, etc. manually
- Always use the *Cross-reference* functionality!



- N.B. Ctrl+A and then f9 updates your document e.g. ToC, links etc.

## Multiple appearances

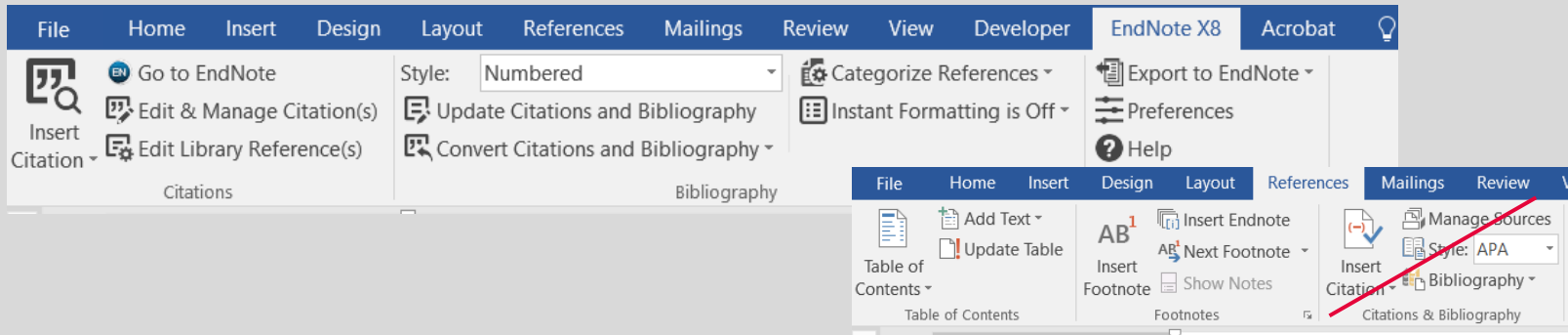
- Standard text that appears multiple times but might change during writing (dates, sample size, etc.)
1. Define your own special ‘mark’ (e.g. \$\$, \$%) and then “Find and Replace” (Ctrl+H)
  2. Define a *Bookmark* and use *Cross-Reference*



# References

## Management software

- Never insert references manually or by using MS Word functionality
- Always use specialized software such as EndNote, Mendeley, Zotero, etc. from the very beginning



- N.B. they work with Add-ins and Field Codes (similar to page numbers etc. {...})

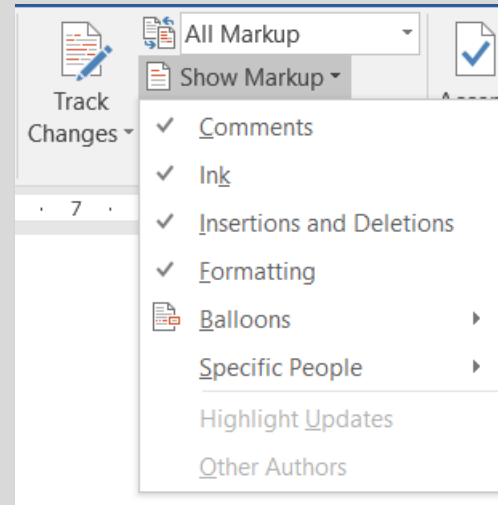
## Tracking changes

- Think about a file name convention e.g.  
Projectname\_protocol\_v01\_20200810\_st.docx
- Switch track changes on before sending it to co-workers, always
- Tracked changes can be switched off but retrospective tracking (compare document functionality) is often difficult/impossible
- Ask them to use comments and comment within comments
- Ask co-workers to add their initials before sending back
- Store document on a cloud server and ask co-workers consecutively

# Versioning

## Tracking changes

- Use the different View options e.g. Outline, Navigation Pane etc.
- Switch off certain Markups e.g. tracked formatting changes
- Show track changes from some persons



# Collaborative writing tools

## Check for reviews

- Version control, commenting, simultaneous and asynchronous editing, ...
- Google Docs
  - + Very robust
  - + Version control and commenting
    - Formatting functionality not comparable to MS Word
    - Reference management
- Word Online (Office 365)
- Authorea, manuscripts.io(, PubPub, Manubot, Overleaf)

# Some general tips

- Reduce abbreviations to an absolute minimum
- Invest in layout – a clean and nice-looking document improves readability
- Use automatic spell check functionality
- Always show the Paragraph Mark when writing
- No smaller than 11 pt. font size
- Line spacing >1.0
- Use After Spacing to separate paragraphs
- Large margins (at least 2.5 cm)

