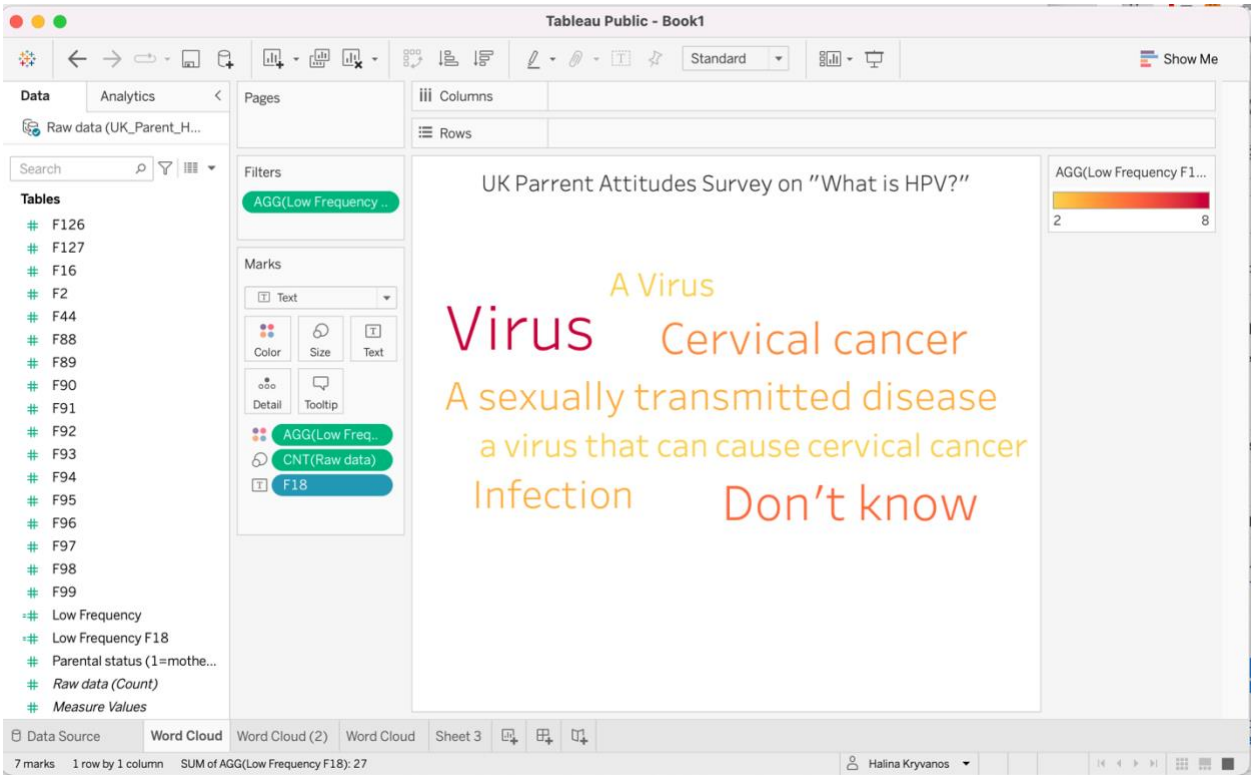
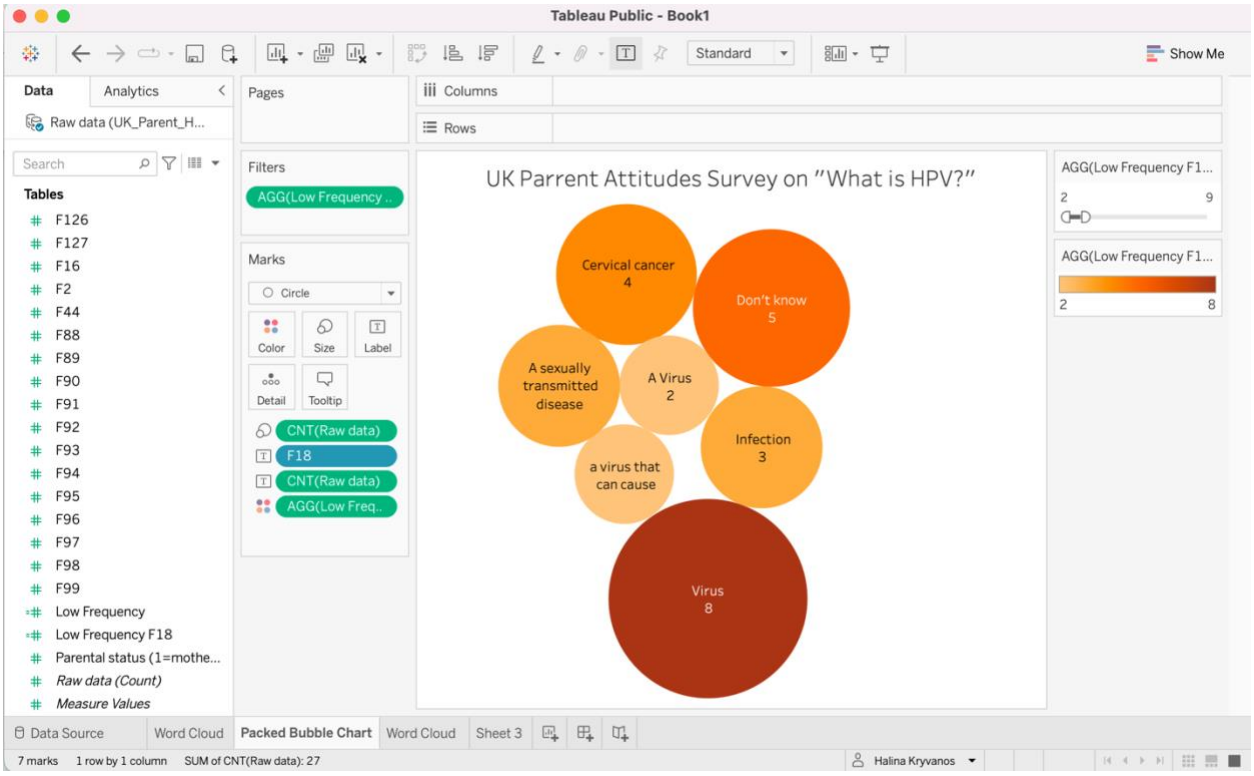
2.8 Textual analysis

1. Create a word cloud for an unstructured data variable in your data set (either the set provided above or a set of your choosing).
    - The word cloud should use size to designate values with higher frequencies.
    - Filter out any low-frequency values if appropriate.



1. Duplicate the chart in a new sheet and turn it into a packed bubble chart for the same data.
    - Use color to add an additional data dimension to the chart.



4. Explain what the bubble chart tells you that the word cloud can't.

Packed bubble chart makes size-comparison easier and attention-striking as it contains qualitative and quantitative information compared to the word cloud.

Visual style guide

Text

- Are the title and text descriptive enough? (i.e., do you understand what the visualization is trying to convey just by looking at the title and text?):
  Yes, the title is descriptive enough.

- Are there text labels?
  Yes.

- Does the text portray any redundant information that could be gotten rid of?
  No redundant information to get rid of.

- Do colours, shapes, and size scales come with legends?
  Yes

Colour

- What does the colour scheme signify?

  Yes(the most occurring word have the darkest colour)

- Are there more than five colours?

  No
- Does the colour scheme make sense? Are colours analogous, complementary, monochromatic, or intuitive?

  Yes
- If colour is used to draw attention to important information, is the darkest colour representing the most important information?

  Yes

Other

- Are different sizes used? If so, is there meaning behind the sizes?

  Yes, different sizes are used.
- Are there groupings in the data that can be portrayed through colour, size, or position?

  Yes, it is clearer in the bubble chart.
- Is there (enough) whitespace?

  Enough space to understand the text.
- Is the visualization accessible?

  Yes
- Does the visualization teach you something?

  Yes.

Part 2

1. Reread your project business requirements and project plan for a recap of your data sources, project goals, and requirements.
2. Create a new document with answers to the following questions
3. How might unstructured survey data supplement your student project?

   Feedback resulting from survey could help to identify areas of improvement from the previous staffing condition during the influenza season. This could also capture the general conditions of how states and their medical facilities response to the influenza season (increasing inpatients, death case, etc.)

   - What sort of data might you receive from unstructured survey questions posed to staff and patients?

     Obtain feedback from medical staffs having first-hand experience handling flu cases/patients.

Obtain feedback from medical management level to identify gap between planning and execution of staffing project.

Obtain feedback from the patients to understand how medical staffing affects their treatment.

- How could textual analysis be used to produce insights from this data?

  Assuming the answers comes in a positive, negative, or neutral response, then with textual analysis we could be able to get the frequency of these answers and see which answer dominate the other.

4. How might surveys or other forms of unstructured data be useful to analyze as a *next step* in this project?

   Asses if the current staffing plan and which areas should be improved to obtain higher better performance

   - With influenza staffing needs determined and plans in place for the next influenza season, how might you use textual analysis to measure the success of the project?

     After calculating in the plans for reduction with the flu and making plans for the next season, I can assess how high the staffing plan is and what areas should be increased to achieve higher productivity.

   - How could textual analysis be used to produce insights from this data?

     By analyzing the key words occur in the qualitative feedback and visualizing it in the form of word clouds and packed bubble chart.