

## E-Report: Odd Dataset

When I researched the dataset, it was stress and heart rate that intrigued me the most. This is driven by personal interest. While stress is something that happens every day and is even mentioned in daily language, it is not generally highlighted as a clinical diagnosis indicator within datasets. Here, though, the data showed an unmistakable pattern. The higher reported stress individuals had elevated heart rates.

It made me question whether stress had a more immediate role in physiological change than is commonly believed to be. Although the dataset itself does not directly report whether increased heart rate is caused by stress or vice versa, the correlation is interesting. It raises questions about how stress could be made more notably a consideration in health evaluation and whether treatments for stress might also serve to modulate cardiovascular response

## Key Results and Figures

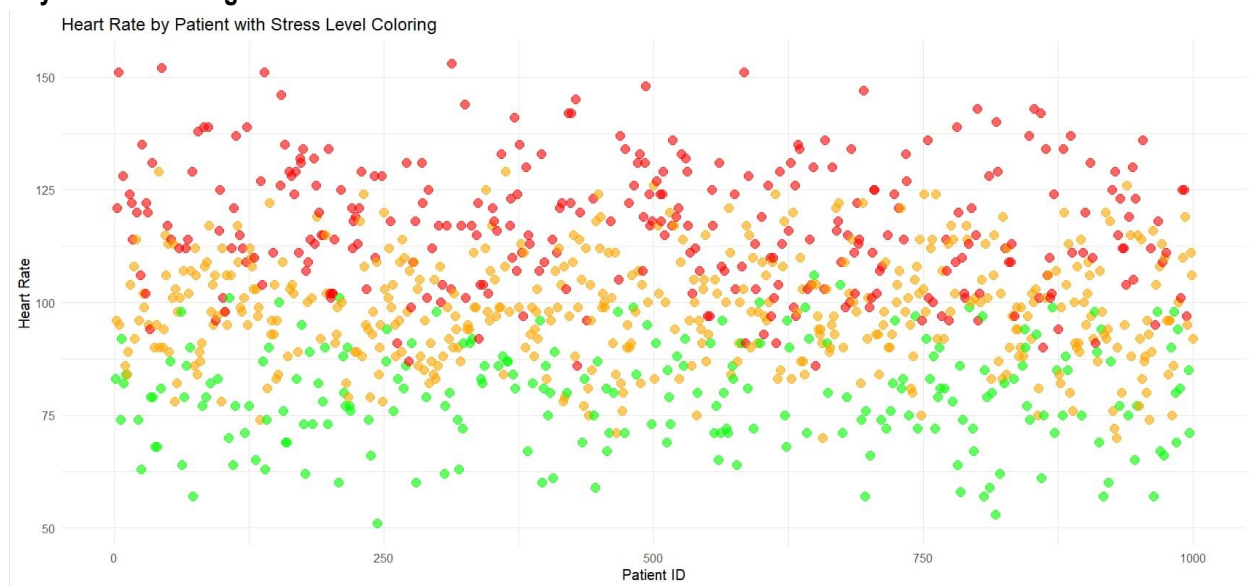


Figure 1.0 Bubble Chart of Heart Rate by Patient with Stress Level Coloring

Pearson's product-moment correlation data: Stress\_Level and Heart\_rate  $t = 45.325$ ,  $df = 998$ ,  $p\text{-value} < 2.2e-16$ , alternative hypothesis: true correlation is not equal to 0, 95 percent confidence interval: 0.7990355 0.8396790 and sample estimates:  $cor = 0.8203908$ .

## Interpretation and Conclusion

To represent this correlation, I created a bubble chart. The bubbles are the patients, graphed on the x-axis. Their heart rate is the y-axis, and stress level is indicated by the color of the bubbles. To easily interpret, I took a simple color scheme: green as low, orange for moderate, and red for high. This graphical method aids in identifying how stress levels group with heart rate values in a manner that makes the association easy to identify.