

Financial Well-being in America

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*Based on 2017's financial well-being

Project Overview

Project Purpose / Description

- Financial Well-Being in America (2017) dataset,
- Obtained from Data.gov. (<https://www.consumerfinance.gov/research/financial-well-being-survey-data/>)
- Interested in learning about financial wellbeing in America
- We looked at specific variables to understand their impact

Project Overview

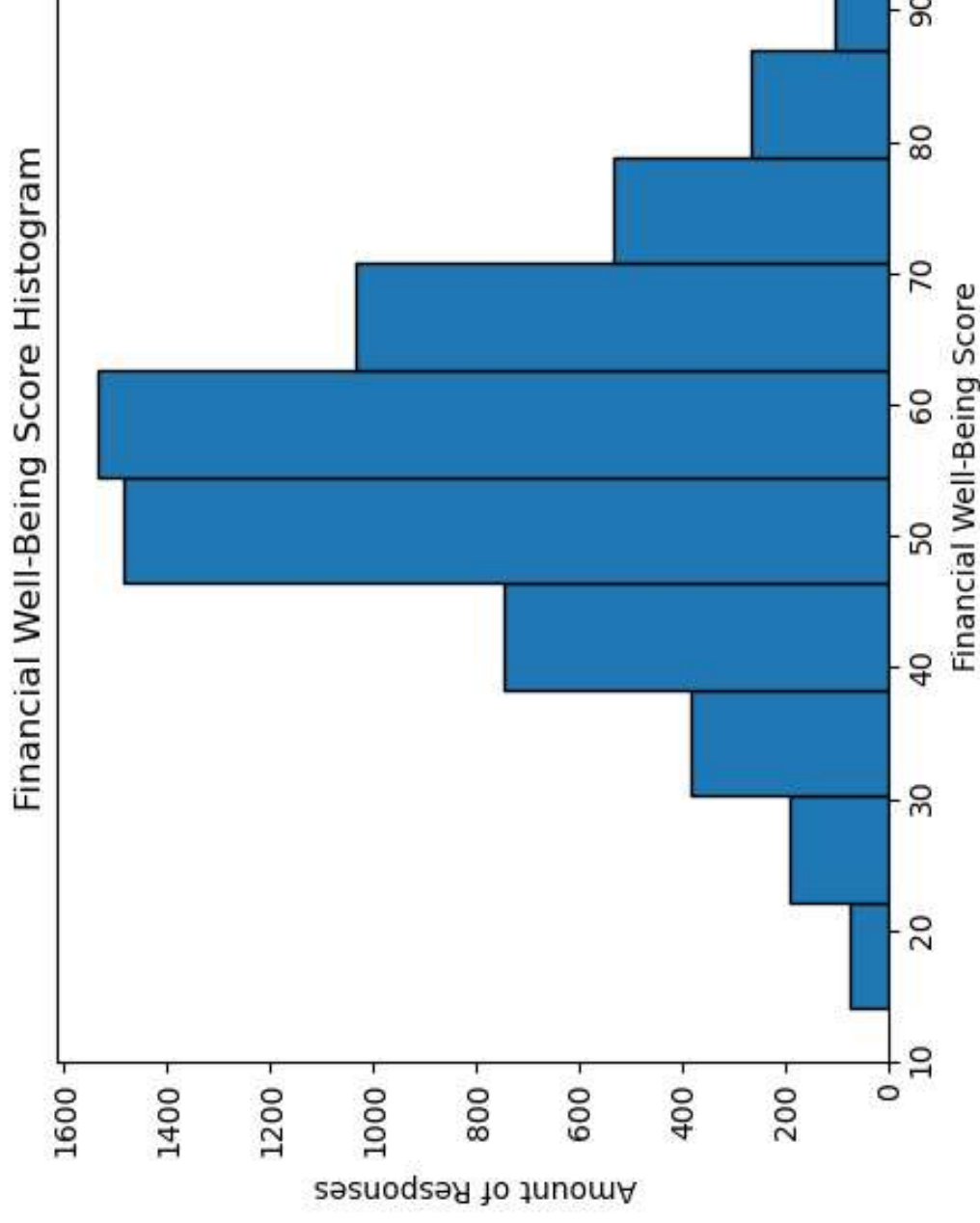
Hypothesis

There is moderate to strong correlation between the financial score and the following variables:

- Shocking life events (Household difficulty or not)
- Kids / No children
- Gift-giving
- Self-control
- Savings
- Having money in case of need

The Financial Well-Being Score Histogram

Normal Distribution



Project Overview

Overview of Data Collection, Cleanu Exploration Process

Data Exploration:

- Analyzed the columns
- Observed the data range in each column

Data Cleanup:

- Checked for duplicates
- Dropped N/A data
- Dropped Outliers
- Renamed Columns

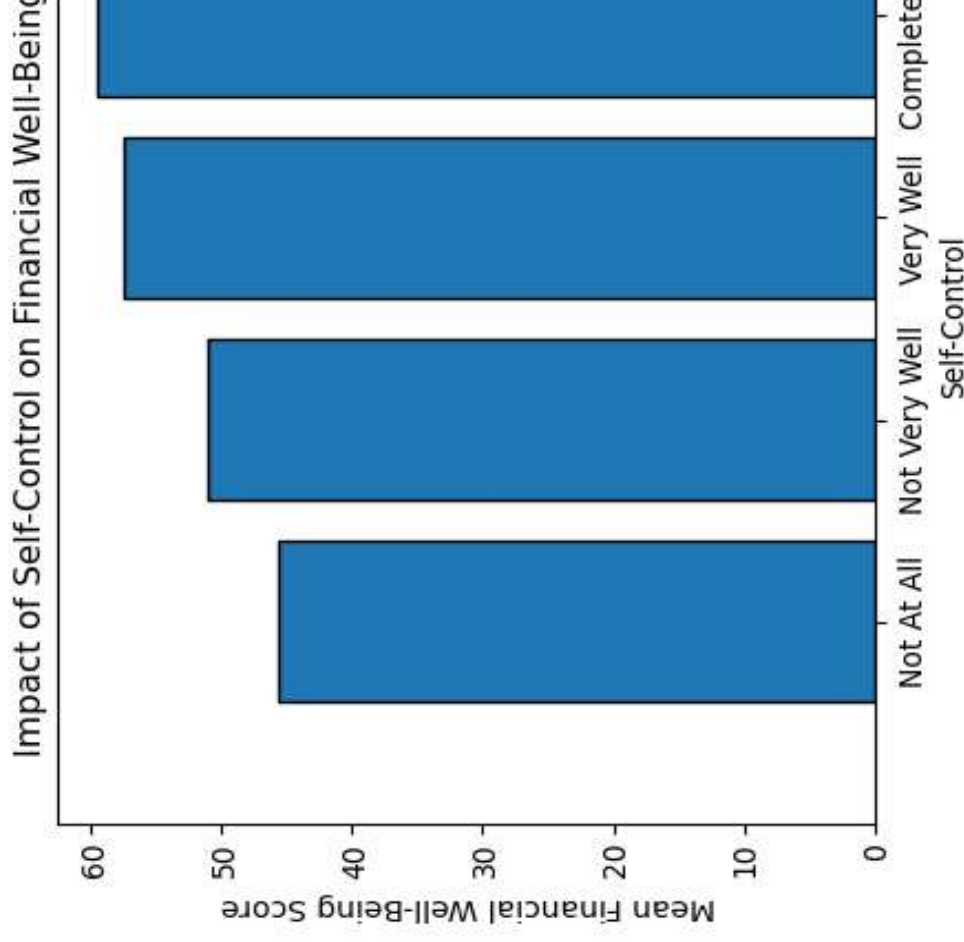
Project Overview

Approach taken to achieve goals

- We adopted an Agile mindset/approach to examine the Finance data set we were interested in
- We created a project schedule, assigned tasks based on meetings and executed them individually, focusing on the topics we wanted
- We split up variables to have smaller data sets to drill down into, created data frames, and created visualizations to illustrate
- Afterward, we reconvened to present and analyze our findings, ultimately formed the basis of our analysis/presentation

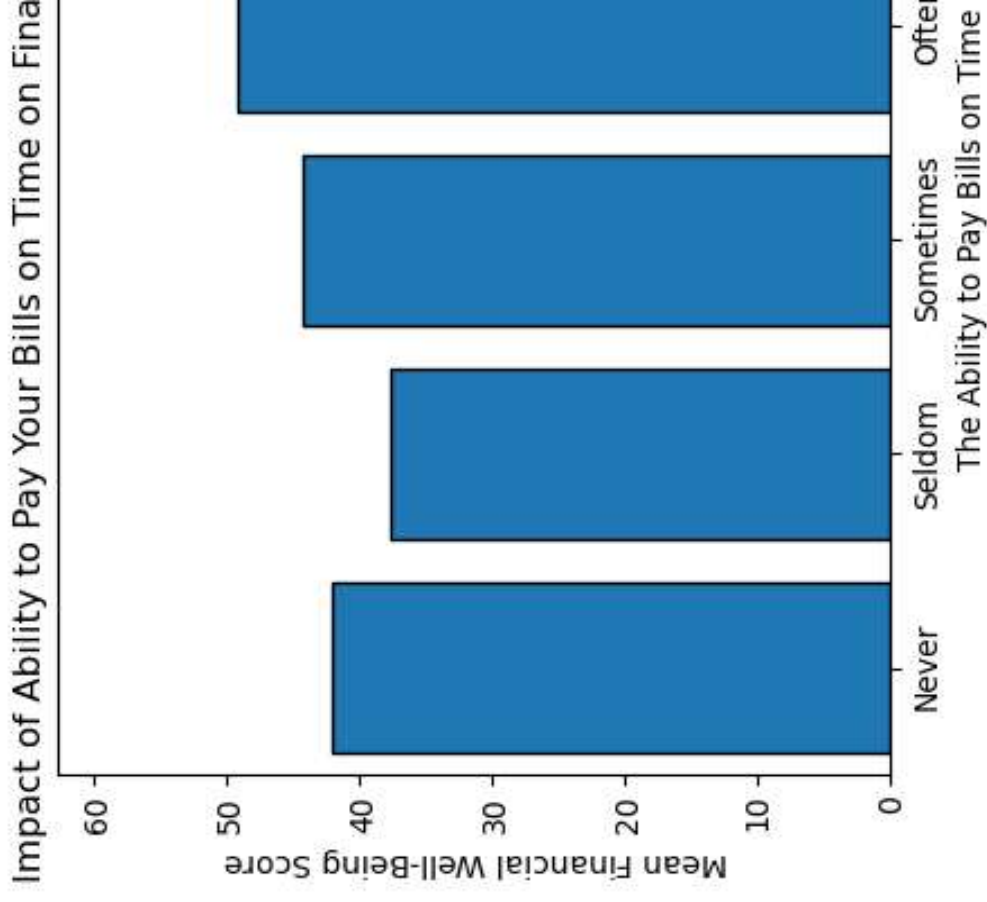
Self-Control Analysis

Survey Statement: I am good at resisting temptation.



Ability to Pay Bills on Time Analysis

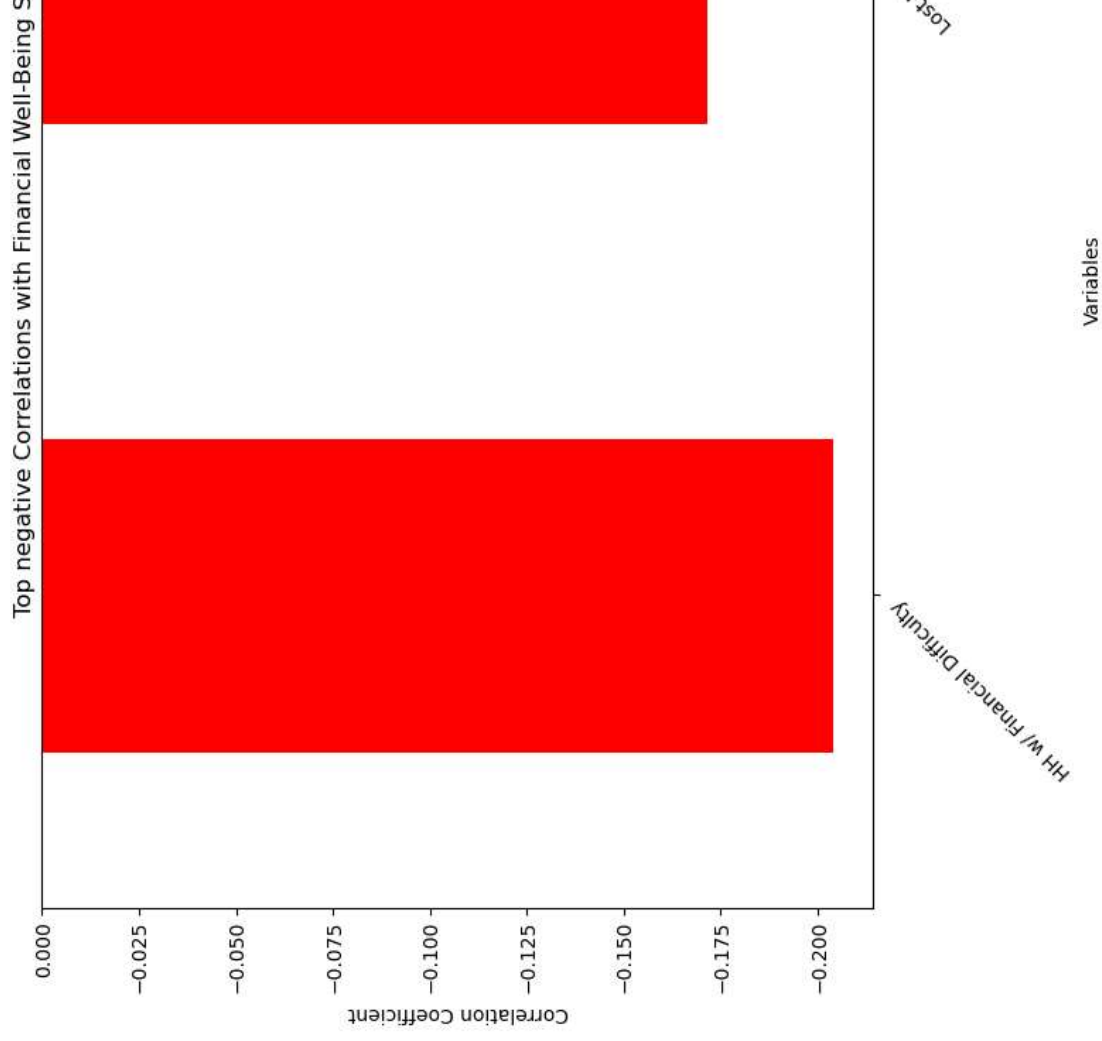
Survey Statement: I Pay My Bills on Time.



What are the major shocks in life that affect financial well-being?

Summary of Results

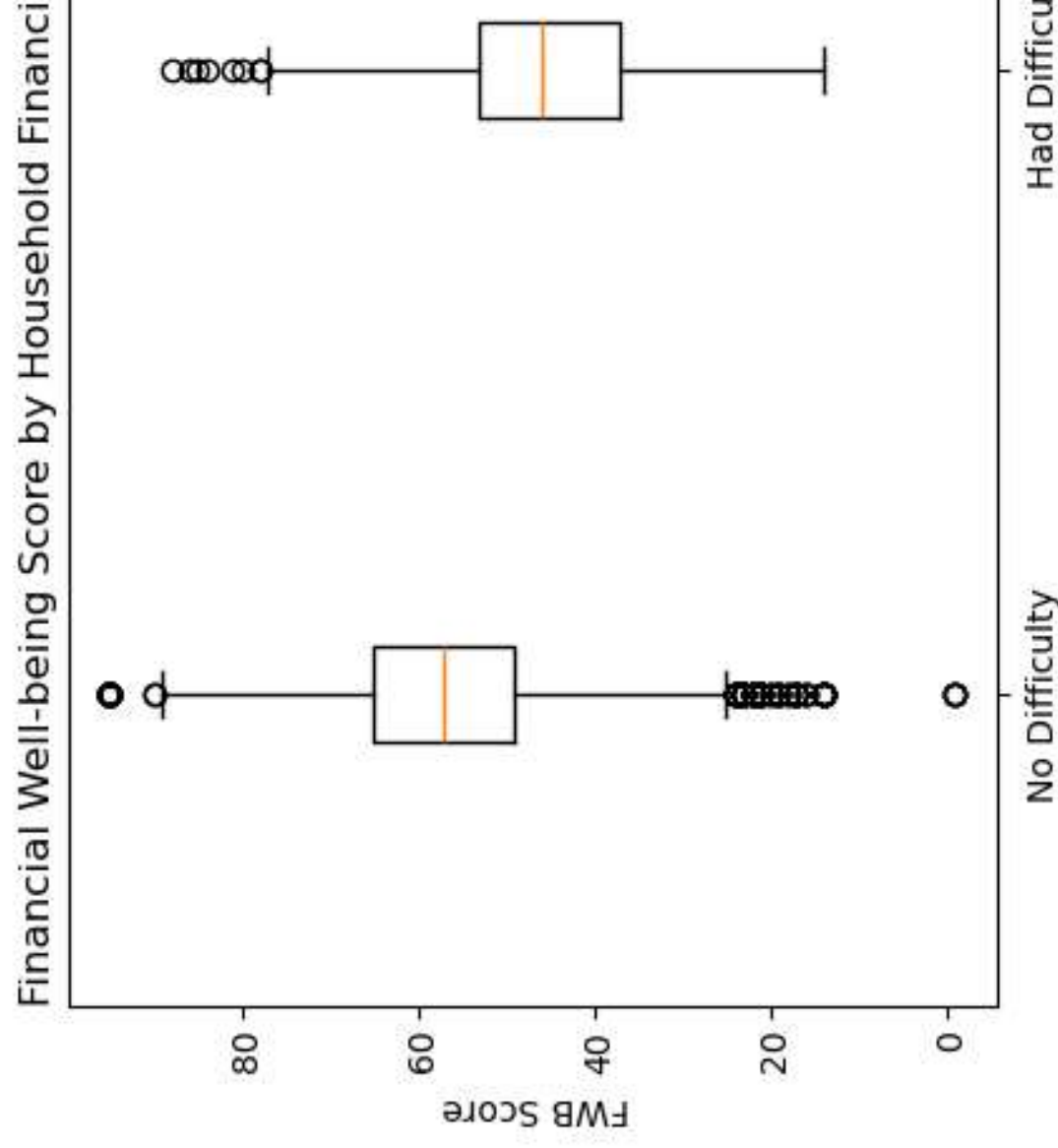
- These findings support the intuitive idea that increased financial stressors, such as difficulty paying bills or unemployment, are likely to diminish an individual's overall financial well-being.



What are the major shocks in life that affect financial well-being?

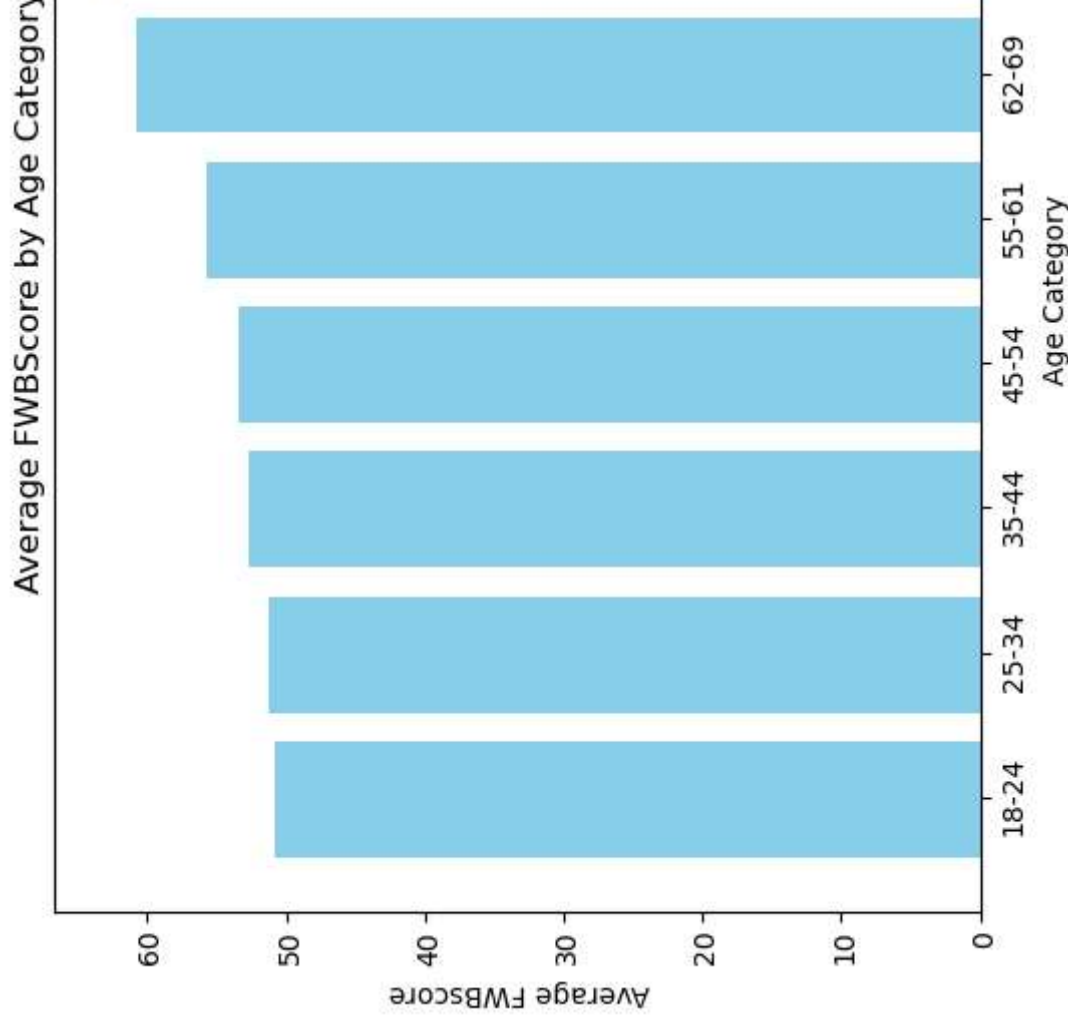
Summary of Results

- The box plot suggests that financial difficulties are associated with a broader and generally lower range of Financial Well-being Scores.
- Correlation between Household with Difficulty & Financial Well-being Score had a relatively strong negative correlation at 0.20



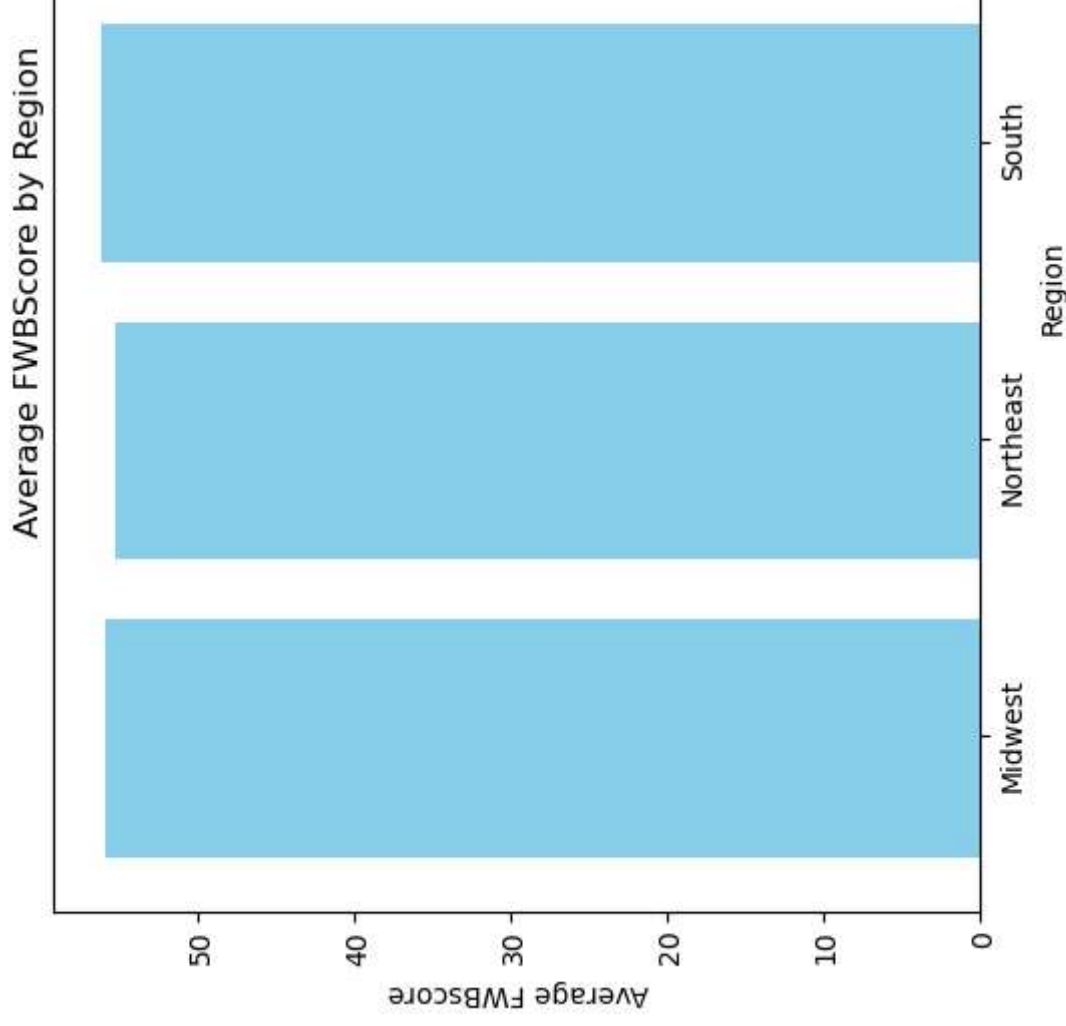
Financial Wellbeing among Age-Groups

- The highest average Financial Wellbeing Score was for 75+ age group = (63.559783)
- The lowest average Financial Wellbeing Score was for 18-24 age group = 50.80



Financial Wellbeing in US Regions

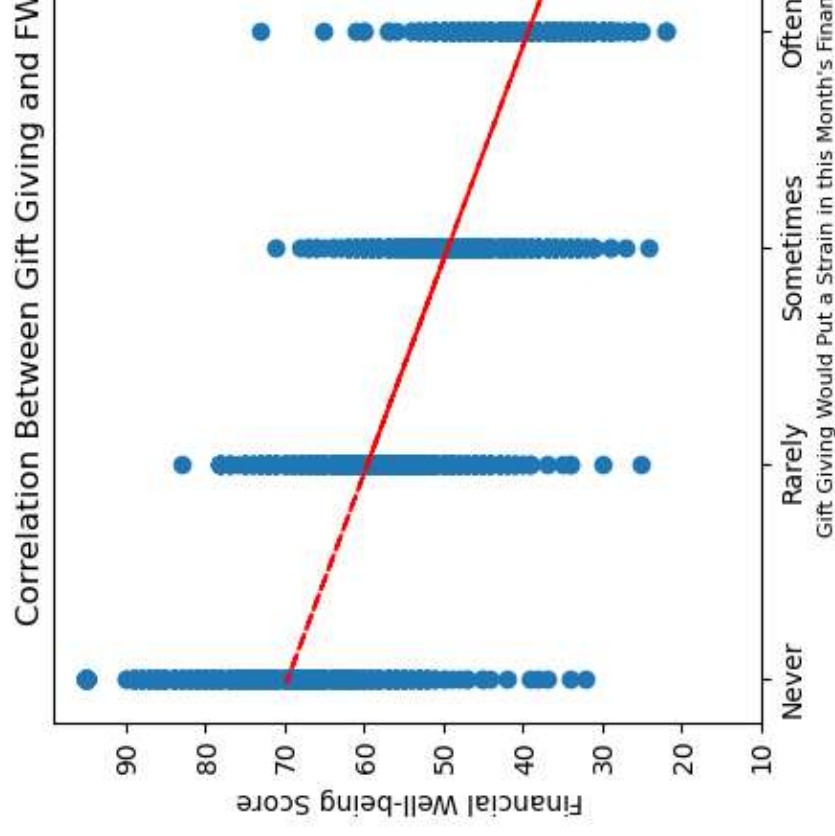
- Based on the bar chart, there does not appear to be significant variation in average financial well-being scores among the Midwest, Northeast, South, and West regions.
- The highest average Financial Well-being Score is 56.49
- The lowest average Financial Well-being Score is 55.30



Would giving a gift put a strain on my finances for the m

Summary of Results

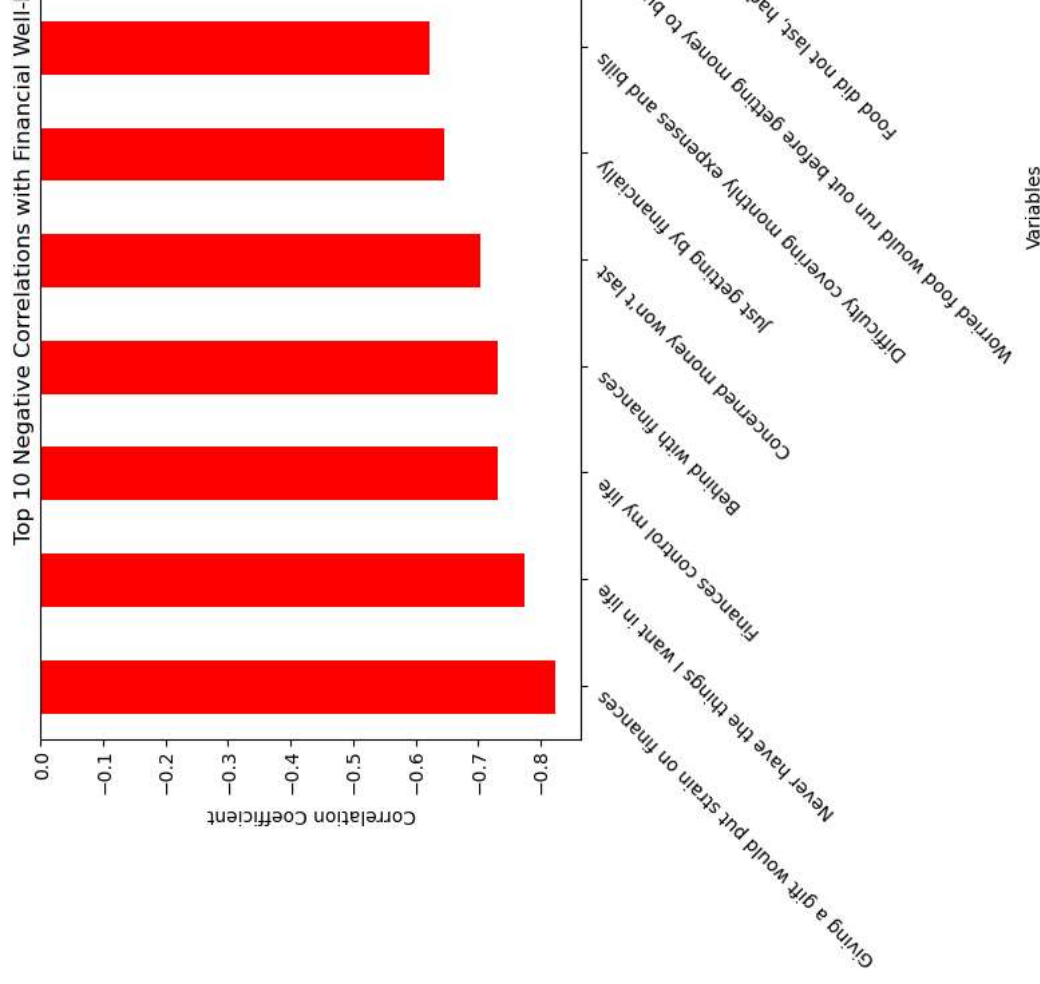
- The plot suggests a general trend where individuals who never or rarely experience financial strain from gift-giving tend to have higher FWB Scores, and those who often or always experience this strain tend to have lower scores as depicted by the downward trendline
- Correlation between Gift Giving and FWB Score is a strong negative correlation at -0.84



What variables in the full data-set correlate the most negatively

Summary of Results

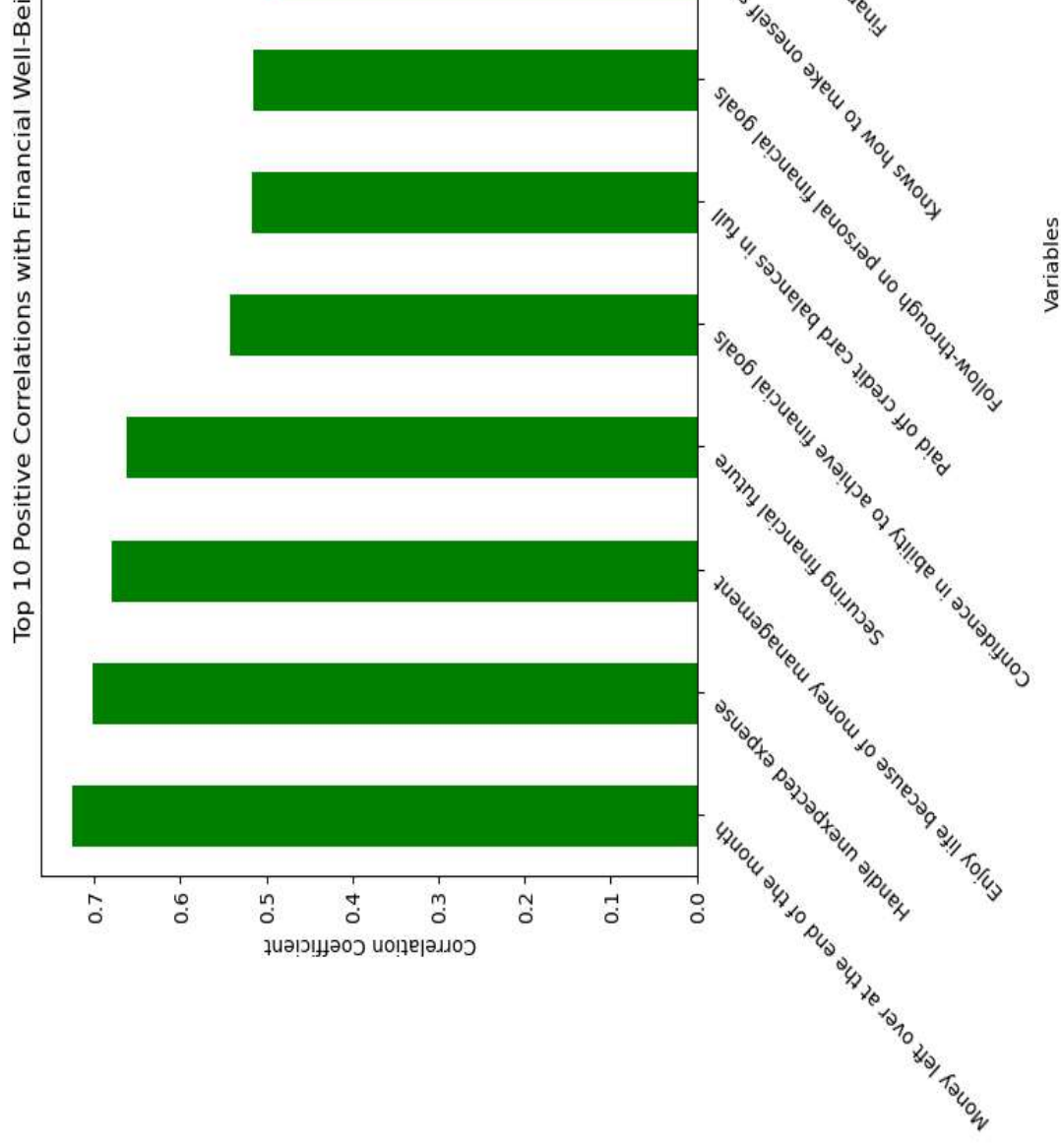
- This chart indicates that variables related to financial strain, lack of financial freedom, and psychological stress about finances are significantly negatively correlated with financial well-being.
- The stronger negative correlations, especially those closer to -0.84, suggest these factors are particularly impactful



What variables in the full data-set correlate the most to

Summary of Results

- This chart reinforces the concept that effective money management, the ability to deal with financial surprises, and maintaining positive financial habits are all correlated with a higher sense of financial well-being.



Summary

Conclusion

- The analysis identified key factors affecting financial well-being, highlighting the importance of financial skills, resilience, and savings. Having accessible funds for emergencies positively impacts financial well-being, while pressure from non-essential spending and gift-giving negatively affected it.

Problems Encountered

- When coding in our group and merging work into the main branch, problems arose, which complicated the development process. One of the key issues our team faced and how we resolved them:
 - **Merge Conflicts:** Editing and running of Jupyter Notebook cells resulted in a series of unintended code changes that could cause merge conflicts. Frequent commits and manual merges were necessary to resolve the issue.
 - **Integration Issues and common variables:** Even when our Jupyter Notebook cells ran well on their own, when we shared and modified the same DataSet, they did not integrate smoothly. We were able to create individual copies, to ensure changes and additions in one column in one portion of the analysis wouldn't impact other columns.
 - **Delayed Integration:** When we worked in isolation for too long, merging our changes, this contributed to integration challenges.

Future Considerations



- Student Loan Payments



- Financial Knowledge Score

