Financial Well-being in Ameri

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*Based on 2017's financial well-b

Project Overview

Project Purpose / Description

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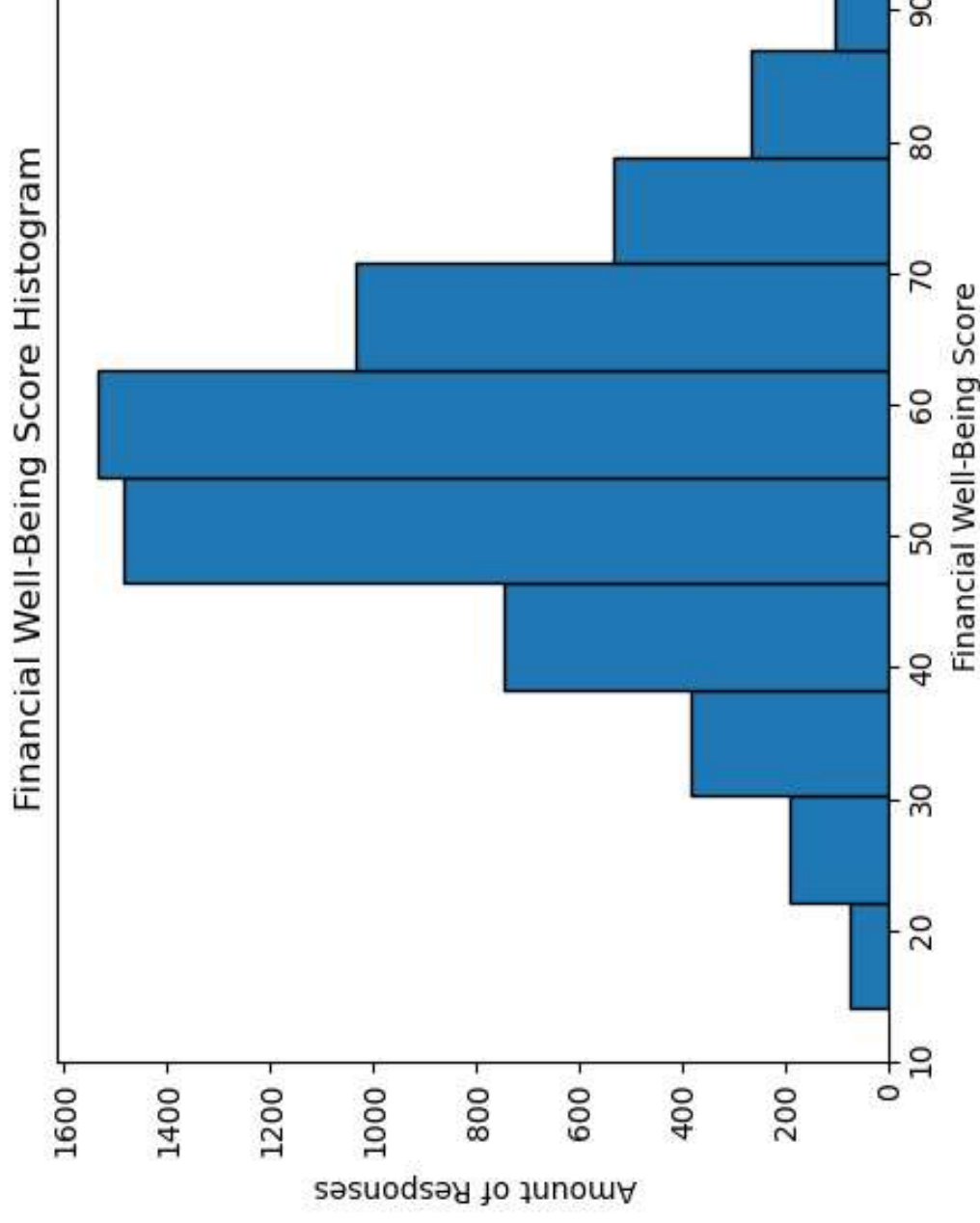
Project Overview

Hypothesis

There is moderate to strong correlation between the financ[...]
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

Financial Well-Being Score Histogram

Normal Distribution

Overview of Data Collection, Cleanu Exploration Process

Project Overview

Data Exploration:

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

Data Cleanup:

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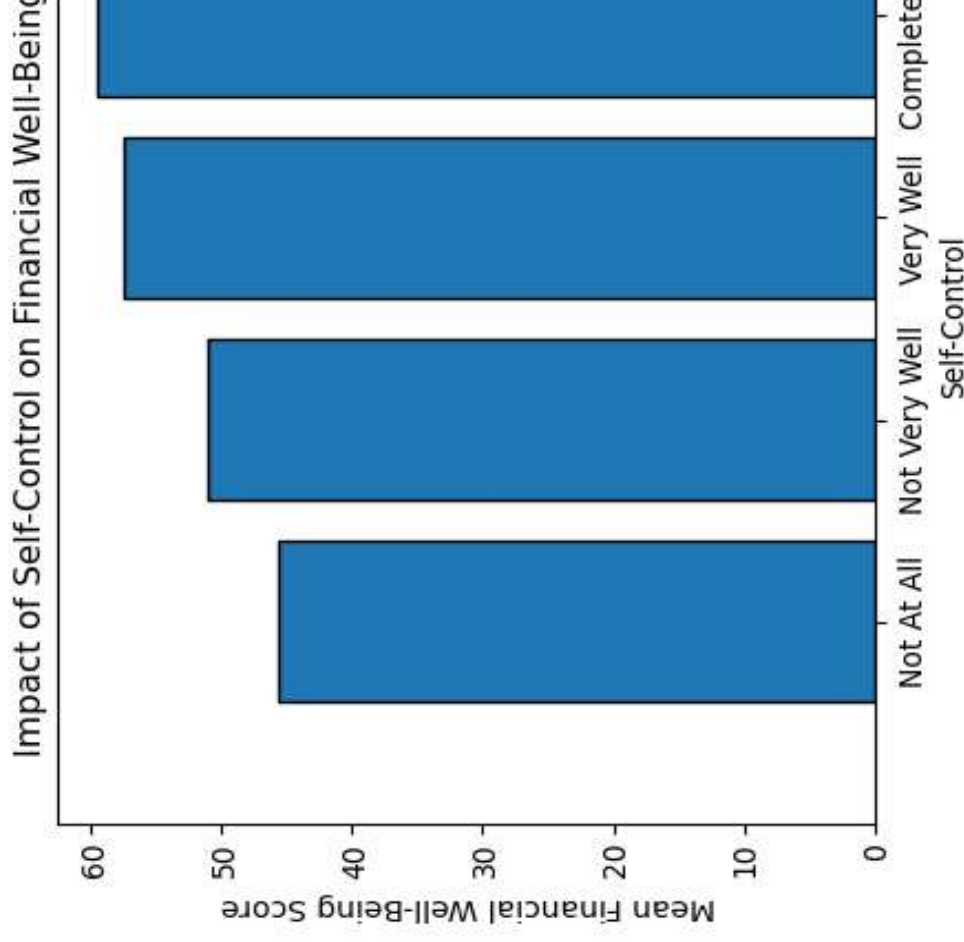- Dropped Outliers
- Renamed Columns

Project Overview

Approach taken to achieve goals

- We adopted an Agile mindset/approach to examine the Financ[...] data set we were interested in

- We created a project schedule, assigned tasks based on meeti[...] and executed them individually, focusing on the topics we wan[...]

- We split up variables to have smaller data sets to drill down int[...] sets, created data frames, and created visualizations to illustra[...]

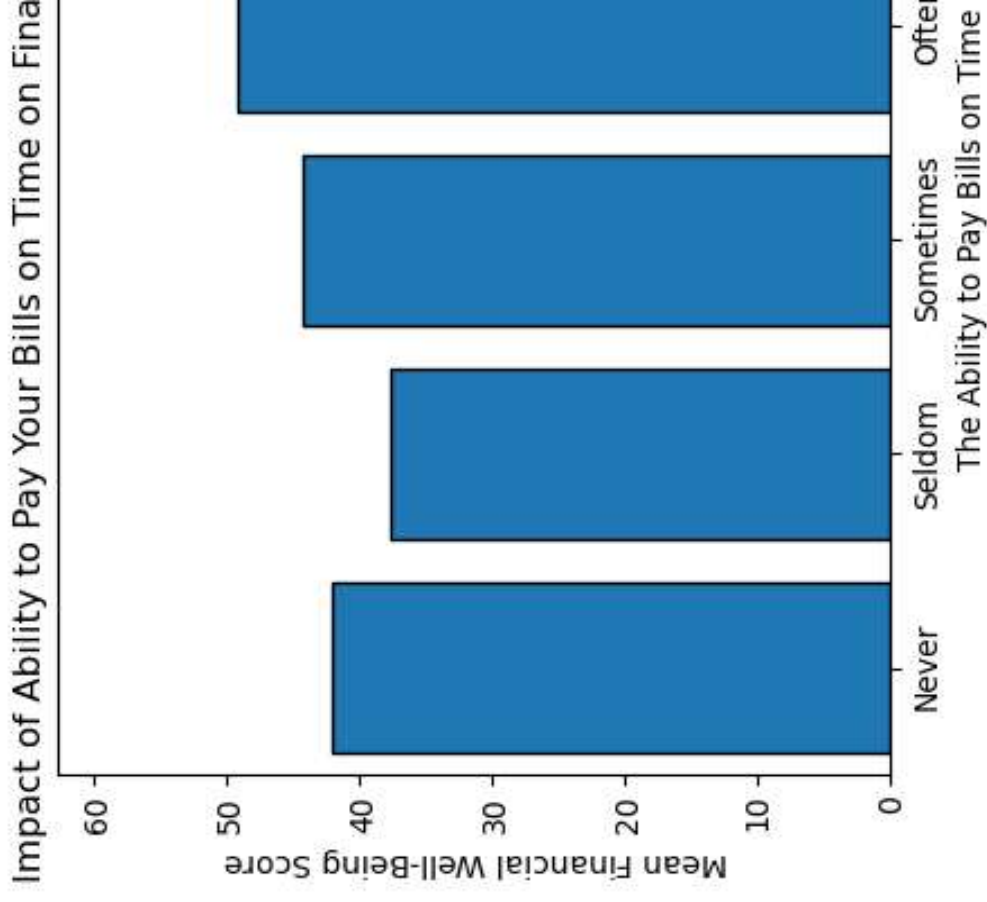- Afterward, we reconvened to present and analyze our findings, [...] ultimately formed the basis of our analysis/presentation

Self-Control Analysis

Impact of Self-Control on Financial Well-Being

Mean Financial Well-Being Score vs Self-Control (Not At All, Not Very Well, Very Well, Completely)

Survey Statement: I am good at resisting temptation.

Ability to Pay Bills on Time Analysis

Impact of Ability to Pay Your Bills on Time on Fina[ncial]

Mean Financial Well-Being Score

60 · 50 · 40 · 30 · 20 · 10 · 0

Never · Seldom · Sometimes · Ofte[n]

The Ability to Pay Bills on Time

Survey Statement: I Pay My Bills on Time.

Top negative Correlations with Financial Well-Being S

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.
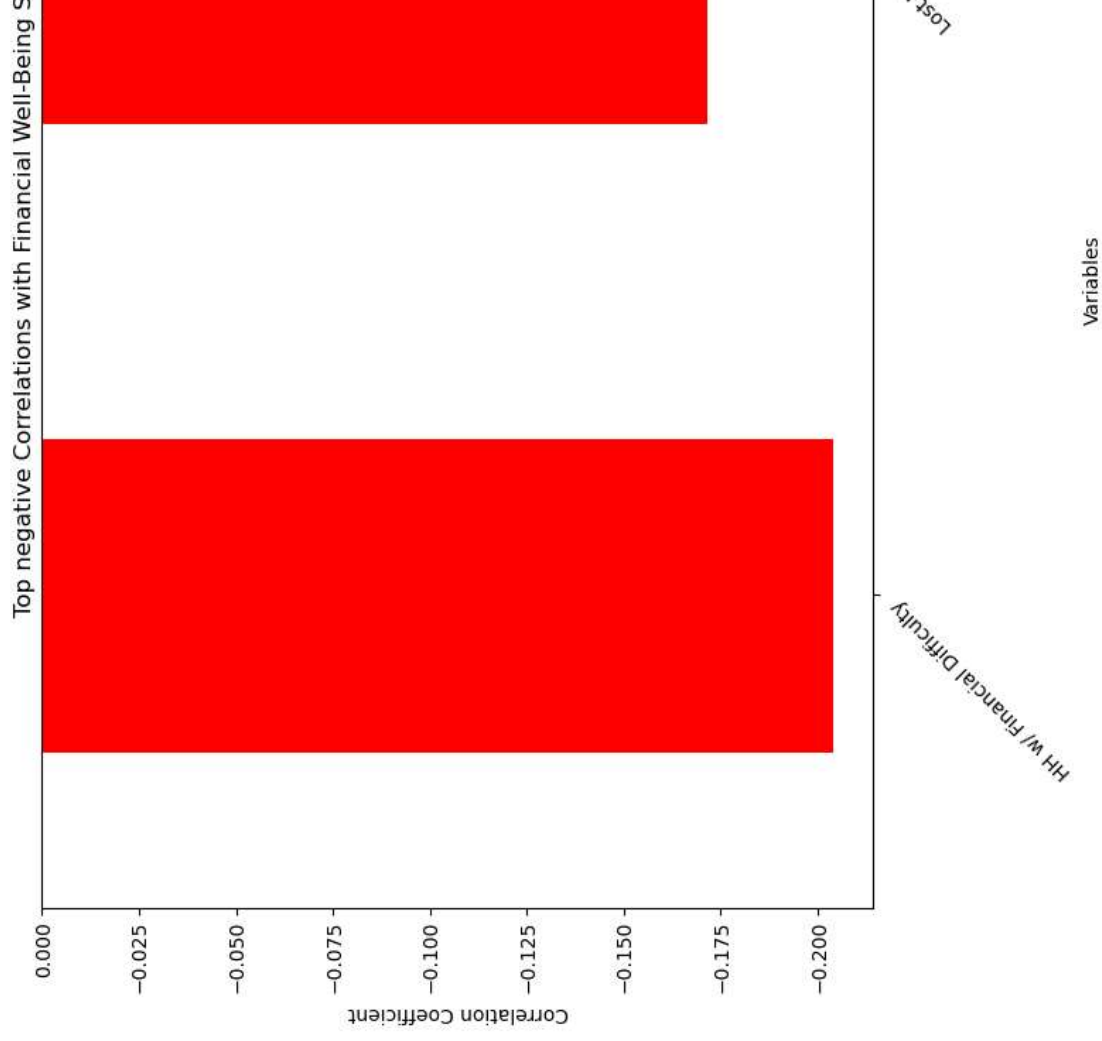
# What are the major shocks in life that affect financial well-

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
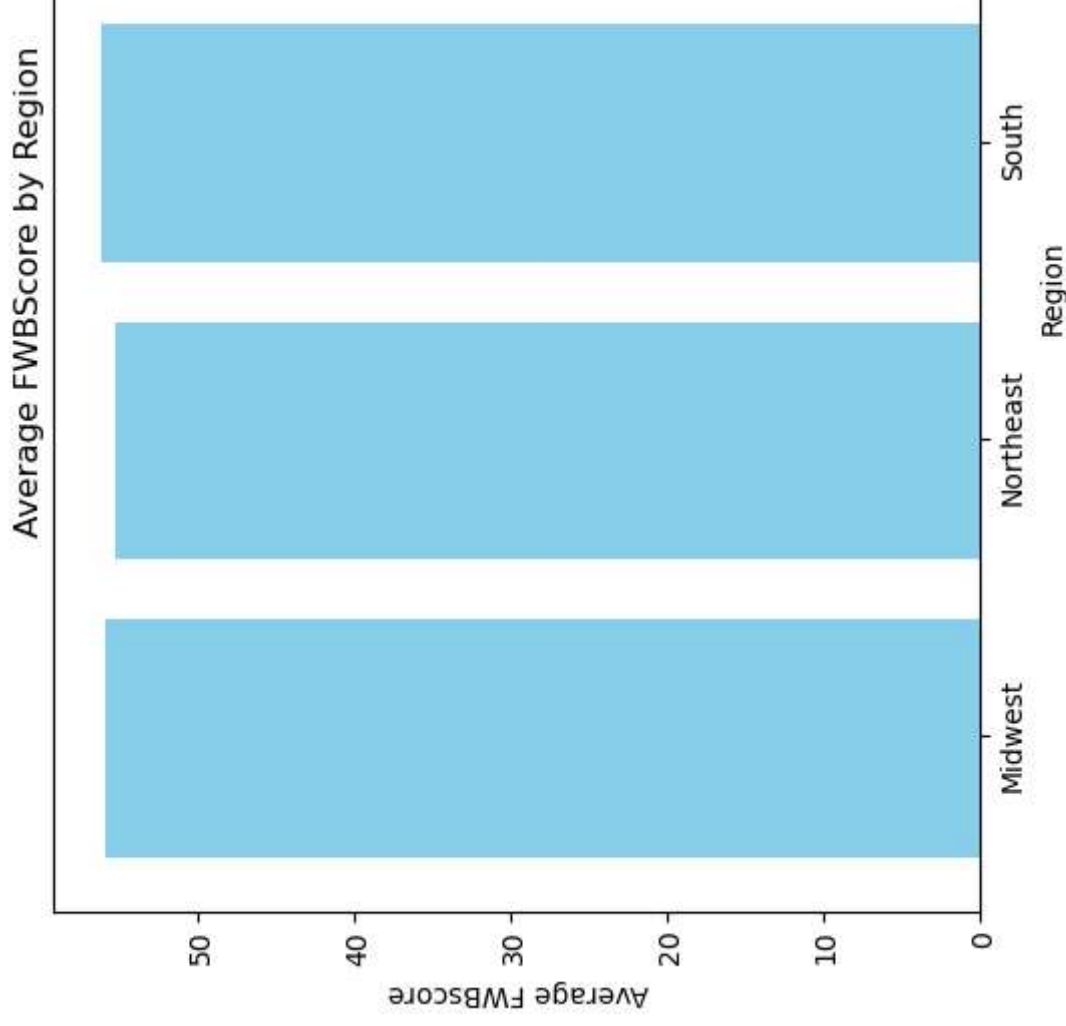
Financial Well-being Score by Household Financi
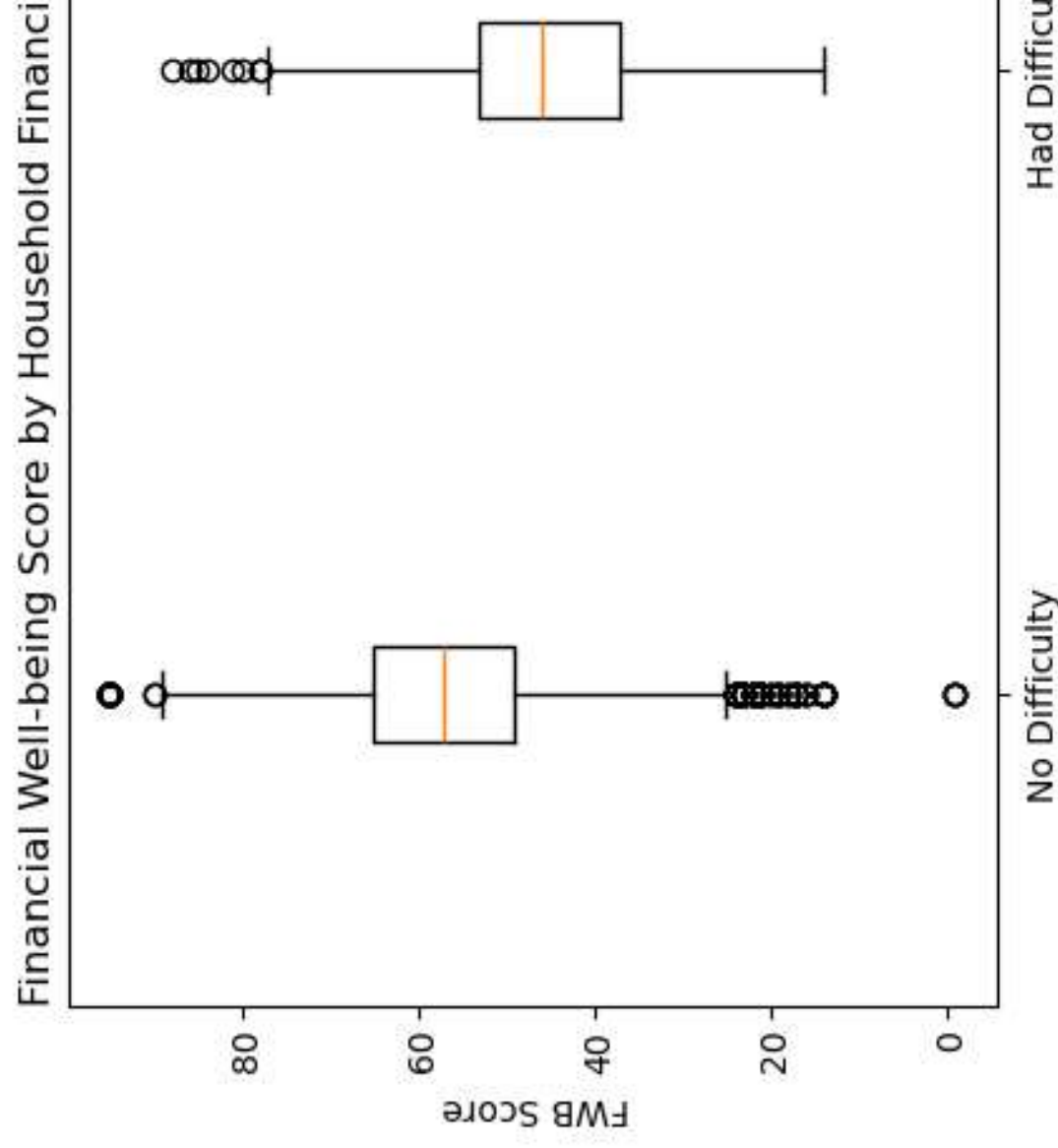
Financial Wellbeing among Age-Groups

Average FWBScore by Age Category

- 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
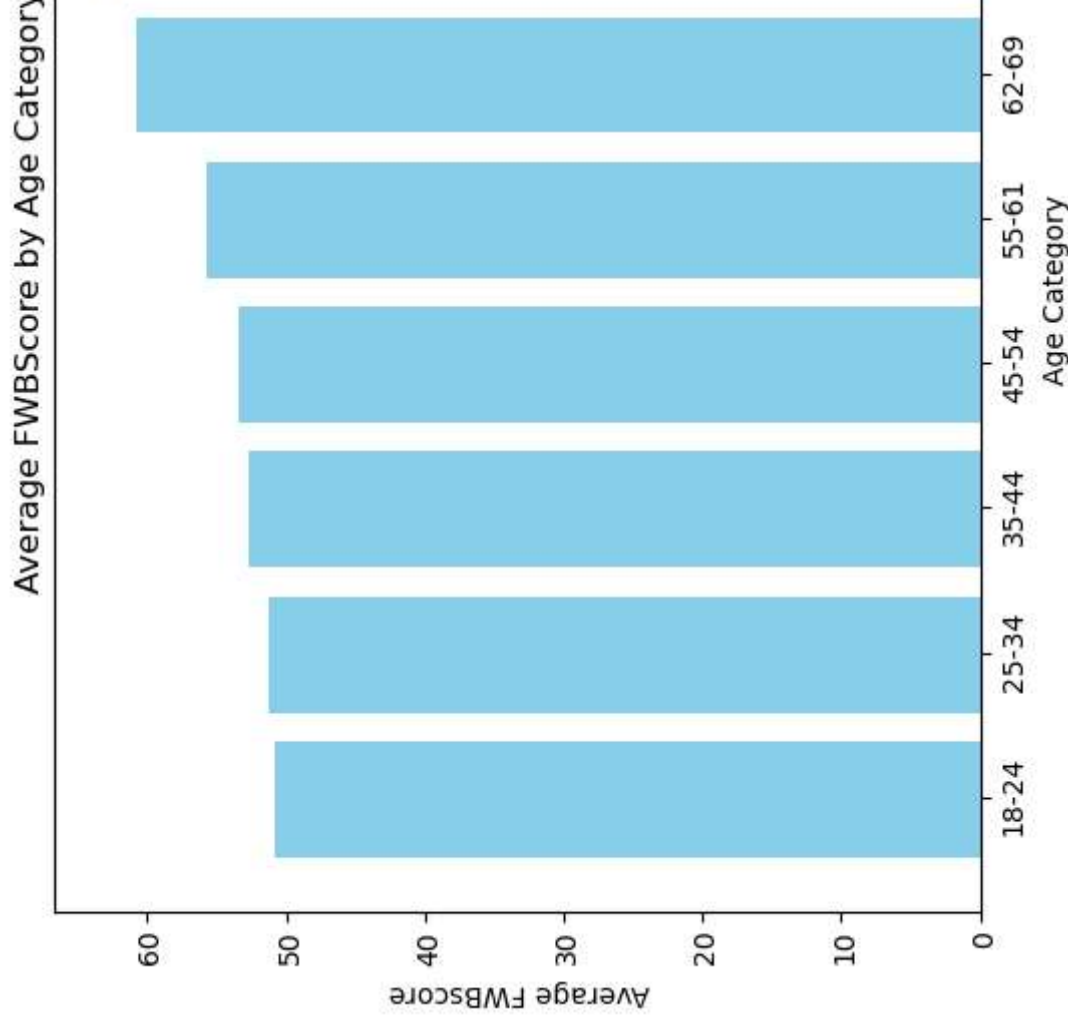
# Financial Wellbeing in US Regions

Average FWBScore by Region

- 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

Correlation Between Gift Giving and FW

Financial Well-being Score

Never Rarely Sometimes Often

Gift Giving Would Put a Strain in this Month's Finan
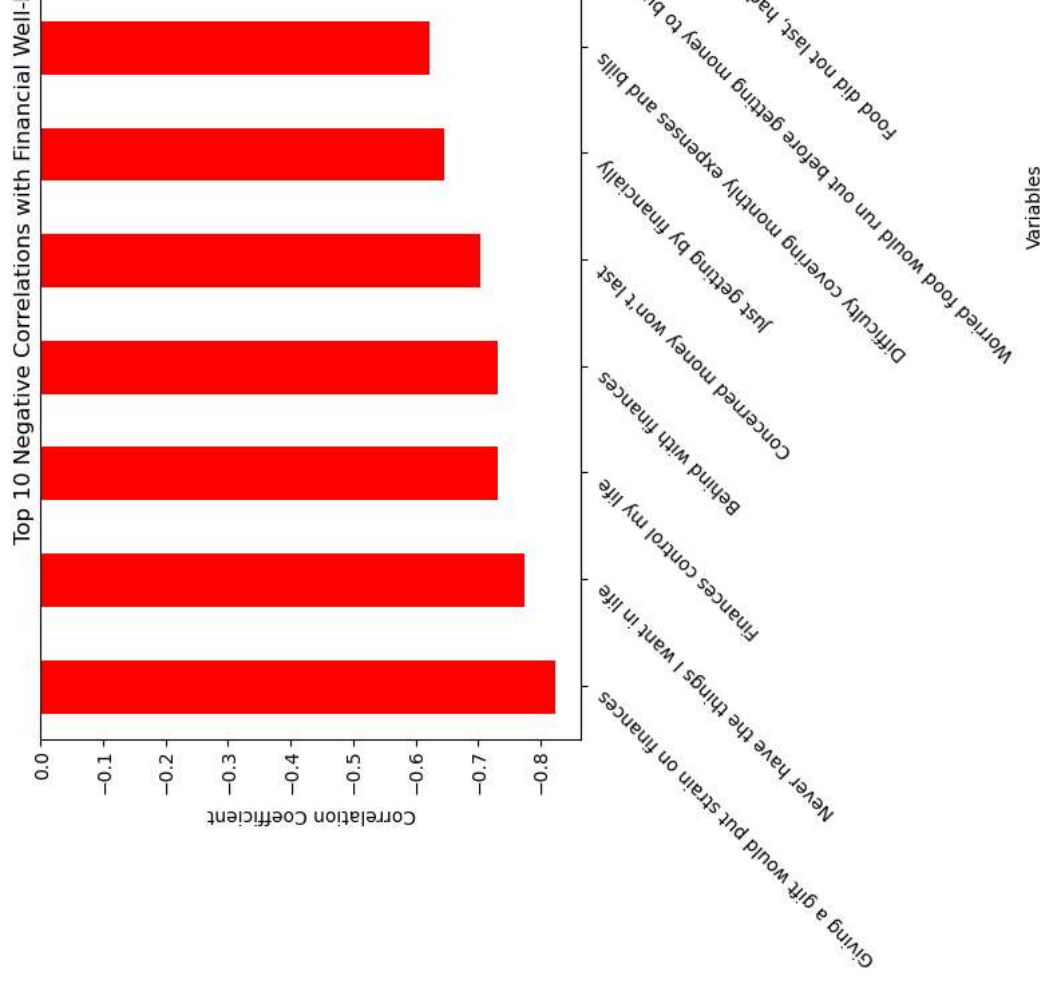
Summary of Results

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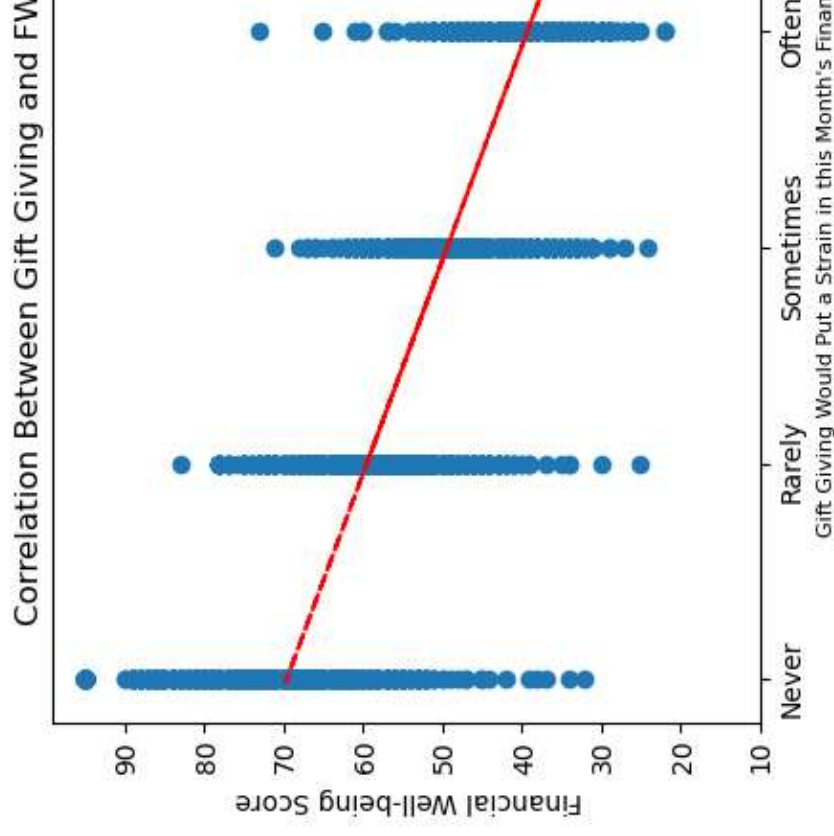
What variables in the full data-set correlate the most negatively

Top 10 Negative Correlations with Financial Well-
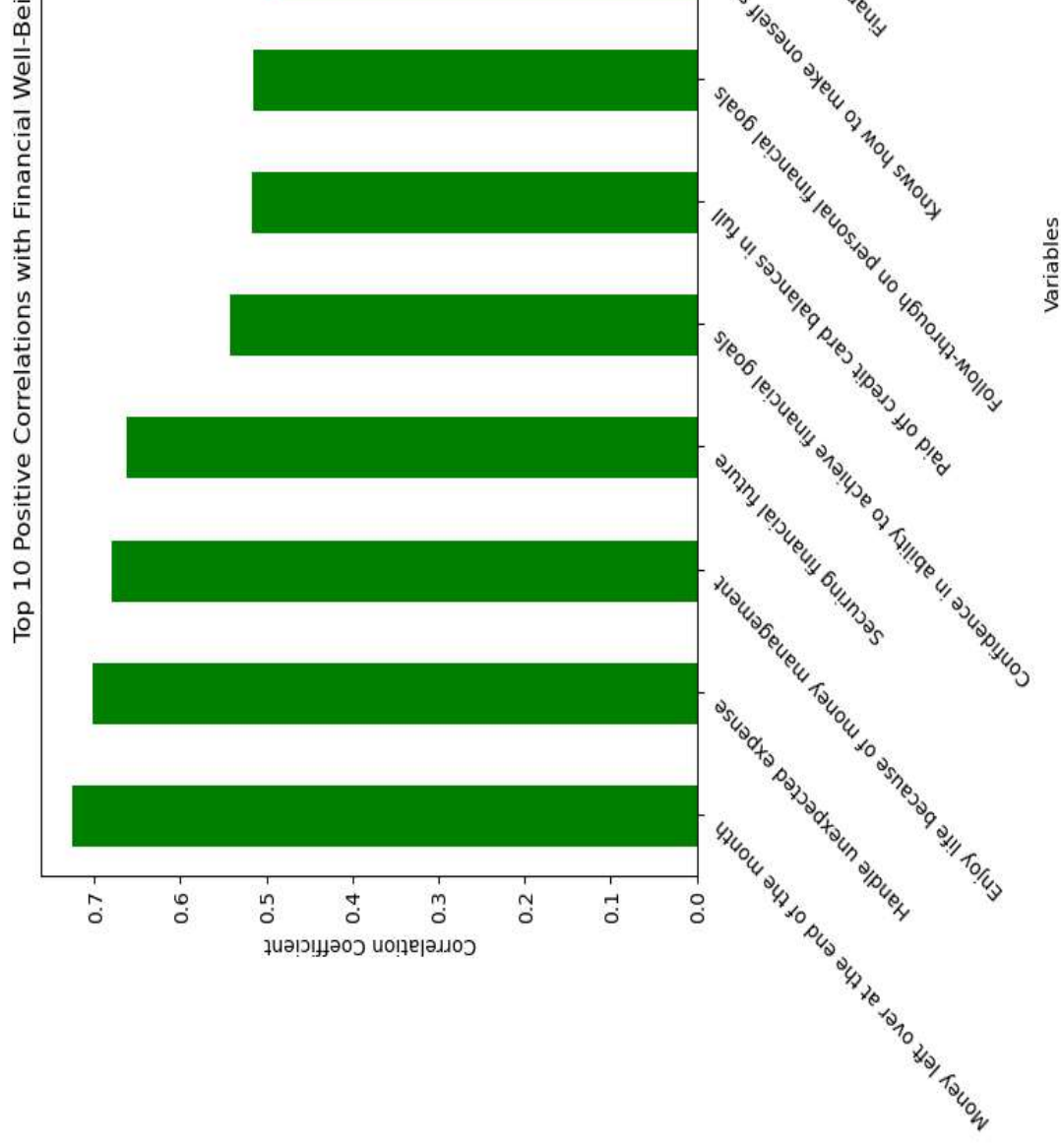
Summary of Results

- 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

Top 10 Positive Correlations with Financial Well-Bei...

Chart axes: Correlation Coefficient (0.0–0.7); Variables — Money left over at the end of the month; Handle unexpected expense; Enjoy life because of money management; Securing financial future; Confidence in ability to achieve financial goals; Paid off credit card balances in full; Follow-through on personal financial goals; Knows how to make oneself; Fina...

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

- Our analysis sought to identify variables with a moderate to str... to financial well-being. While our initial hypothesis considered a... factors, the results highlighted that the most significant correla... universally spread across all anticipated areas. Notably, financ... ability to navigate life's shocks, and maintaining savings under... importance to financial well-being. On the other hand, the impa... children, frugality, and self-control, while relevant, did not exhib... correlation as expected.

- The analysis underscores the importance of financial buffer—h... accessible funds for unexpected needs correlates positively wi... being, underscoring its significance for peace of mind. Convers... pressure of non-essential spending is highlighted by the pronou... correlation seen with financial strain from gift-giving. These fin... nuanced financial landscape where stability and discretionary s... substantial but opposing effects on an individual's financial he...

Problems Encountered

When coding in our group and merging work into the main bran... problems arose, which complicated the development process. ... of the key issues our team faced and how we resolved them:

- **Merge Conflicts**: Editing and running of Jupyter Notebook... series of unintended code changes that could cause merg... frequent commits and manual merges were necessary to ... issue

- **Integration Issues and common variables**: Even when our ... Jupyter Notebook cells ran well on their own, when we sha... modified the same DataSet, they did not integrate smooth... were able to create individual copies, to ensure changes a... columns in one portion of the analysis wouldn't impact oth...

- **Delayed Integration**: When we worked in isolation for too l... merging our changes, this contributed to integration challe...

- Student Loan Payments

- Financial Knowledge Score

Future Considerations 💡