Evaluating Employee Satisfaction with Regression Analysis

Background:

After some time providing data analytics to in different departments at Havenwood Academy, I was given responsibility of the employee survey. The state I got it in was bare and gave us little quantitative value. After an initial redesign of the survey with several iterations coming quarter by quarter as we administered them, we got to a survey that gave us relevant data that helped us really understand where we were making improvements in work culture and what still needed work.

After a quarter with poor scores in our NPS, compensation satisfaction, satisfaction in leadership, and overall satisfaction, I was worried about what may be going on. Even after a base pay raise for all our staff, our employees thought poorer when asked "How fairly are you compensated for your work?" Due to the timing of the survey, I believed these poor scores may be tied to safety in the workplace.

The following quarter, we had booming scores in every area. Again, I believe this had to do with safety.

Regression Setup:

In each of our surveys, we asked the very important question "How safe to you feel at work?" The available answers were "All of the time, most of the time, some of the time, and rarely." So, the regression was set to evaluate their satisfaction in other areas based off what they responded in the safety question. A score was assigned based off of their answer with "All of the time" being a score of 3 and a "Rarely" being a score of 0. I then ran regressions against questions like "How likely are you to refer a friend to work here" or "How fairly are you compensated." The results were phenomenal.

Results:

In each individual question, we had statistically significant regressions that told us the following:

Staff who answer "All of the time" when asked, how safe do you feel score:

How satisfied are you with Havenwood's leadership: *9.1* How fairly are you compensated: *8.2* How likely would you refer family to be treated here: *8.0* How likely would you refer a friend to work here: *8.5*

Staff who answer "Most of the time" when asked, how safe do you feel score:

How satisfied are you with Havenwood's leadership: 7.3 How fairly are you compensated: 6.8 How likely would you refer family to be treated here: *6.2* How likely would you refer a friend to work here: *7.1*

Staff who answer "Some of the time" when asked, how safe do you feel score:

How satisfied are you with Havenwood's leadership: 5.4 How fairly are you compensated: 5.4 How likely would you refer family to be treated here: 4.5 How likely would you refer a friend to work here: 5.8

Staff who answer "Rarely" when asked, how safe do you feel score:

How satisfied are you with Havenwood's leadership: **3.6** How fairly are you compensated: **4.0** How likely would you refer family to be treated here: **2.8** How likely would you refer a friend to work here: **4.4**

A one point increase in feeling of safety for our staff increased overall satisfaction by 31%. This discovery pointed out something we all could see, but not quantify. From here, the company began making more and more decisions based on safety. They were more likely to discharge more violent clients and less likely to admit them in the first place.