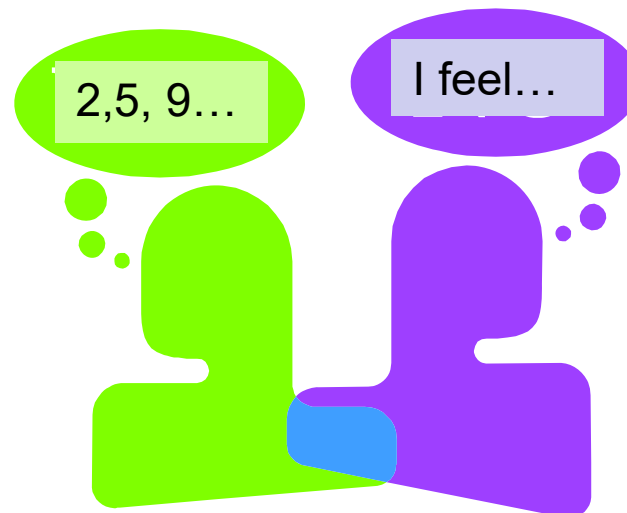


Balancing numbers and voices



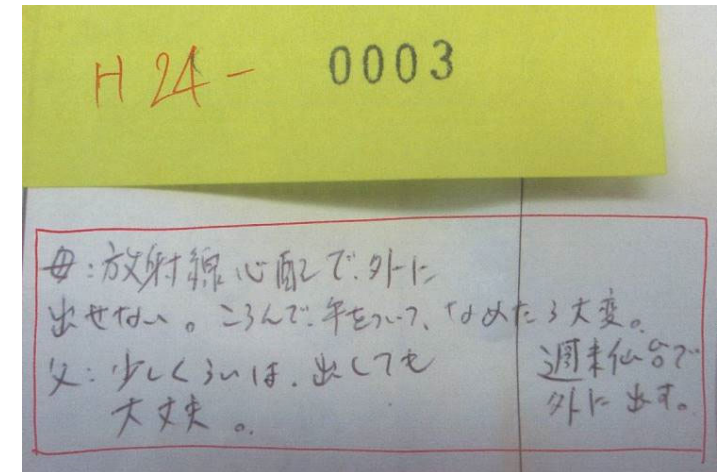
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Aya Goto

Text data examples

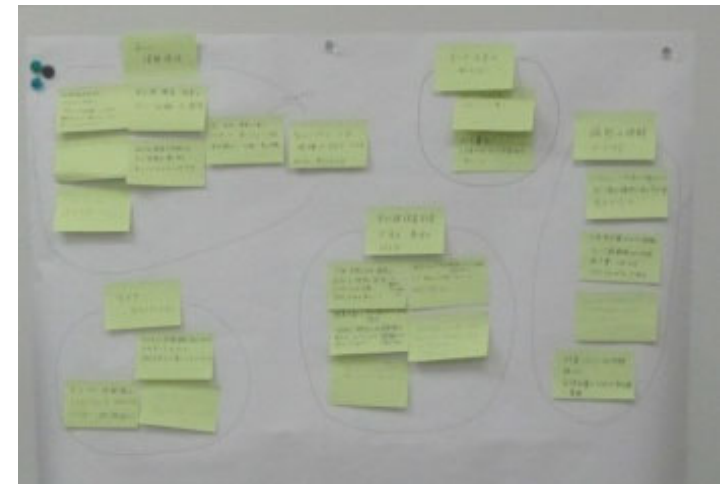
Parenting counseling data

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



Group discussion data

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



QUALITATIVE
WHAT ARE YOU
TALKING ABOUT?
IS THIS SCIENCE?

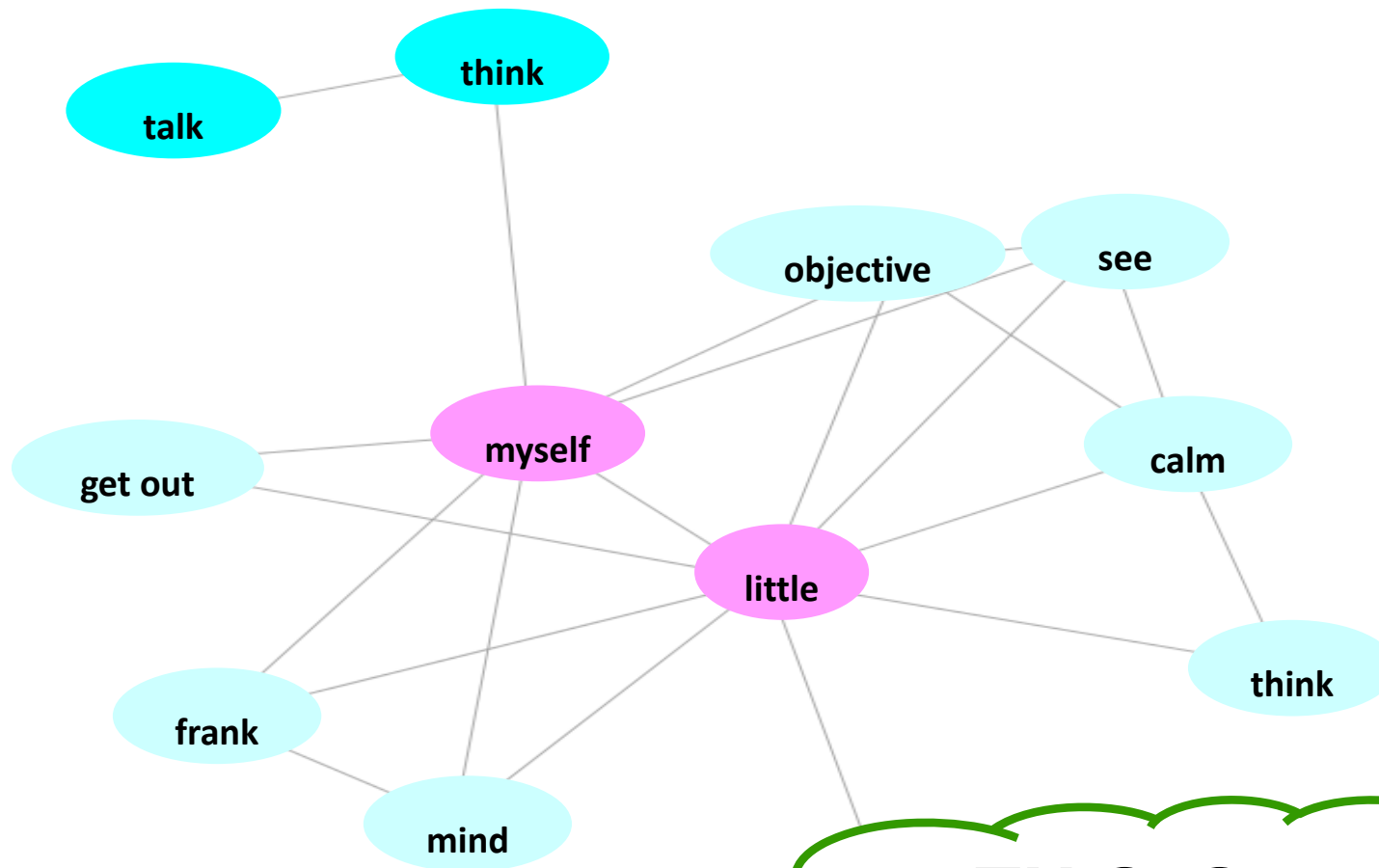


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Way to go

- ❖ Quantitative analysis of qualitative data (KH coder)
- ❖ Qualitative analysis of qualitative data (SCAT)



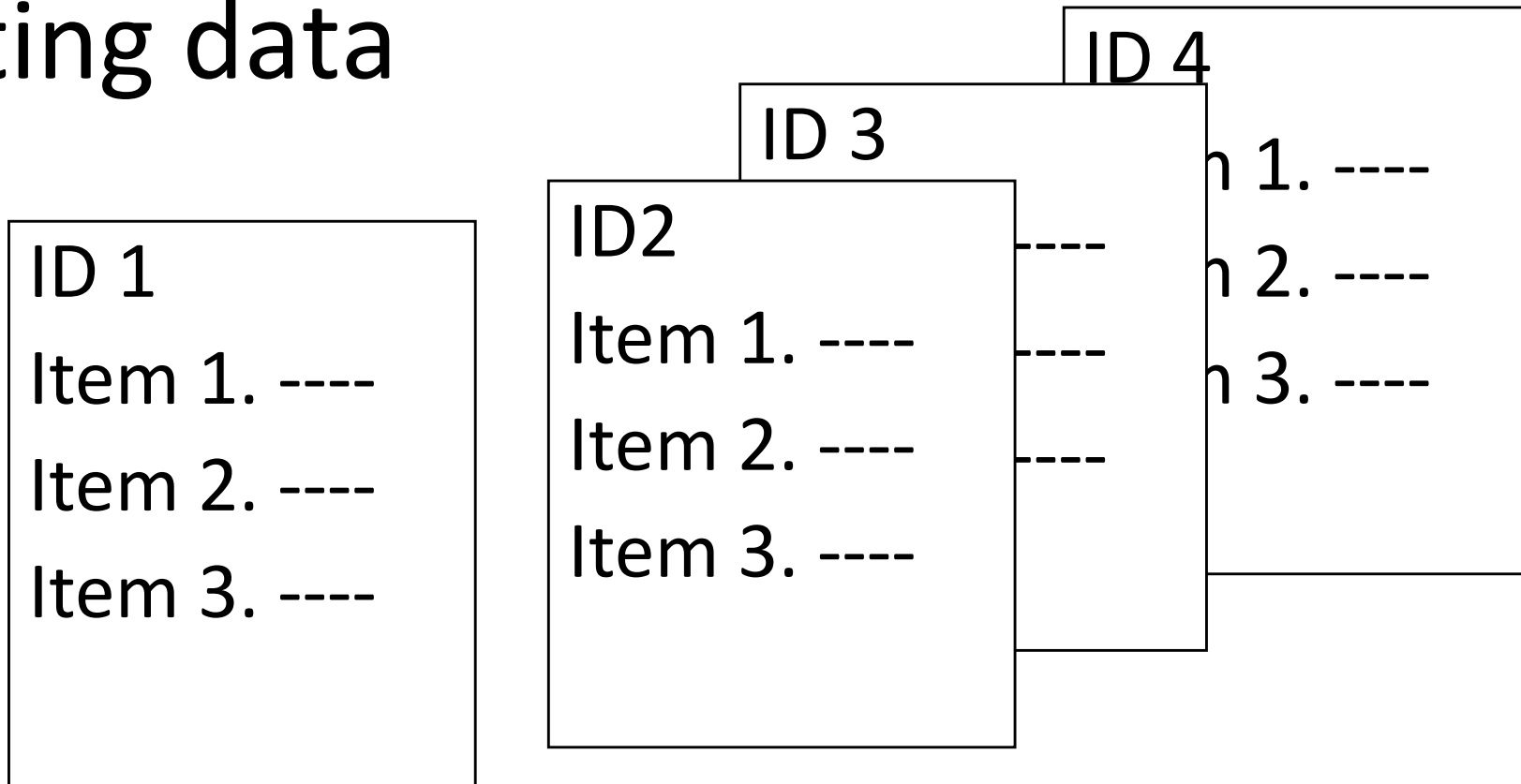


**THIS IS
SCIENCE!**

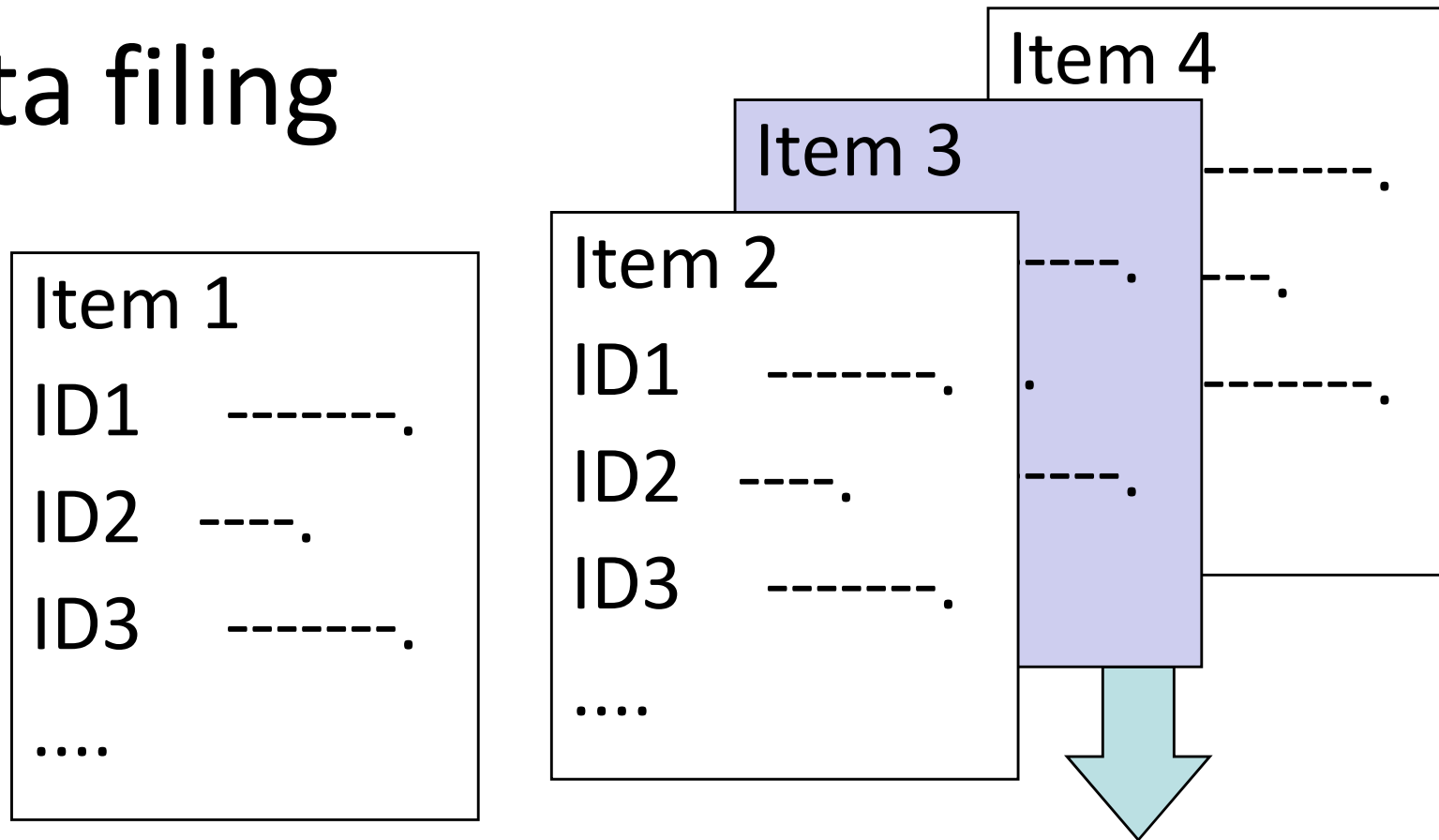


Manual quantitative analysis of text data

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

Code

Definition

CAUSECON TB is caused by exposure to infected people.

CAUSEWRK TB is caused by hard labor.

CAUSENUT TB is caused by poor nutrition.

...

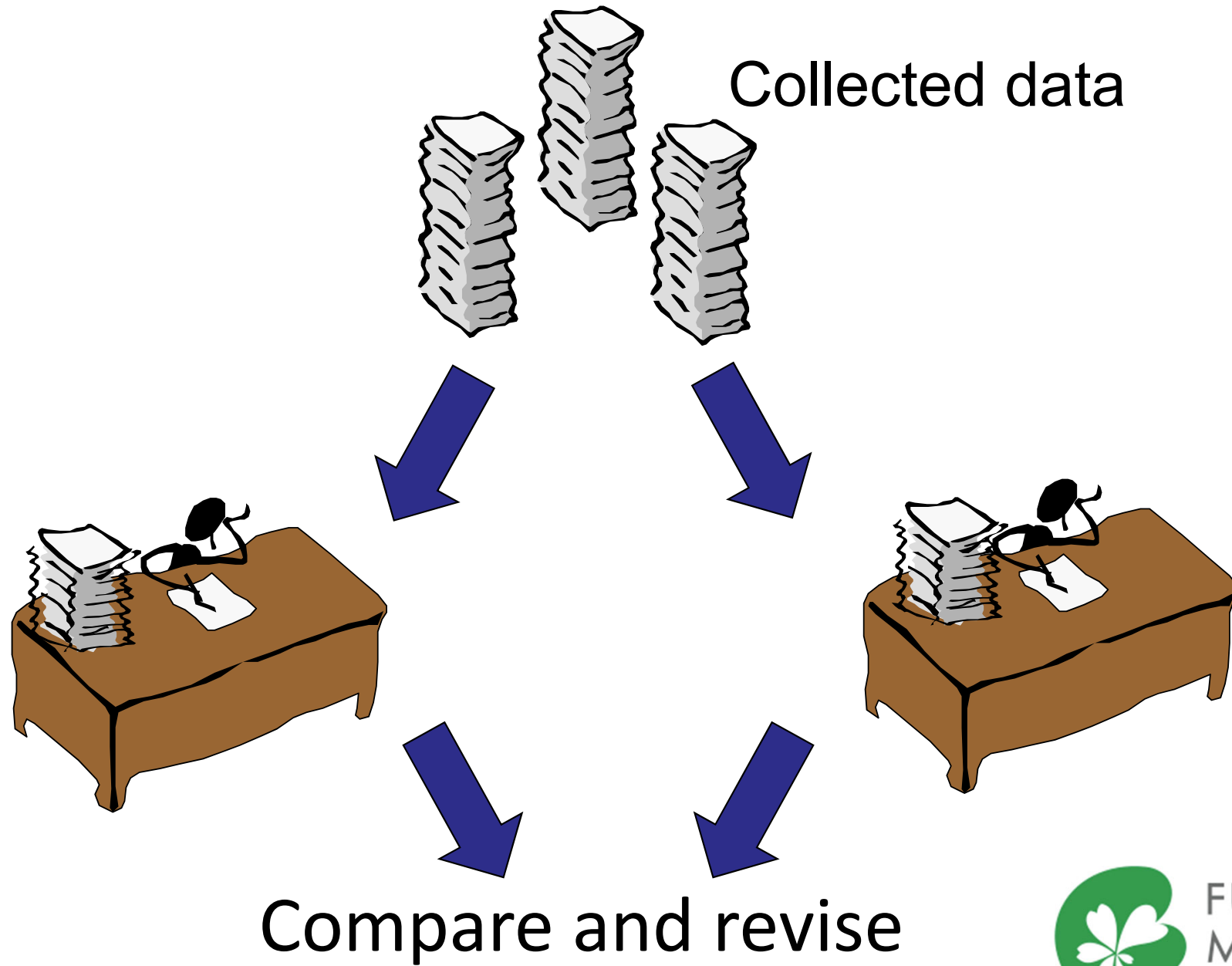
DATA CODING

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)

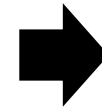
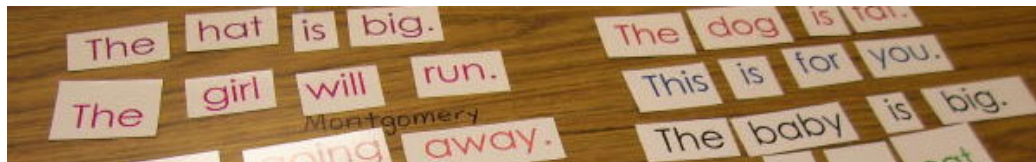


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Computerized quantitative analysis of text data

KH Coder (Quantitative analysis to create topics)



Example: Participants' opinions after a parenting class

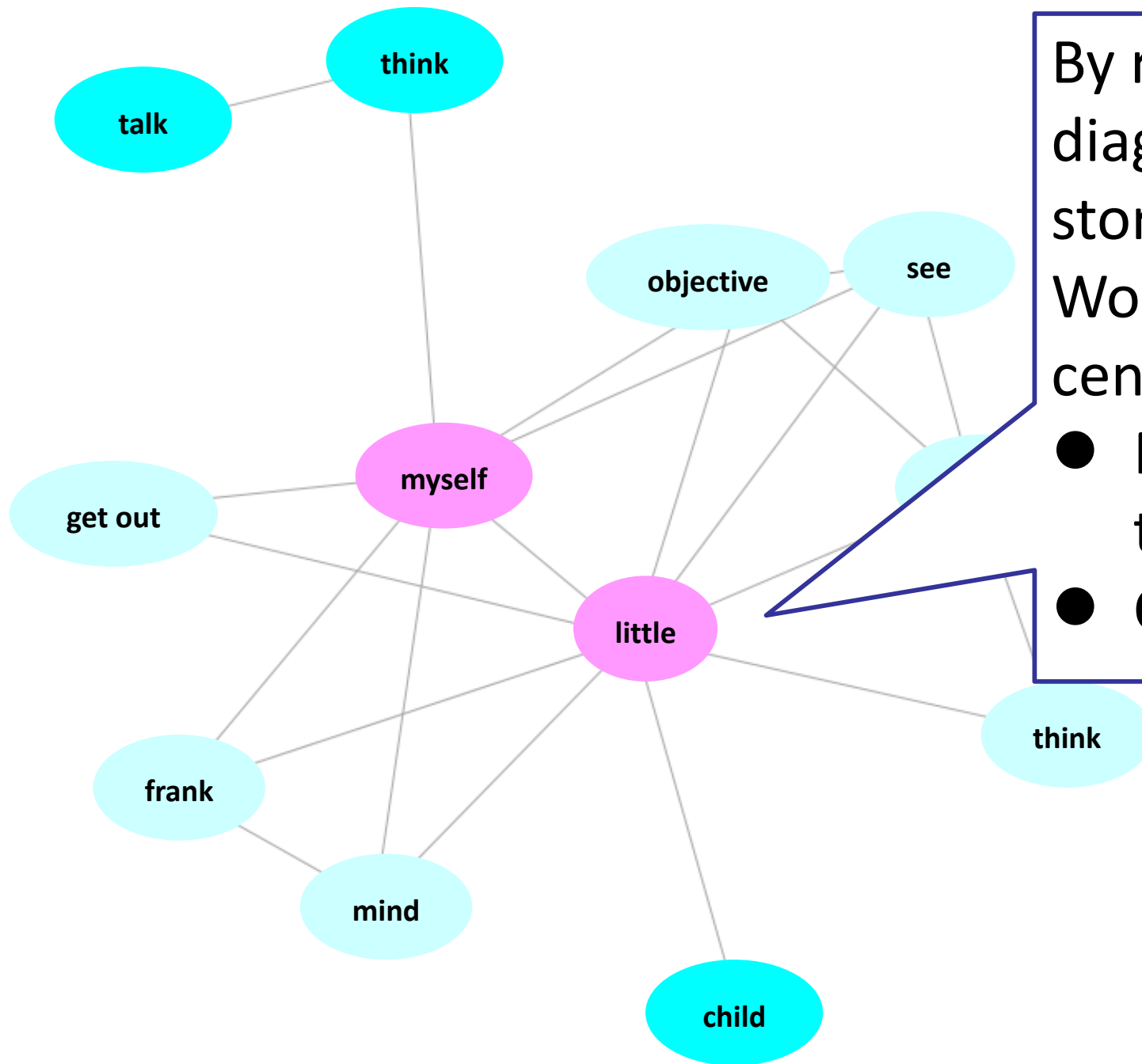
terms	No
little	8
myself	7
think	3
mind	2
objectively	2
see	2
think	2
child	2
frankly	2
get out	2
calm	2
talk	2

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.



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

Installing data into KH Coder

- ❖ Install and open ENG version 
- ❖ Project → New → Browse → Eng FreeLing
→ select the file → OK
- ❖ Pre-Processing → Run pre-processing
→ OK
- ❖ Tools → Words → Frequency list (Excel)
→ OK *You see a list of frequent words in a excel sheet.*

Frequency list (= Descriptive analysis)

❖ Tools → Words → Frequency list (Excel)

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

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

❖ Tools → Words → Frequency list → OK

Click each word and you can find the word in a sentence.

This function is applied in all diagrams.

Co-occurrence network

- ❖ Tools → Words → Co-occurrence network
 - Select sentence as unit
 - Specify min No. (in this exercise, select 3) → OK

Options: Co-Occurrence Network of Words

Select the unit & words

Unit:

Filter words by Term Frequency

Min. TF: Max. TF:

Filter words by Document Frequency

Min. DF: 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:

Filter edges:

Top Jaccard coef. >=

Thicker lines for stronger edges

Larger nodes for higher frequency words

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

Smaller Nodes

Correspondence analysis (= Cross tabulation)

- ❖ Tools → Words → Correspondence analysis
 - Select sentence as unit
 - Specify min No. (in this exercise, select 3)
 - Select H1 and Tabulating Unit → OK

Options: Correspondence Analysis of Words

Select Words

Filter words by Term Frequency

Min. TF: 3 Max. TF: []

Filter words by Document Frequency

Min. DF: 1 Max. DF: []

Document Unit: Sentences []

Filter words by POS

Noun

Foreign

TAG

PRP

Correspondence Analysis Options

Input Data Matrix:

Words x Documents

Tabulating Unit: H1 []

Biplot

Words x Variable(s)

Filter words by chi-square value: Top 60 []

Words that are outside of the H1 labels are the characteristics of the group.

Exercise

Opinions about what you thought that patients wanted to say.

- ❖ Use a file “kh coder exercise data”.
- ❖ Develop a list of frequent words.
- ❖ Develop diagrams.
- ❖ Write a summary sentence.