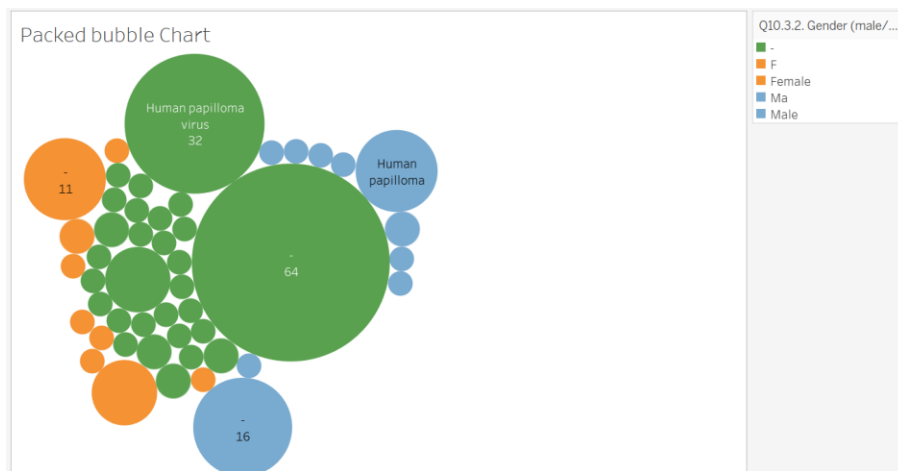
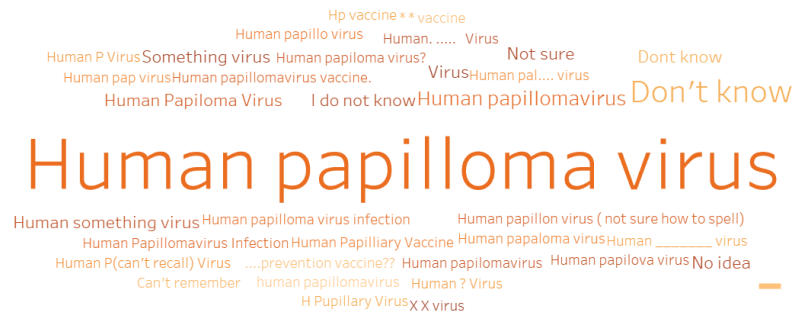


Part 1

Word Cloud



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

The bubble chart is able to separate answers that were female versus male. Not all answers were able to be separated. I found it interesting that the correct answer “human papilloma virus” did not have any gender data. Also the size of the bubbles and the counts added inside the bubbles makes them much easier to distinguish than the more abstract word cloud.

Link to Tableau: <https://public.tableau.com/app/profile/chris.charles.arnold>

Part 2

- How might unstructured survey data supplement your student project?

You could use it to create a more human connection to the data in the beginning of a presentation. Just because we love data and analyzation in this course does not mean that all will easily be drawn in to the presentation. Also while slightly related but different in some respects, this type of data can show the vastness of human thought depending on what you are looking at.

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

If you ask personal questions on opinions, this is where you will see a great variety in answers. Everyone thinks differently and will thus write differently how they think. Free form answers will also make people feel less limited and more likely to give true opinion versus adapt slightly to give an answer seen.

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

Even though the data may be free form, there will be similar answers and also many will write the same things. A word cloud will more easily deliver an easily recognizable trend presentation to those who don't respond well to pure number presentation.

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

One specific thing that I thought of while looking over the data sets that have survey data involved. Looking at the below category, it would be interesting to show the relationship between the parental type situation and the flu shot rate. You could show 2 separate bubble charts with one being vaccinated and the other being non vaccinated and see if there were bigger bubbles of one category in “yes” versus “no.”

The screenshot shows an Excel spreadsheet titled "NIS_Flu_Shot_Survey_reduced - Excel". The active sheet is "Table3". The data table has columns: SEQNUMHH, PDAT, YEAR, AGEGRP, BF_ENDR06, CBF_01, CEN_REG, CHILDNM, CWIC_01, CWIC_02, and EDUC1. The data rows show various entries for children's flu shot status and demographic information. A filter menu is open over the "YEAR" column, showing options to sort by color, filter by color, and text filters. The filter menu also includes a search bar and a list of filter criteria: (Select All), DON'T KNOW, FATHER (STEP, FOSTER, ADOPTIVE) O, GRANDPARENT, MOTHER (STEP, FOSTER, ADOPTIVE) C, OTHER FAMILY MEMBER/FRIEND, and REFUSED.

SEQNUMHH	PDAT	YEAR	AGEGRP	BF_ENDR06	CBF_01	CEN_REG	CHILDNM	CWIC_01	CWIC_02	EDUC1
1	NA	CHILD DOES	2017 19 - 23 MON	395.687	ST YES	SOUTH	FOUR OR MCYES	YES		COLLEGE G
2	NA	CHILD DOES	2017 19 - 23 MON	NA	ST NO	WEST	FOUR OR MCYES	NO		> 12 YEARS
3	NA	CHILD DOES	2017 30 - 35 MON	NA	MINO	SOUTH	FOUR OR MCYES	NO		> 12 YEARS
4	NA	CHILD HAS A	2017 19 - 23 MON	NA	TE NO	MIDWEST	ONE	NO	NA	COLLEGE G
5	NA	CHILD HAS A	2017 19 - 23 MON	547.87	ST YES	NORTHEAST	TWO OR THFYES	YES		< 12 YEARS
6	NA	CHILD DOES	2017 24 - 29 MON	NA	RE NO	SOUTH	ONE	YES	NO	> 12 YEARS
7	NA	CHILD HAS A	2017 30 - 35 MON	121.7	ST YES	NORTHEAST	TWO OR THFYES	YES		COLLEGE G
8	NA	CHILD HAS A	2017 24 - 29 MON	365.2	ST YES	NORTHEAST	TWO OR THFNO	NA		> 12 YEARS
9	NA	CHILD HAS A	2017 19 - 23 MON	456.562	ST YES	NORTHEAST	FOUR OR MCNO	NA		12 YEARS
10	NA	CHILD DOES	2017 30 - 35 MON	30.437	TE YES	WEST	ONE	YES	YES	> 12 YEARS
11	NA	CHILD HAS A	2017 30 - 35 MON	304.37	ST YES	MIDWEST	TWO OR THFNO	NA		> 12 YEARS
12	NA	CHILD DOES	2017 19 - 23 MON	NA	ST REFUSED	NORTHEAST	ONE	NO	NA	COLLEGE G
13	NA	CHILD HAS A	2017 19 - 23 MON	426.12	ST YES	SOUTH	TWO OR THFNO	NA		COLLEGE G
14	NA	CHILD DOES	2017 19 - 23 MON	213.062	RE YES	SOUTH	TWO OR THFYES	YES		12 YEARS
15	NA	CHILD DOES	2017 30 - 35 MON	304.37	ST YES	MIDWEST	FOUR OR MCNO	NA		COLLEGE G
16	NA	CHILD DOES	2017 24 - 29 MON	91.312	TE YES	MIDWEST	ONE	NO	NA	< 12 YEARS
17	NA	CHILD HAS A	2017 19 - 23 MON	456.562	ST YES	MIDWEST	FOUR OR MCNO	NA		< 12 YEARS
18	NA	CHILD DOES	2017 24 - 29 MON	NA	RE NO	NORTHEAST	TWO OR THFYES	NO		> 12 YEARS
19	NA	CHILD DOES	2017 24 - 29 MON	NA	RE NO	NORTHEAST	TWO OR THFYES	NO		> 12 YEARS
20	NA	CHILD DOES	2017 24 - 29 MON	NA	RE NO	NORTHEAST	TWO OR THFYES	NO		> 12 YEARS

- 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?

You could directly ask the staff members in a survey to write how the execution of the plan made them feel during the year. Answers like “prepared,” “ready,” or focused”

versus “chaotic,” “understaffed,” or “anxiety-ridden” along with their frequency could give a good indication that does not rely on the death numbers or infection rates.

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

As implied above, a word cloud or bubble chart could easily bring visual cues to the frequency of the above answers.