

# The Association Between Financial Wellbeing and Financial Behavior



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### Introduction

- Financial Wellbeing: encompassing freedom of choice and monetary security
- Financial Behavior: refers to the choices and actions people make with their money (e.g. earning, spending, saving, budgeting, debt management, investing)
  - This study will utilize the use of a financial skill metric to base financial behavior
- Despite advancement in financial literacy initiatives, a significant portion of the population struggles to manage finances
- Impact of Behavior on Wellbeing: Responsible behaviors like budgeting, saving, and smart debt management contribute to financial security and peace of mind
- Financial behavior is heavily influenced by many factors, but it impacts financial wellbeing the most
- Beyond Behaviors: While certain behaviors may seem crucial. They might not be the sole indicator of overall financial health, indicating a more nuanced picture not explored by literature
- Importance of Both: Understanding your financial behaviors and making informed decisions are vital

# Methods

### Sample

Noninstitutionalized American adults over the age of 18 (n=6,394) who responded and completed the Consumer Financial Protection Bureau's National Financial Well-Being Survey

#### Measures

- <u>Financial Well-Being:</u> measured with the score on the Financial Well-Being Scale (values ranging from 0-100
- Financial Skill Score: score ranging from 0 to 100 based on participants' responses to 10 questions regarding financial skill which reflects an individual's ability to find, process, and act on financial information
- <u>Financial Knowledge:</u> measured with the question "How would you assess your overall financial knowledge?" Possible responses ranged from 1 (very low) to 7 (very high)
- <u>Education:</u> Measured with the question "Highest degree received?" Possible responses ranged from 1 (less than high school) to 5 (graduate/professional degree)
- Race/Ethnicity: 1(White, Non-Hispanic), 2 (Black, Non-Hispanic), 3 (Other, Non-Hispanic), and 4 (Hispanic)
- Age: Split into values ranging from 1 (18-24) to 8 (75+)
- Household Income: Range from 1 (less than \$20,000) to 9 (\$150,000 or more)

# **Research Questions**

- 1. How is person's financial wellbeing affected by financial behavior?
- 2. Which financial behavior affects financial wellbeing the most: skill, knowledge, household income, or goal planning?
- 3. Does a persons' age, gender, or education level affect their financial wellbeing?

# Results

### Univariate

- Financial Wellbeing was a close to normally distributed variable with the center at 44.0 points
- Financial Skill was also close to normally distributed, with an outlier at 42 (317 respondents) and the center at 44.7 points

### Bivariate

A Pearson correlation test revealed that, among the respondents of the survey, the correlation between between Financial Wellbeing Score (quantitative) and Financial Skill Score (quantitative) was 0.49 (p=.0001), suggesting that around 24% of the variance in Financial Wellbeing can be explained by Financial Skill.

### Multivariate

- The interaction between Financial Wellbeing and Financial Skill was found to be significantly associated with gender. Participants who were males had a greater correlation than those who were females, meaning gender moderated the relationship
- Financial Wellbeing Score (Beta=0.491, p<.0001) was significantly and positively associated with financial skill after controlling for education, age, financial knowledge, financial goals, sex, and race/ethnicity. On average, a 1 point increase of financial skill score will result in a 0.491 point increase in Financial Well Being holding all other variables fixed
  - Education (Beta = 4.18, 3.55, 6.82, 8.93, p<.0001) is significantly and positively associated with Financial Well Being score. In particular, the higher the degree a person has, holding all other variables fixed, the higher a person's Financial Well Being score is, making Education a moderator

Figure 1. Bivariate Regression Plot

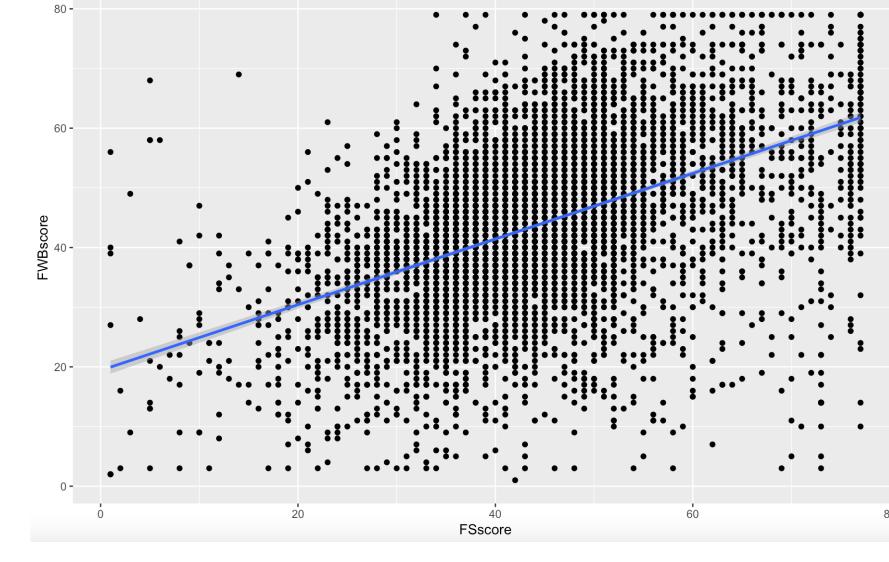


Figure 2. Bivariate Regression by 3<sup>rd</sup> Categorical Variable

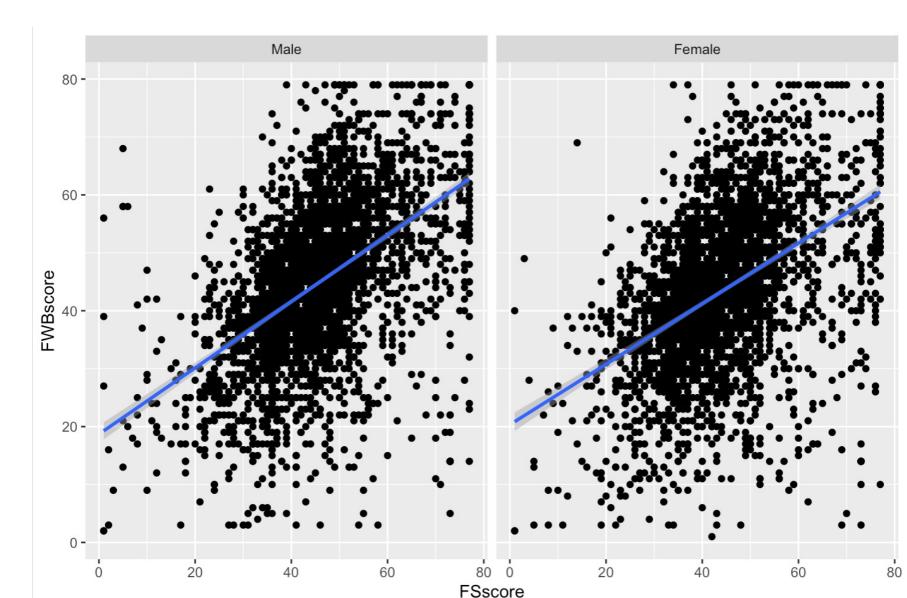
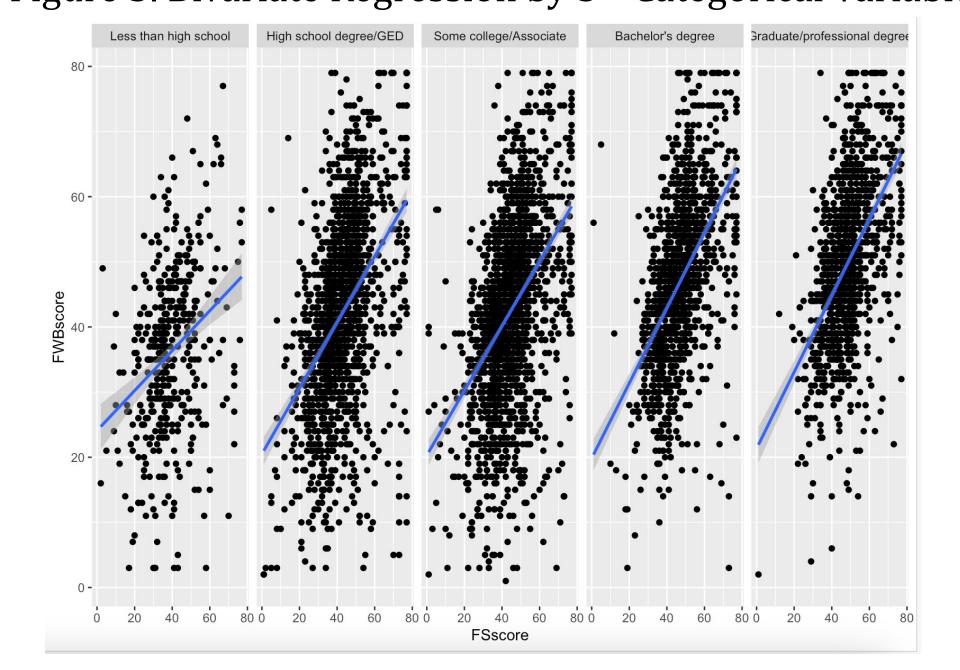


Figure 3. Bivariate Regression by 3<sup>rd</sup> Categorical Variable



## Discussion

- Some of the categorical variables had significant associations at certain levels, while they didn't at others
  - Age, for example, is significant at ages 23-34, 55-61, 62-69, 70-74, 75+ but not at ages 35-44 and 45-54
  - Financial Knowledge is only associated at the lowest level
- The data shows that the correlation between skill and wellbeing differs for gender, education, household income, age, and race/ethnicity.
- The data shows increased Financial Wellbeing as Financial Skill Scores scores increase, when it is split by age group. However, when age is looked at alone with financial wellbeing, some of the ages aren't significantly associated, and some are negatively associated
- Further studies must consider/include the following:
  - Why some levels of financial behavior are significantly correlated with wellbeing and others are not
  - How effective implementing education programs are for individuals and their wellbeing, as knowledge is not associated at all levels beyond the lowest stage

Anvari-Clark, J., Ansong, D. Predicting Financial Well-Being Using the Financial Capability Perspective: The Roles of Financial Shocks, Income Volatility, Financial Products, and Savings Behaviors. *J Fam Econ Iss* 43, 730–743 (2022). <a href="https://doi.org/10.1007/s10834-022-09849-w">https://doi.org/10.1007/s10834-022-09849-w</a>
 Fan, L., Chatterjee, S., & Kim, J. (2022). An Integrated Framework of Young Adults' Subjective Well-Being: The Roles of Personality Traits, Financial Responsibility, Perceived

Fan, L., Chatterjee, S., & Kim, J. (2022). An Integrated Framework of Young Adults' Subjective Well-Being: The Roles of Personality Traits, Financial Responsibility, Perceived Financial Capability, and Race. *Journal of Family and Economic Issues*, 43(1), 66–85. <a href="https://doi.org/10.1007/s10834-021-09764-6">https://doi.org/10.1007/s10834-021-09764-6</a>
 Guo, B., & Huang, J. (2023). Financial Well-Being and Financial Capability among Low-Income Entrepreneurs. *Journal of Risk and Financial Management*, 16(3), 181-. <a href="https://doi.org/10.3390/jrfm16030181">https://doi.org/10.3390/jrfm16030181</a>

Lin, J. T., Bumcrot, C., Mottola, G., Valdes, O., Ganem, R., Kieffer, C., Lusardi, A., & Walsh, G. (2022). Financial Capability in the United States: Highlights from the FINRA Foundation National Financial Capability Study (5th Edition). FINRA Investor Education Foundation. <a href="https://www.FINRAFoundation.org/NFCSReport2021">www.FINRAFoundation.org/NFCSReport2021</a>
 Lusardi, A., Mitchelli, O. Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education. <a href="https://doi.org/10.2145/20070104">Bus Econ 42</a>, 35–44 (2007). <a href="https://doi.org/10.2145/20070104">https://doi.org/10.2145/20070104</a>

OECD (2020), PISA 2018 Results (Volume IV): Are Students Smart about Money?, PISA, OECD Publishing, Paris, <a href="https://doi.org/10.1787/48ebd1ba-en">https://doi.org/10.1787/48ebd1ba-en</a>.

Pak, T., Fan, L., & Chatterjee, S. (2023). Financial socialization and financial well-being in early adulthood: The mediating role of financial capability. Family

Tahir, M. S., Ahmed, A. D., & Richards, D. W. (2021). Financial literacy and financial well-being of Australian consumers: a moderated mediation model of impulsivity and financial capability. *International Journal of Bank Marketing*, 39(7), 1377–1394. https://doi.org/10.1108/IJBM-09-2020-0490

- Xiao, J. J., Kim, K. T., & Lee, S. (2023). Consumer Financial Capability and Financial Wellbeing; Multi-Year Analyses. *Applied Research in Quality of Life*. <a href="https://doi.org/10.1007/s11482-023-10253-1">https://doi.org/10.1007/s11482-023-10253-1</a>
- Xiao, J. J., & O'Neill, B. (2018). Propensity to plan, financial capability, and financial satisfaction. *International Journal of Consumer Studies.*, 42(5), 501–512. <a href="https://doi.org/10.1111/ijcs.12461">https://doi.org/10.1111/ijcs.12461</a>
   Xiao, J. J., & Porto, N. (2022). Financial capability and wellbeing of vulnerable consumers. *The Journal of Consumer Affairs.*, 56(2), 1004–1018. <a href="https://doi.org/10.1111/joca.12418">https://doi.org/10.1111/joca.12418</a>