ROI – RACS Survey

The RACS survey project I worked on in Winter Term 2024 taught me a lot of new data science skills. The entire class was dedicated to a service project, helping the Rockbridge Area Community Services board members create a survey for their clientele on what they may need to improve on to better serve the community. The first part of the course was focused on survey creation, where, as a class, we met with a member from RACS to understand what the focal point of the survey should be and then worked together to create questions that allowed us to get a better understanding of the clientele at RACS and their opinions on the services offered. When working on the survey, I learned a lot about how to phrase questions and what questions are appropriate to ask people. I also learned about the ethics of survey making, ensuring that people have the right not to take the survey or answer specific questions if they do not want to.

After our survey had been created and approved, it was distributed to the clients of RACS to fill out as our way of obtaining the data. After a few weeks, we got around 50 responses, which was less than we were hoping for. Due to the limited response rate, instead of everyone in the class writing a paper on the analysis of the survey, only one person was to do so, and the rest of the class was to analyze another form of data. I volunteered to analyze the RACS survey data and write a report on it, as I had already had an idea in mind of what the paper could be about.

For my data analysis, I used R to make a variety of visualizations of the data. I mostly made histograms to show the frequency of responses to the survey questions with the hopes of giving the RACS board members information they may need, like which services are most used, age demographics of clientele, etc. After making the visualizations, I wrote a little explanation of what each graph meant and a short conclusion regarding what I had learned about the clientele of RACS from the survey data.

For the second part of this project, I wanted to research other community service organizations in Virginia to see how RACS compares to them. The main intention of the survey was to identify if clientele are satisfied with the services offered at RACS and if there were any other services they wanted but did not have access to. Therefore, I researched all other CSBs (community service boards) in Virginia and created a list of the services they offered, where they are located, how many providers they had, and their funding (if applicable).

To analyze this data, I again used R. With the data I collected, I made histograms comparing the number of services offered and the number of providers at each CSB to RACS. This analysis was primarily done to show RACS how they compare to other CSB's in Virginia.

Finally, I compiled a list of services offered at other CSBs that RACS did not have. I did some research on what mental health issues are the most prevalent in Virginia and on the opinions of what Virginians believe they need more of in terms of mental health care. With this background research, my analysis, and the survey, I suggested what services I think would be beneficial for RACS to start providing to better help for their clientele.

Overall, this was an intensive project that I learned a lot from. I collected data in two different ways: survey and through my research. Then, I analyzed both datasets with the use of R, making visualizations and summarizing my findings in an easy and interpretable way. Lastly, I had to conclude my research in a way that was easy to follow and made sense for the board members. In early May, I will have to present these findings to the board, and I feel as though I will be able to do that confidently and appropriately due to the extensive work I put in for this project and what I have learned because of it.