

Data Analysis

Mean formula used: =AVERAGE(_2:_40)

Mean of 2014 appointments (column G): 11668

Mean of 2018 appointments (column H): 14,479

Mean of 5-year-appointment change (column I): 30

Mean of 5-year-student-enrollment change (column F): 5

Median formula used: =MEDIAN(_2:_40)

Median of 5-year-student-enrollment change (column F): 5.06

Median of 2014 appointments (column G): 9,881

Median of 2018 appointments (column H): 11,988

Median of 5-year-appointment change (column I): 24.165

Mode formula used: =MODE(_2:_40) and =MODE.SNGL(_2:_40)

Mode of 2014 appointments (column G): N/A

Mode of 2018 appointments (column H): N/A

Mode of 5-year-appointment change (column I): N/A

Mode of 5-year-student-enrollment change (column F): N/A

Mode of counselors per school, 2014 (column N): 18

Mode of counselors per school, 2018 (column O): 20

Min formula used: =MIN(_2:_40)

Mode of 2014 appointments (column G): 2,148

Min of 2018 appointments (column H): 3297

Min of 5-year-appointment change (column I): -18.21

Min of 5-year-student-enrollment change (column F): -9.39

Min of counselors per school, 2014 (column N): 4

Min of counselors per school, 2018 (column O): 4

Max formula used: =MAX(_2:_40)

Max of 2014 appointments (column G): 43627

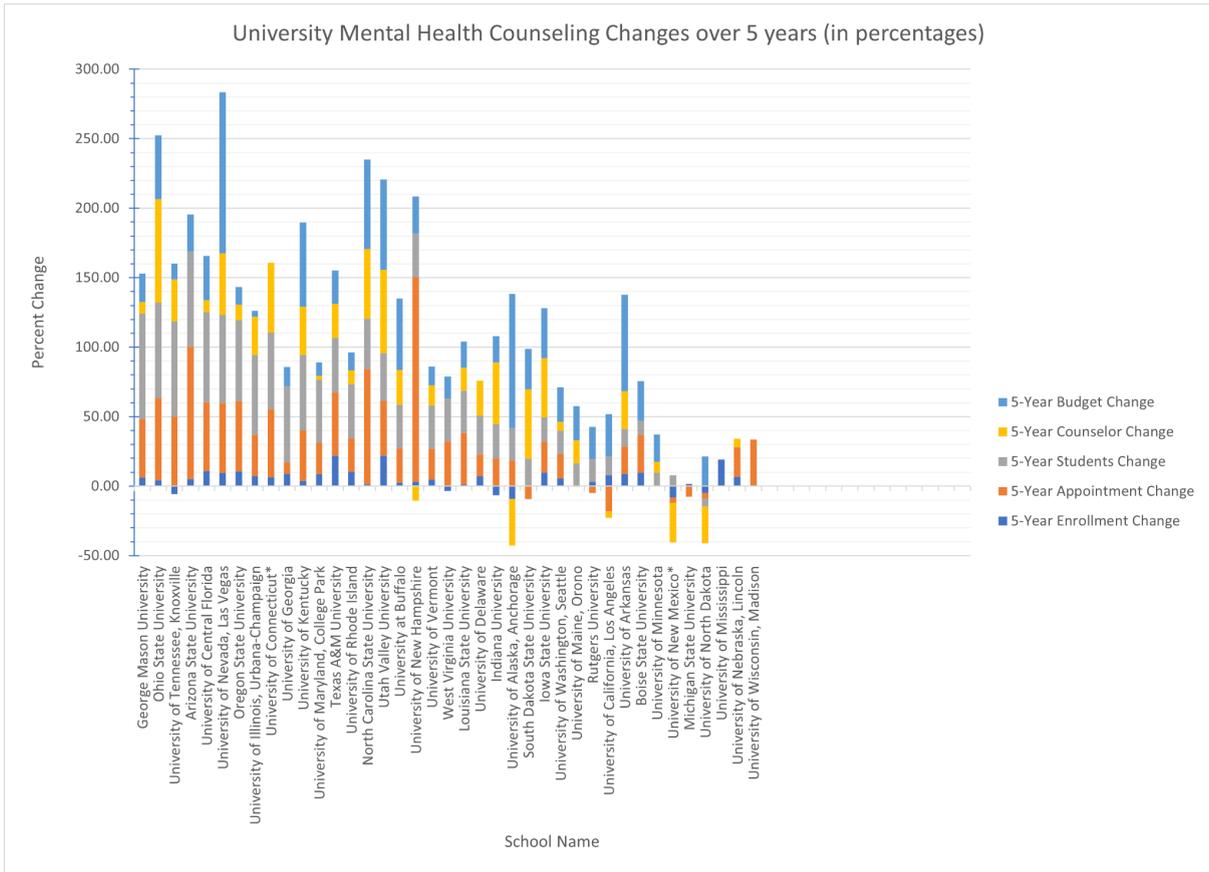
Max of 2018 appointments (column H): 37147

Max of 5-year-appointment change (column I): 147.44

Max of 5-year-student-enrollment change (column F): 21.98

Max of counselors per school, 2014 (column N): 63

Max of counselors per school, 2018 (column O): 60



Percent function:

$=PERCENTILE(2:40, .75 \text{ and } .9)$

Used columns O and N (counselors for 2014 and counselors for 2018)

O (counselors in 2018):

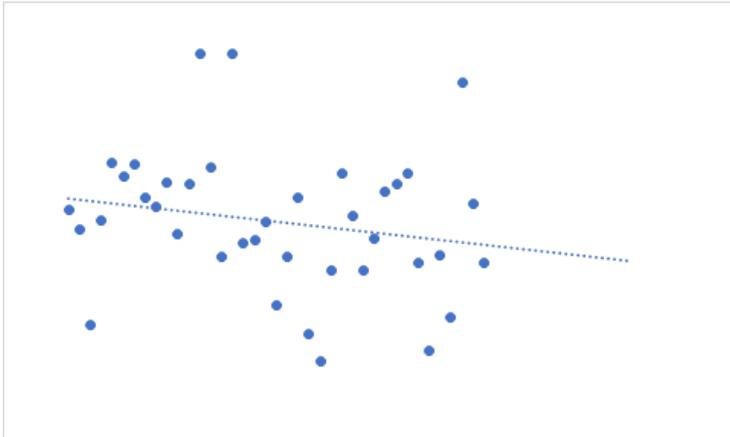
- 75th percentile: 23.6
- 90th percentile: 39

N (counselors in 2014):

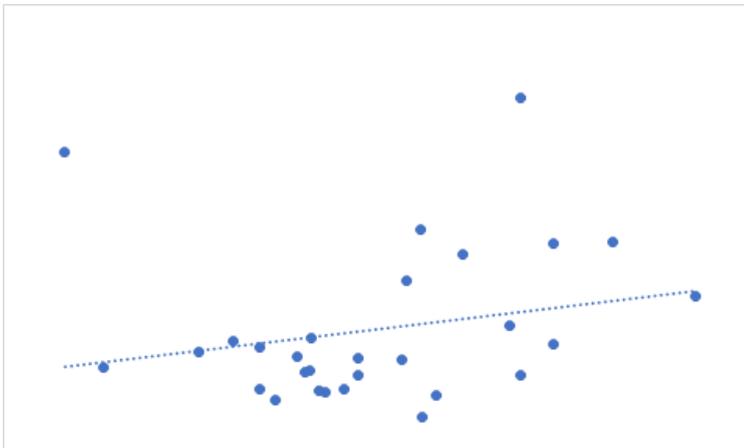
- 75th percentile: 18
- 90th percentile: 24.13

Correlation between 5 year change in enrollment and 5 year change in appointments

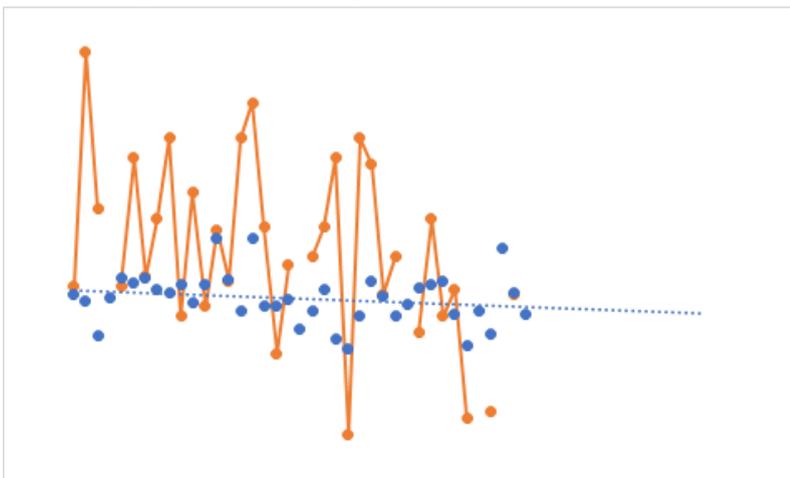
$=CORREL(I2:I40, F2:F40) = 0.174088219$



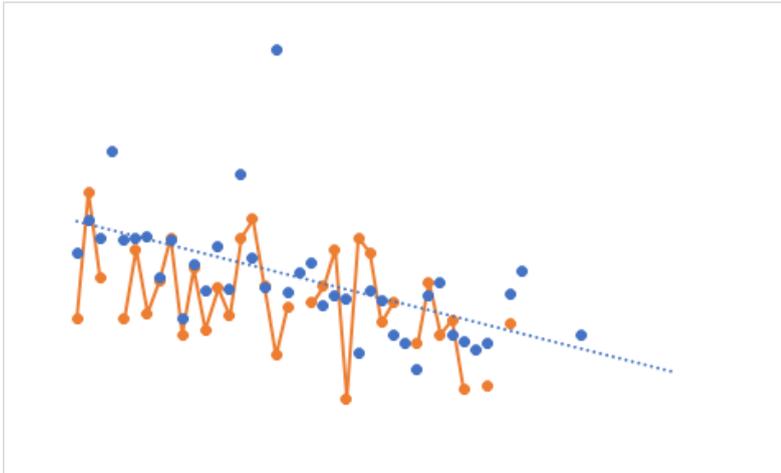
Correlation between 5 year change in counselor staff and 5 year total budget change
 =CORREL(P2:P40, V2:V40) = **0.22605639**



Correlation between 5 year change in counselor staff and 5 year student enrollment
 =CORREL(F2:F40, P2:P40) = **0.314173**



Correlation between 5 year change in counselor staff and 5 year appointment increase
 =CORREL(I2:I40, P2:P40) = **0.227744**



My thoughts:

None of the correlations that I got were particularly strong, nor were the percentiles particularly enlightening. It was very difficult to establish any sort of trend in my data, as there were only 40 schools representing a general populous, and they had varying reasons as to why their data might have changed over a 5-year period. Because of this, it was hard to establish any reason why the percentage increases for number of appointments would go up when the counselor staff, budget, and student enrollment did not necessarily increase as well. I'd suspect that there is an increase in mental health difficulties based on these factors, but it's hard to tell with the current data and would require more research. I'd be interested in looking into it as a story idea -- seeing whether or not the demand for mental health resources has increased in the last several years regardless of enrollment counts or increased access to resources (in other words, are students struggling more with their mental health?)

Another story idea I discovered was from looking at the minimum counts. The minimum number of counselors listed was 4, and the corresponding school had over 15,000 students. I thought that was fascinating, and I'd be interested in looking into requirements for providing mental health to students, and whether there is a set amount of counselors necessary.

I did see that the percentiles for the amount of counselors increased, but there was still such a small amount of data it was hard to rely on.

This assignment generated quite a few story ideas, but because the data came from 40 schools, it was hard for any of them to be really strong. They're mostly speculation.