

Balancing numbers and voices



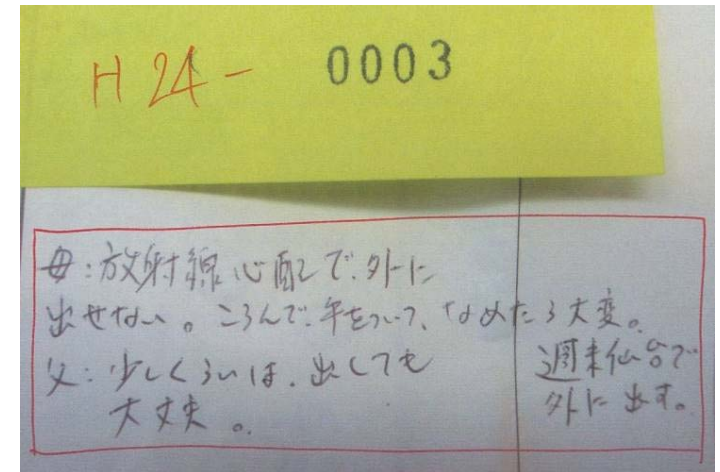
FUKUSHIMA
MEDICAL
UNIVERSITY

Aya Goto

Text data examples

Parenting counseling data

- ❖ Public health nurses' parenting counseling notes in child health checkup files



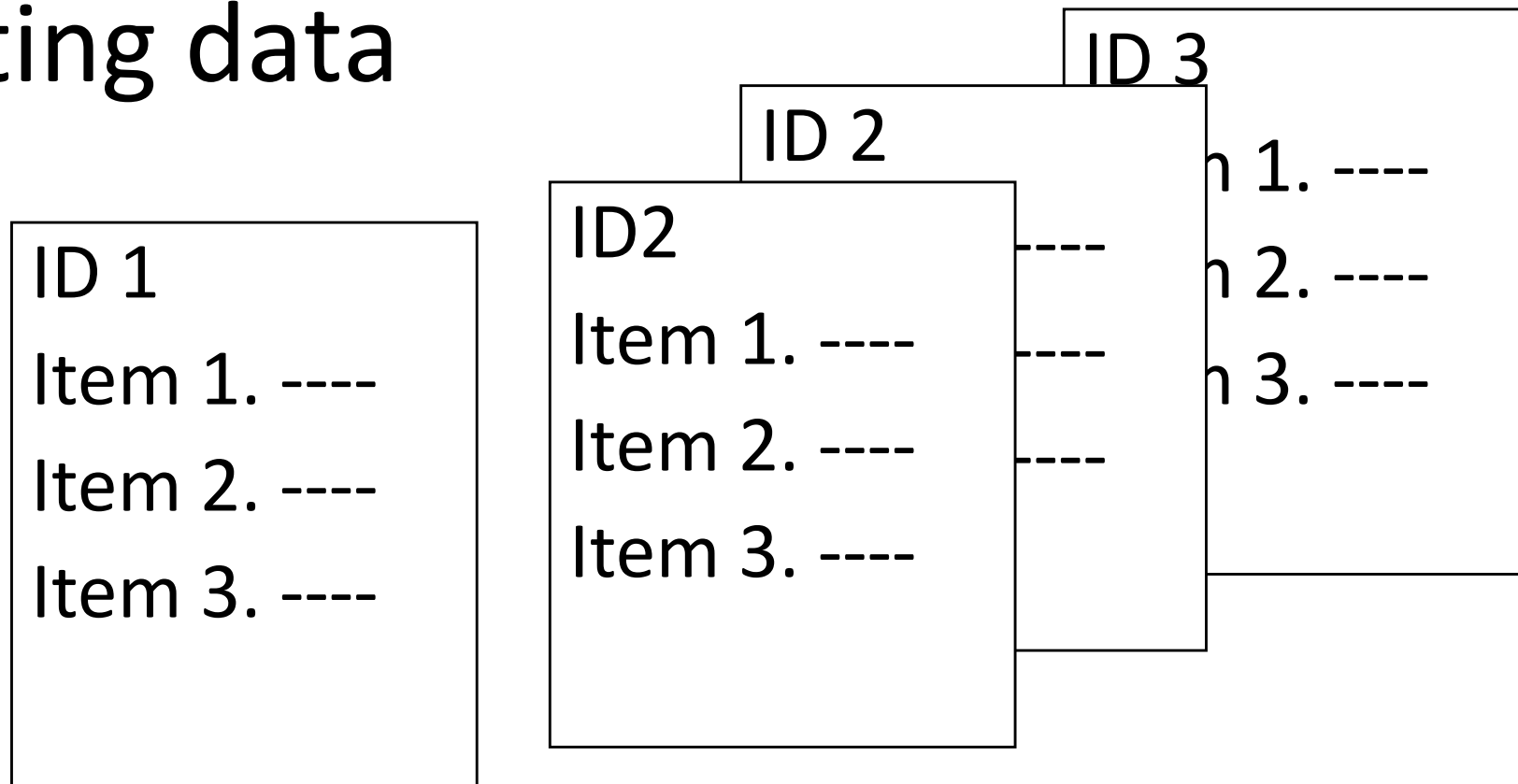
Group discussion data

- ❖ **Post-It notes** from public health nurses' meetings

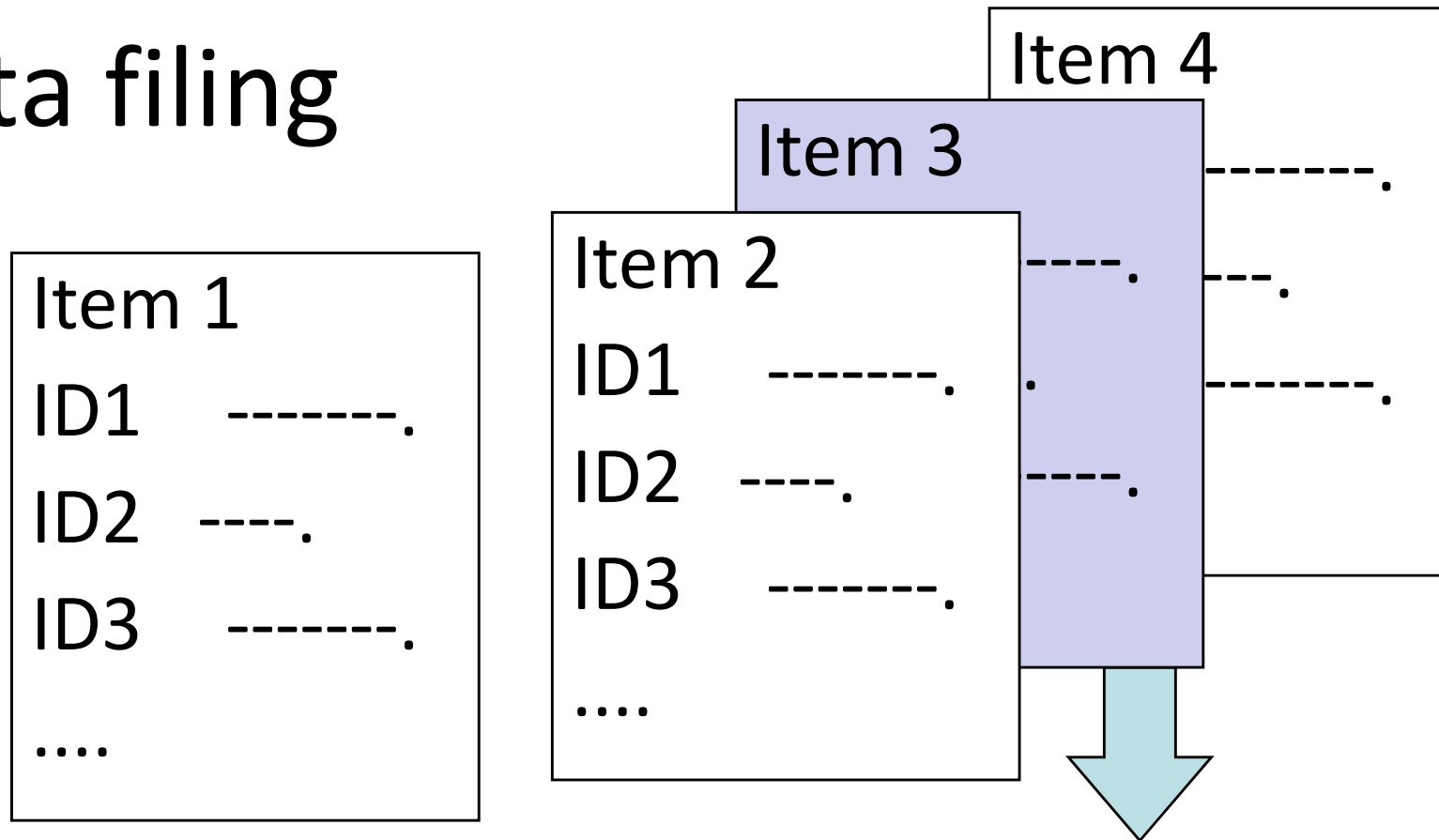


Manual quantitative analysis of text data

Existing data



Data filing



ID1: TB sometimes caused by working too much, and too hard. Also, no nutritional food.

ID2: I was told that ... if one is overworked without proper nutrition can get tuberculosis.

Carey JW, et al. Cultural Anthropology Methods 8(3): 1-5.

CODE LIST

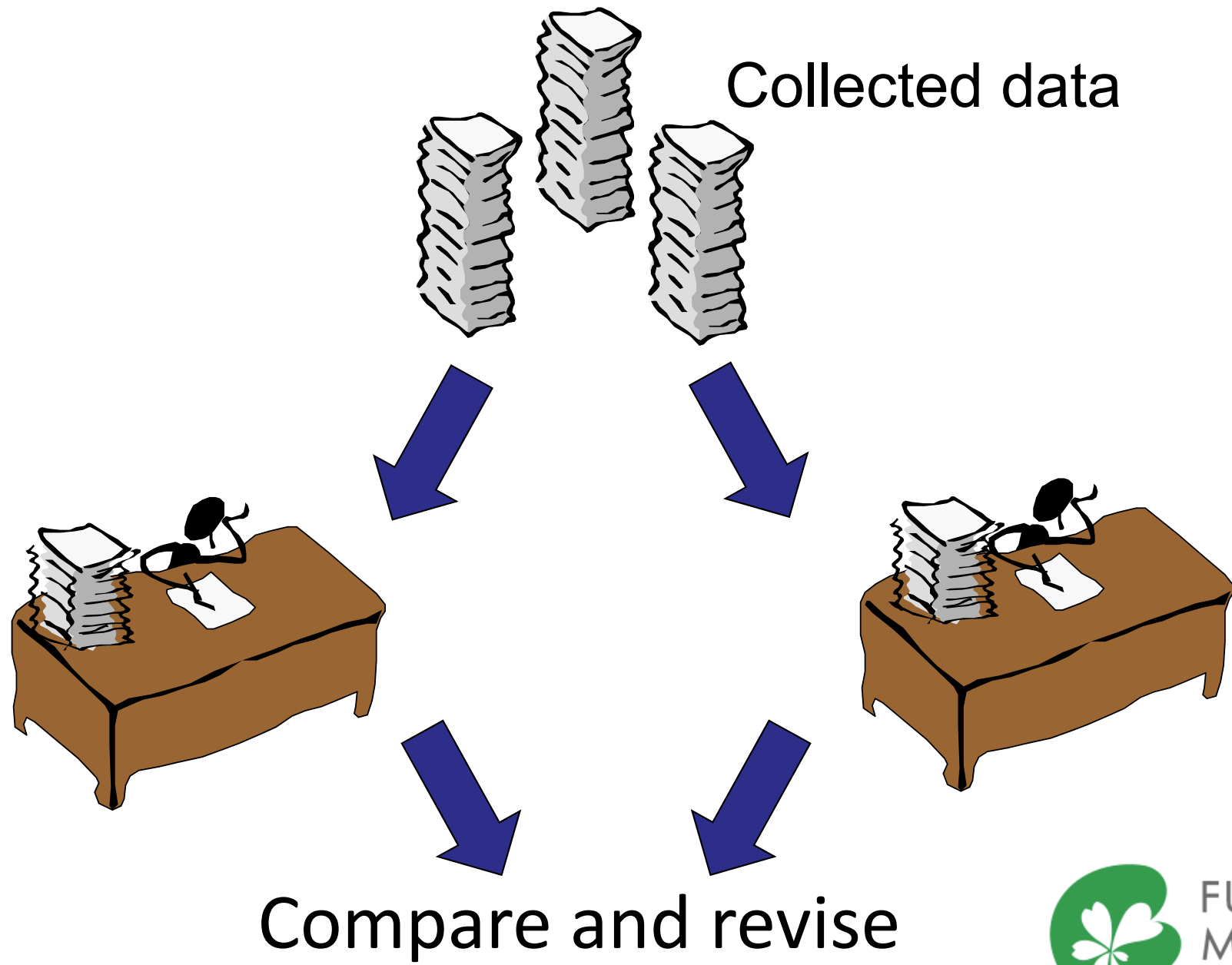
<u>Code</u>	<u>Definition</u>
CAUSECON	TB is caused by exposure to infected people.
CAUSEWRK	TB is caused by hard labor.
CAUSENUT	TB is caused by poor nutrition.
...	

DATA CODING

ID1: TB sometimes caused by working too much, and too hard.(CAUSEWRK) Also, no nutritional food. (CAUSENUT)

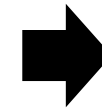
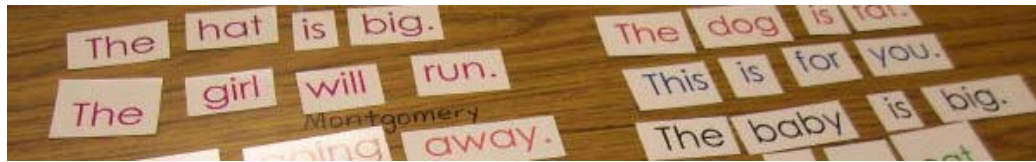
ID2: I was told that ... if one is overworked (CAUSEWRK) without proper nutrition can get tuberculosis. (CAUSENUT)





Computerized quantitative analysis of text data

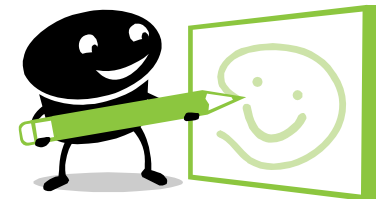
❖ STEP1: KH Coder (Quantitative analysis to create topics)



Topics



❖ STEP2: Steps for Coding and Theorization (SCAT) (Qualitative analysis to create storylines)



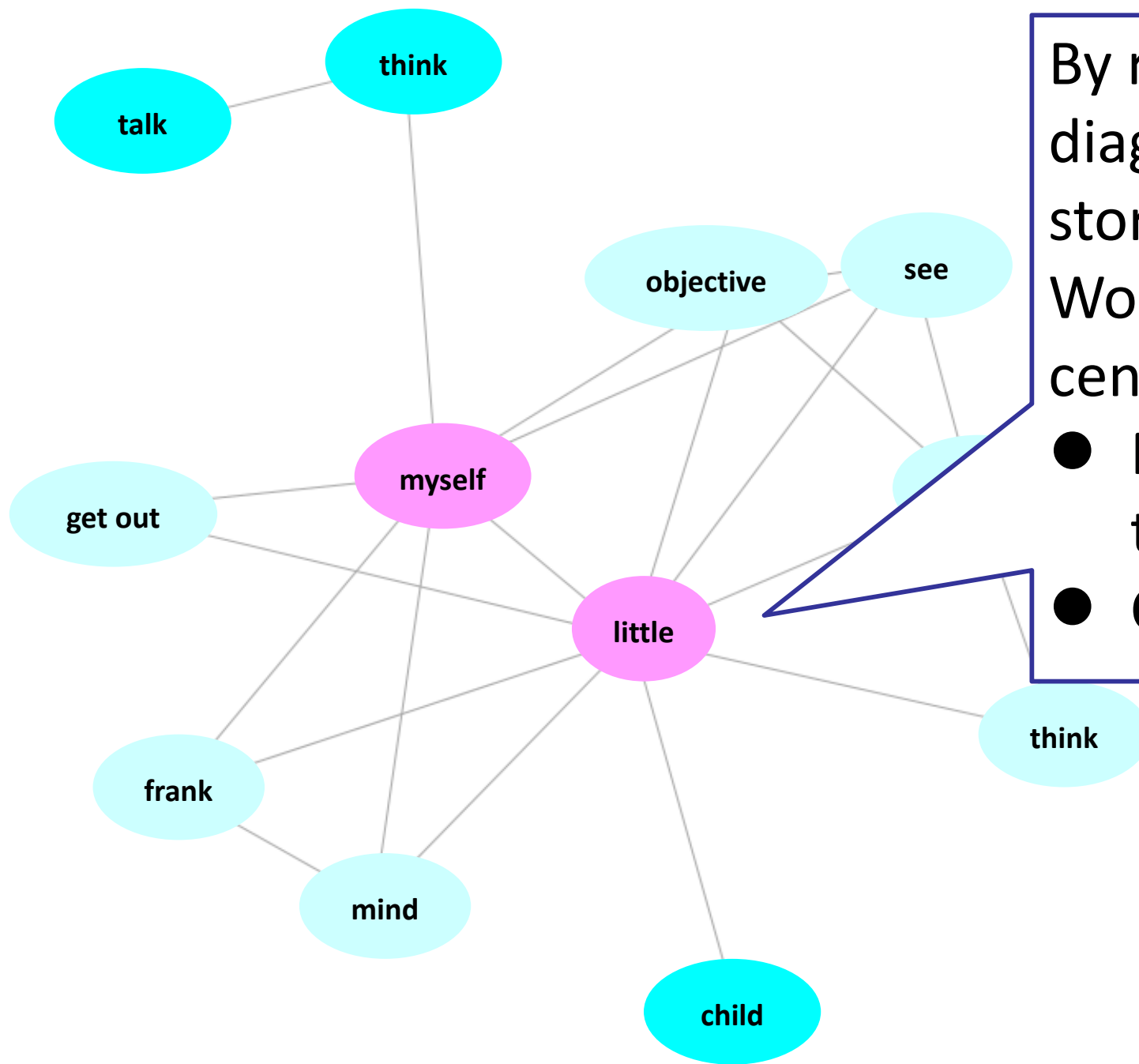
Storyline

Example: Participants' opinions after a parenting class

terms	No
little	8
myself	7
think	3
mind	2
objectively	2
see	2
think	2
child	2
frankly	2
get out	2
calm	2
talk	2

Simply by looking at the list of frequent words, you can get an overview of participants' opinions.

- My mind changed a little.
- See and think objectively.




By referring to the diagram, context of stories become clearer. Words in pink are the centrals.

- Mothers talked about themselves.
- Changes were little.

Data entry

- ❖ Enter by WORDS in English
- ❖ Put “.” at the end of each sentence.
- ❖ Eliminate ★ ◎ × ? →
- ❖ Save as a simple text file.
Select (*.text)

Analyzing by KH coder

- ❖ Install and open ENG version 
- ❖ Project → New → Browse
→ select the file → OK
- ❖ Pre-Processing → Run pre-processing
→ OK
- ❖ Tools → Words → Frequency list → OK

You see a list of frequent words in a excel sheet.

When you want to check how the word is used...

❖ Tools → Documents → Search documents
→ Enter word → Select sentence → OK

Search Documents

Search Entry:

#direct

Coding Rule File: Browse No File Selected

#direct: and how

AND no sort Unit: Sentences Run

Result:

1. I understood more how to design a study and how to analysis data. 2. ...
Not understand clearly how to choose method to analyze (may be attend thi...
1. That variety of biostatistical tests and application. 2. Effects of bia...
How can I download a full text study in the world in English? How can ...
Understand results in statistical analysis and corresponding interpretation. ...
How to practice SPSS. How to start the basic concept about research metho...
How to gain basic concepts to read results in a research. How to evaluat...
Basic epidemiology, biostatistics, how to use SPSS and STATA clearly.

When you want to see a diagram...

- ❖ Tools → Words → Co-occurrence network
 - Select sentence as unit
 - Specify min No. (in this exercise, select 4) → OK

Options: Co-Occurrence Network of Words

Select the unit & words

Unit: **Sentences**

Filter words by Term Frequency

Min. TF: **4** Max. TF:

Filter words by Document Frequency

Min. DF: **1** Max. DF:

Filter words by POS

☒ 名詞

☒ サ変名詞

Co-Occurrence Network Options

Type of edges:

☒ words - words ☐ words - variables / headings

Variable / Headings: **n / a**

Filter edges:

☒ Top **60** ☐ Jaccard coef. >= **0.2**

☐ Thicker lines for stronger edges

☐ Larger nodes for higher frequency words

☐ Variable font size *For printing with EMF/EPS/PDF

☐ Smaller Nodes

Exercise

- ❖ Use a file “learning.”
- ❖ Develop a list of frequent words.
- ❖ Develop a diagram.
- ❖ Write a summary sentence.