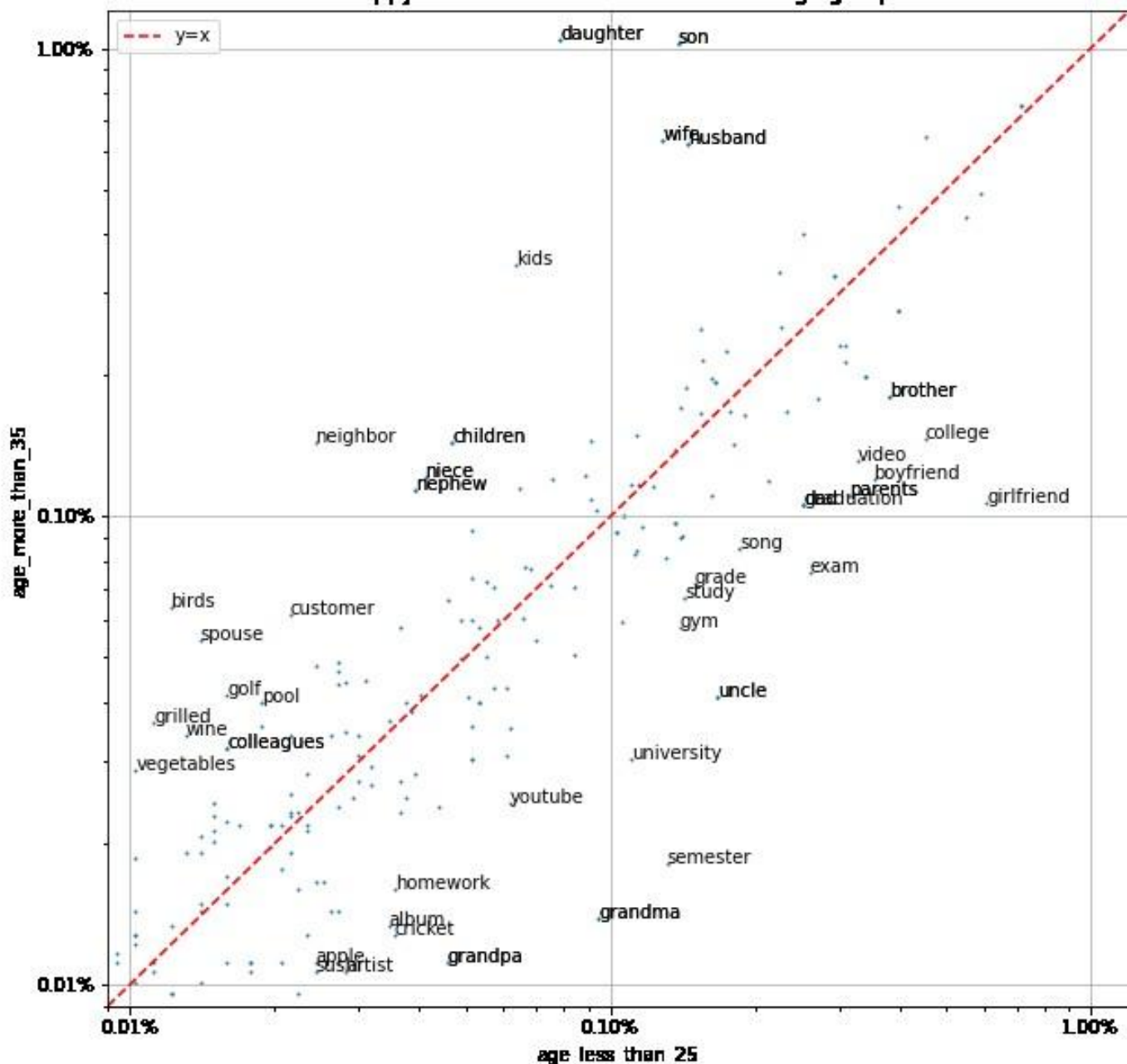# How does age influence happy moments?

The interests of the younger and the elder must be different. To analysis the relationship between the happy moments and age, we use the dataset of a corpus of 100,000+ crowd-sourced happy moments on https://github.com/megagonlabs/HappyDB. The goal of this report is to find an interesting tendency between happy moments and age

Question 1, Are the happy moments for elders different from youngers ones?
Of course yes! We can check what are the differents between the two age groups, I split the data into two groups, the one with age less than 25 and the one with age larger than 35. We try to analysis the proportion of frequency that each keyword or text appears in happy moments.
 Based on the plot above, the keywords about family appear for both datasets, elders care more about wife, husband, children, and kids while younger care more about grandma and grandpa. However, the keywords about school never appear in the plot for the elder's dataset, while "semester"," homework"," university"," exam", and" college" appears in the younger dataset.

Happy Moment ratio between different age group

It looks like teenagers are more happy in the school!
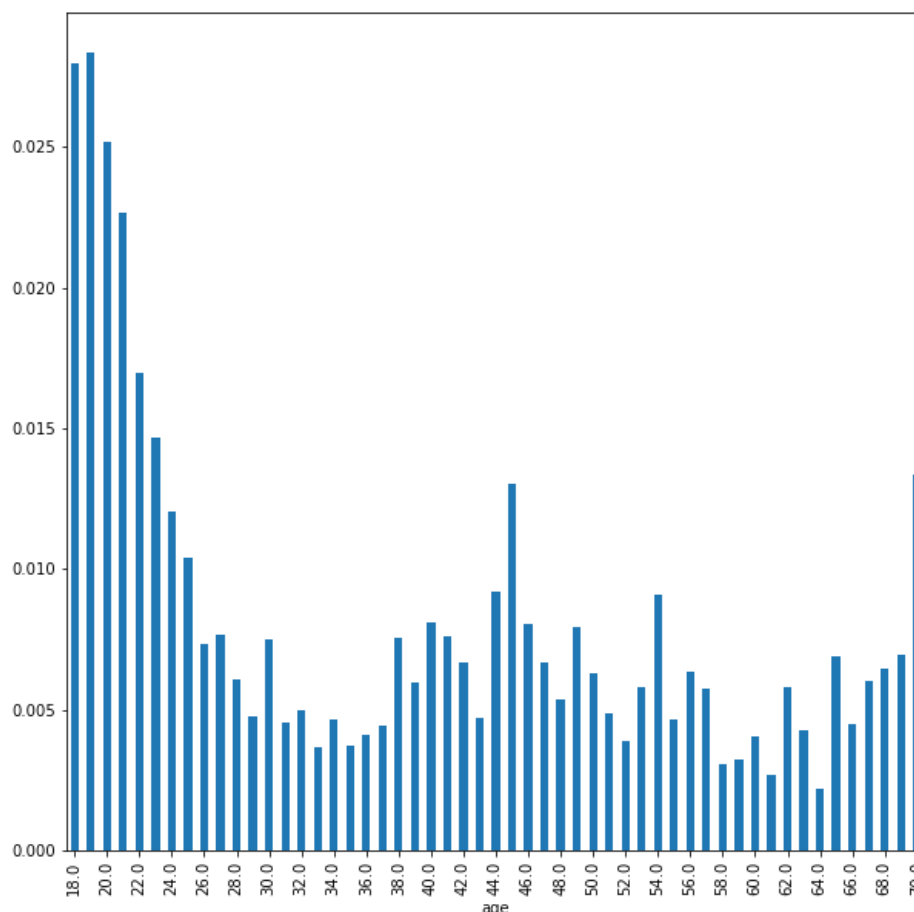We can also check this by looking at the word cloud.

Dataset for age less than 25

Dataset for age more than 35

Q2: Does the ratio of happy moments related to school decrease as age gets larger?
To address this problem, we need to divide the dataset for each age and calculate the frequency of keywords related to school for happy moments.


The result is contrary to intuition, the frequency is the highest near 18-20, then it decreases, however, the tendency starts to increase at age 35 for a while, then decreases at 45. It is partly because the kids of people from age 35 to 45 start to go to school, so the happy moments about school for those parents increase at that time. I do wish to see if the same tendency appears when people's grandson and granddaughter go to school and the answer is yes! The

tendency for frequency starts to increase again at age 65.

Q3: There are nine different topic, what about other topic?
I did the same thing I do in Q2 to other eight topics, and here is the result.
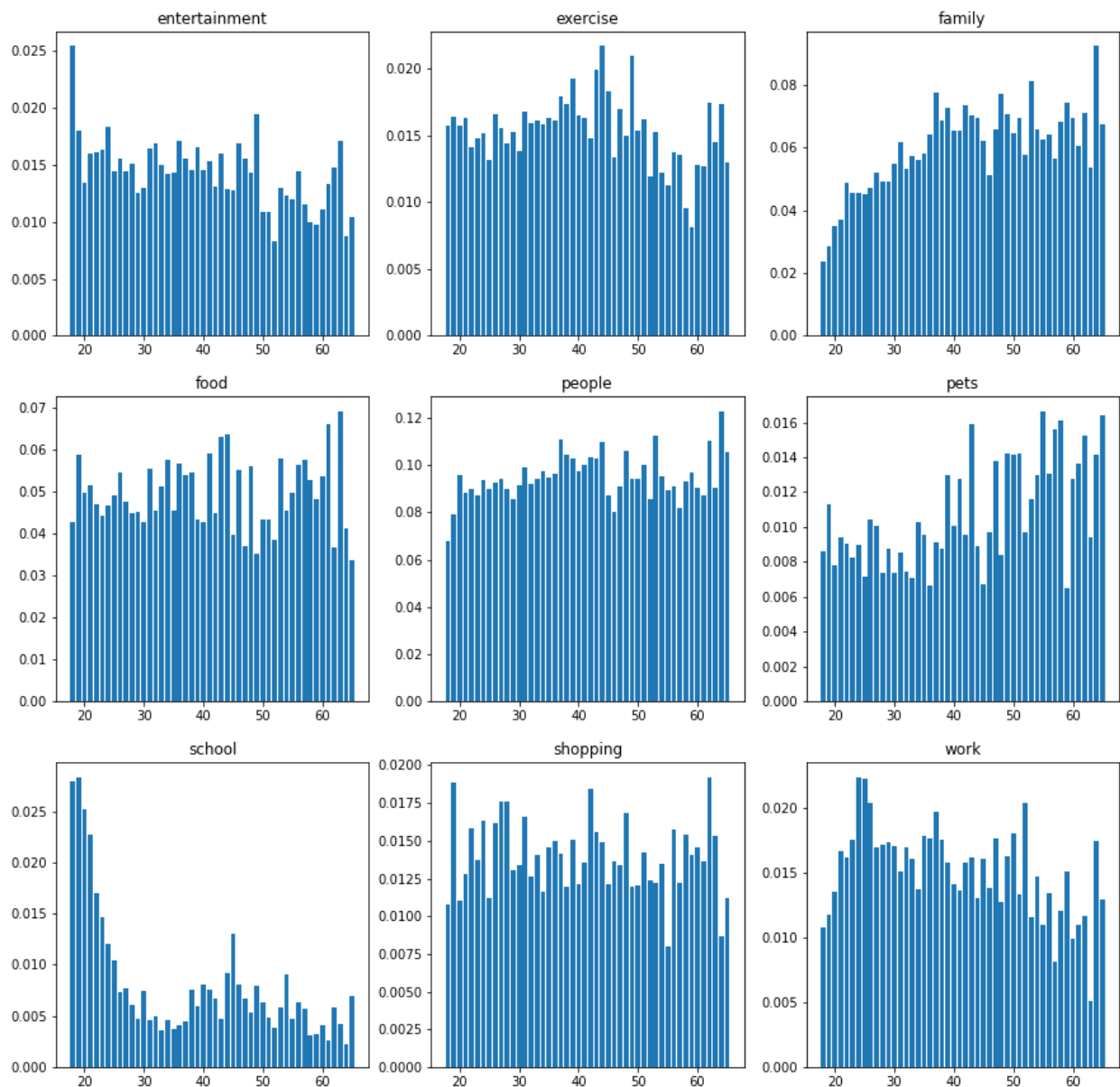
Indeed the tendency for school is the most interesting, the frequency of family keep increasing as age gets larger, the pets one increases significantly at about age 35. For the topic of work, the frequency increases from age 18 to 25, then decreases, but it also experiences a little increase starting from age 55, maybe because their son and daughter start going to work. For another topic, the frequency is almost the same among all ages. But for entertainment, it is likely for kids, the frequency will be larger than for other ages, however, I do have not enough datasets to show that.

Conclusion:

Q1: for different age group, the happy moments are different.

Q2: The tendency not strictly decreases as age gets larger, between when people's children and grandchildren go to school , the frequency will increase.

Q3: For some topic, the frequency for happy moments remains almost the same, but for school, work, and pets, it depends.