Exploratory Data Analysis

Overall, my response variable, Financial Well-Being Score, is one of a very holistic nature in relation to wealth altogether. It appears to be a variable that can be manipulated and influenced across multiple variables and holds a strong connection so far to its quantitative counterparts. It will take further analysis to explore its relationship with financial knowledge and human personality and psychology altogether, but what follows are my findings so far.

Analyzing the level of perceived life satisfaction in a person, it was clear this variable held a strong relationship with my response variable, financial well-being score. With an upward trend displayed in the boxplots compared side by side for each response category, there was an apparent trend that held consistent. However, there was a significant influence from outliers, noting that the mean was at 6.6 when the median was found at 8. This hints at a skewness in the graph at the need for readjustment in regard to outliers. Beyond the extraneous data points, this variable was a good choice in the explanation of financial well-being score so far.

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Next, I analyzed the quantitative variable, Financial Skills Scores. With a very apparent linear trend moving upward to the right, the variable demonstrated a relatively strong relationship with the Financial Well-Being Score response variable. Given its correlation output of 0.4924, the variable shows promise in being one of the most influential upon the response. I believe this variable may coincide in its influence alongside the other scores, KH and LM, so there could be a factor of collinearity to take in consideration as well as the outliers in the plot that have high financial well-being scores as well as financial skills scores. I do not believe any transformations are needed for this graph either since it shows only a linear relationship.

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Lastly, I analyzed the quantitative variable KH Score. While fairly similar to Financial Skills Score, it held a different relationship with the response variable. The correlation between the variable itself and the response held at 0.3306, slightly lower than the prior quantitative variable explained and a lot more spread out in its graph. I do believe in order to create a better understanding of this variables relationship with Financial Well-Being Score, there is going to need to be some degree of transformation in order to reframe the data appropriately.

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