Predictors of Financial Well-Being

Uriel Lurie, Applied Data Analysis, Wesleyan University

Introduction

- In the United States, efforts to implement standardized financial literacy courses in high schools has constantly been a topic of discussion.
- Research shows that financial literacy courses implemented at "teachable moments" in a person's life are most effective for better financial well-being later on in life (Kaiser, 2017).
- Those with neuroticism have a higher chance of making poor decisions with their money and damaging their economic well-being (Joshanloo, 2022).
- Not much research has been done to establish associations between personality type and financial well-being, and whether or not financial literacy courses can support those who are considered "at risk" to make poor financial decisions later in life

Research Questions

- Is there a positive association between financial literacy and financial well-being?
- Do those who have specific personality types that are considered "at risk" (neuroticism) have significantly worse financial outcomes than their counterparts?

Methods

Sample

- 217 variables were measured from a sample of over 6000 unique individuals that addresses individual income and employment, savings, financial behaviors, and attitudes. The study was published in 2017 by the Consumer Financial Protection Bureau (CFPB).

Measures

- **Financial Well-Being Scores** were assessed on a scale of 1-100, with 100 being the highest score
- **Self control:** Participants were asked to respond to the statement, "I am good at resisting temptation" and respond on a 1-4 scale, with 4 being "completely well" and 1 being "not at all"
- **Financial Skill Score** was measured, on a scale from 5-85 measuring financial literacy and knowledge

Results

Univariate

- For **self control** variable, 2.73% responded "1", 21.88% responded "2", 58.92 responded "3" and 16.47% responded "4", n=6344 individuals surveyed
- **For Financial Skill Score**: SD= 12.53, Min=5, Max =85, normally distributed
- **Financial Well-Being:** SD=14.15 Min=14, Max=95, normally distributed

Bivariate

A Pearson Correlation test showed that Financial Well-Being and Financial Skill Score are significantly correlated ($p<.05$, $r=.49$). There is a relatively strong positive association.

- A linear regression showed that the relationship between Financial Skill Score and Financial Well-Being was **statistically significant** ($p<.05$, beta =.55)
- This beta value indicates for every one unit improvement in an individual's financial skills score, their financial well-being score improved by .55 points. (See Figure 1)

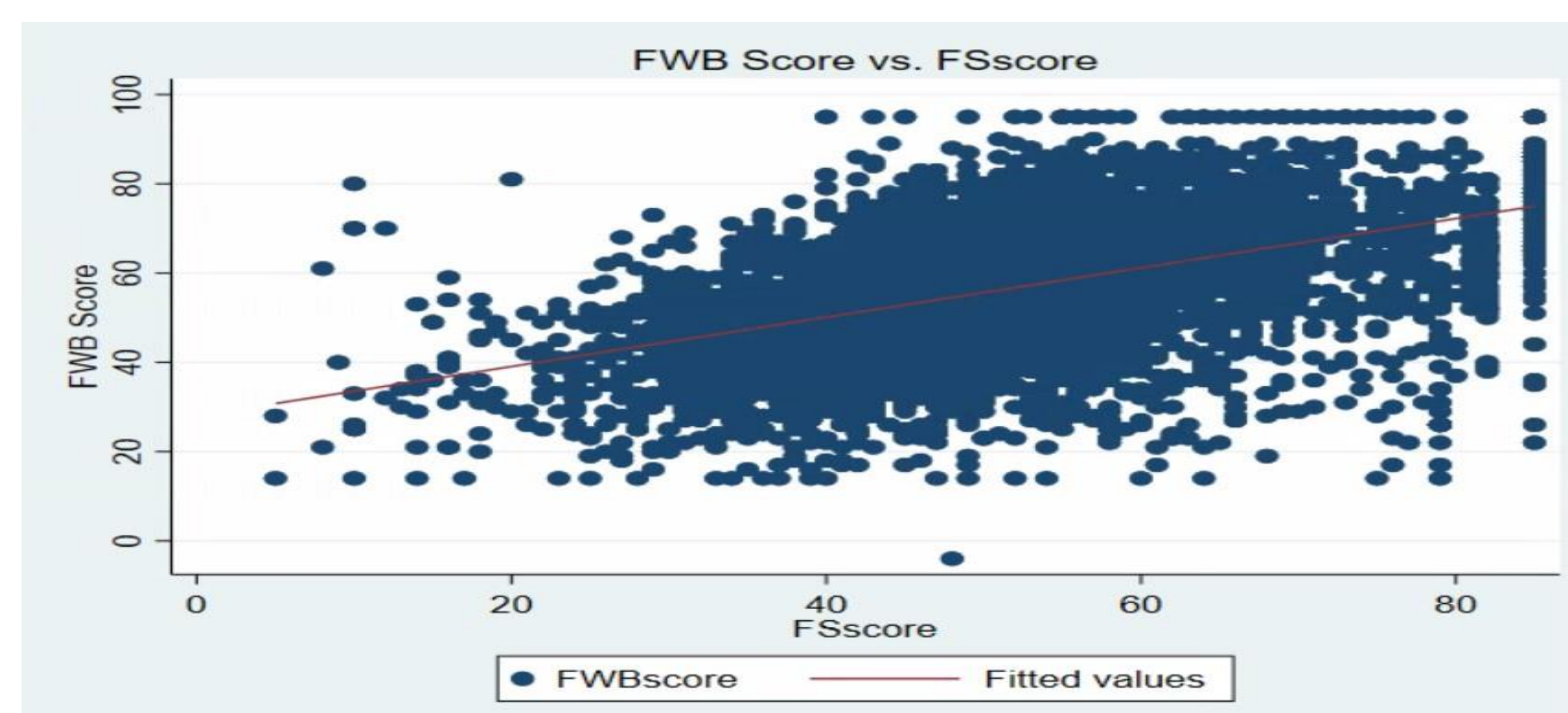

Figure 1: Scatterplot with line of best fit

Multivariate

- Self Control is not an additional explanatory variable for Financial Well-Being.
- After adding the self-control variable, there is **no statistically significant relationship** between self-control and Financial Well-Being (p-value>.05 for Low-Moderate and High Self Control). (See Figure 2)

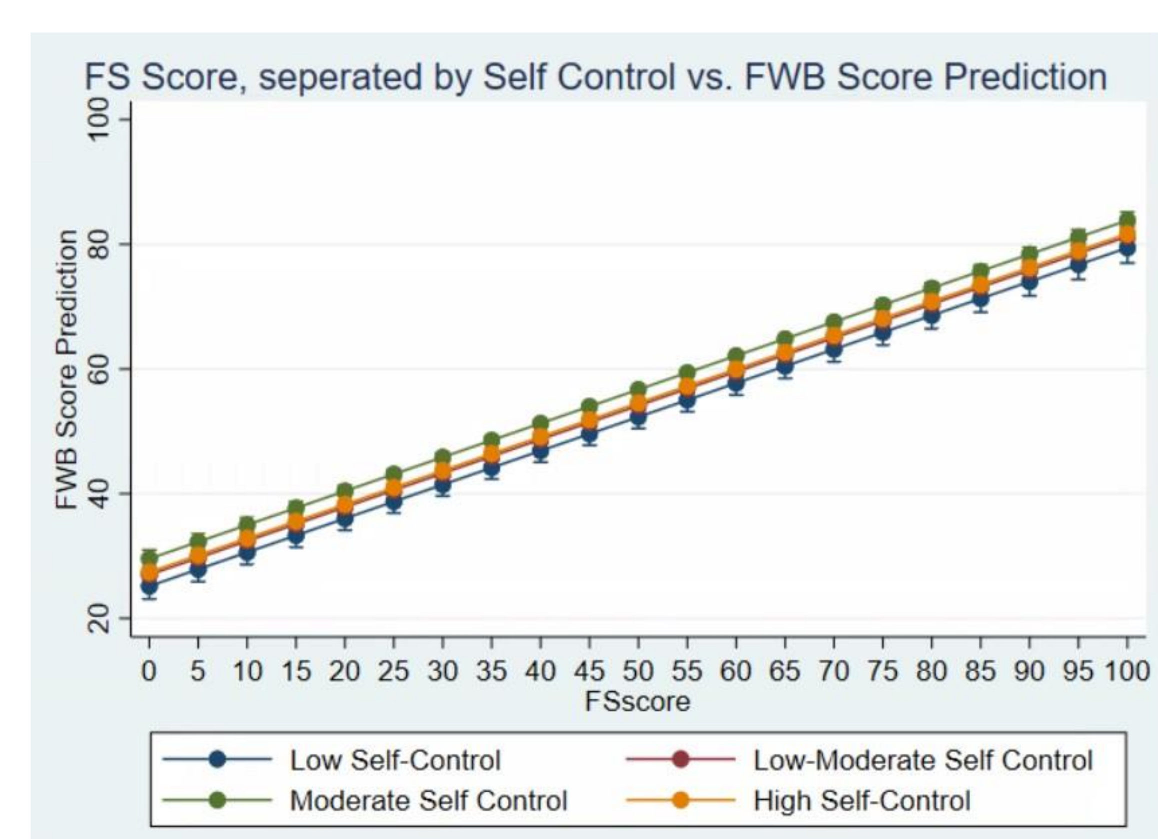

Figure 2: FS Score, controlled for self control

Discussion

- Financial Skills Score is statistically significant in predicting an individuals Financial Well-Being later in life.
- Variations in an individual's self control does not significantly affect their Financial Well-Being.
- Policy-Makers and Educators can use this information as consideration for a national roll-out of a standardized financial literacy course for high school students, as it appears all students would benefit from improved financial literacy.
- A limitation of this study is the definition of self control, which is subjective and might have skewed the data set. This is a form of bias, which is in the nature of self-survey data collection processes.
- Further research and data is needed to understand other factors that may affect Financial Well-Being. Such covariates could include other personality traits, education, previous financial situations, etc.

Chhatwani, M. (2022). Personal control and financial well-being among the elderly: Moderating role of the big five. *Personality and Individual Differences*, *184*, 111171. https://doi.org/10.1016/j.paid.2021.111171
Hastings, J., Madrian, B., & Skimmyhorn, W. (2012). Financial Literacy, financial education and economic outcomes. https://doi.org/10.3386/w18412
Joshanloo, M. (2022). Personality trait level and change predict future financial well-being: A longitudinal study in Australia. *Personality and Individual Differences*, *191*, 111575. https://doi.org/10.1016/j.paid.2022.111575
Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? https://doi.org/10.1596/31469
Ksendzova, M., Donnelly, G. E., & Howell, R. T. (2017). Brief money management scale and its Associations with Personality, Financial Health, and Hypothetical Debt Repayment. *PsycTESTS Dataset*. https://doi.org/10.1037/t65232-000