



Association Between Education Levels and Self Assessed Financial Well-Being

Lindsey Diomede, Applied Data Analysis, Wesleyan University

Introduction

- 7 in 10 individuals engage in some form of post high school education which is neither an easy nor cheap endeavor (Board of Governors of the Federal Reserve System, 2018).
- 67% of those who did not complete college reported lacking the money or time to attend (Board of Governors of the Federal Reserve System, 2018).
- Education benefits income as the median earnings of bachelor's degree recipients were \$24,900 higher than those of high school graduates (Mayunk, 2023)
- Mixed methods studies found positive association between education classes and increase in financial literacy (Brown, 2009).
- Existing research is inconclusive and mainly focuses on the relationship between financial education and financial literacy (Pratama & Selvia, 2020).
- The focus of this study is to examine whether education, regardless of financial education, has an influence on one's financial well-being.

Research Questions

- Is there an association between the **education level** received and future **financial well-being** status?
- Does the association between **education level** and **financial well-being** differ for individuals based on their **gender**?

Methods

Sample

- Respondents (n=6,394) were drawn from the 2016 Financial Well-Being survey which was conducted in 2016 by The Consumer Financial Protection Bureau (CFPB).
- Participants represented the adult US population and highlights all different types of households from each state.

Measures

- Education** level was assessed with one question considering the highest education degree that the individual had received. Possible responses ranged from 1 (less than high school) to 5 (graduate/professional degree).
- The response variable being **Financial Well-Being** was measured based on the individuals response to three statements considering financial comfortability. Participants were asked to rank the claims on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). Responses to these three statements were then summed to create a quantitative variable on a 15 point scale. Higher scores closer to 15 reflect a strong financial well-being and lower scores closer to 1 reflect extreme low financial well-being.
- Gender is coded as binary (1 Male, 2 Female)

Results

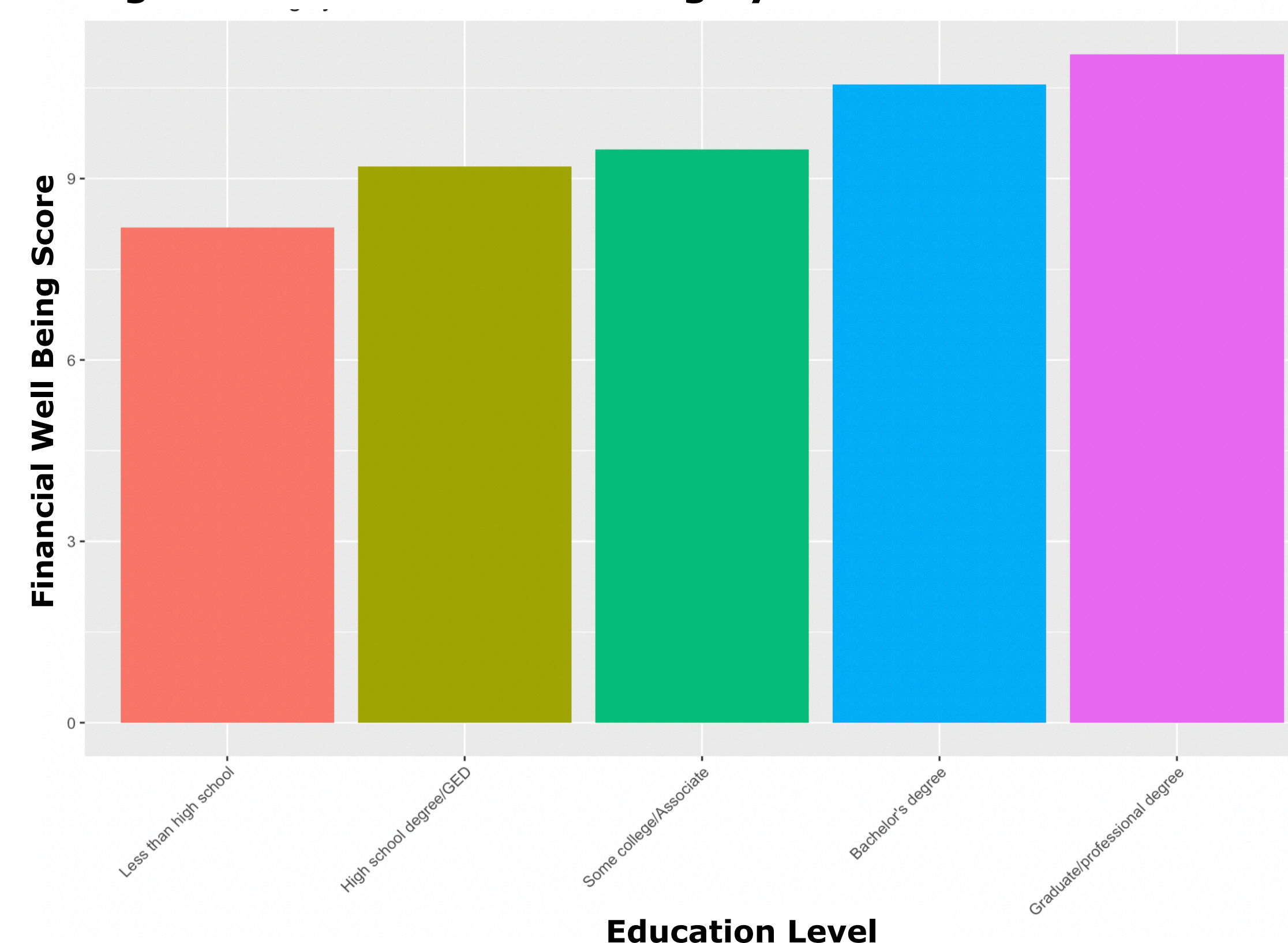
Univariate

- 6.7% of respondents only received an education less than high school, 25.364% received a high school degree/GED, 30.21% reached some College / Associate degree, then 20.55% received a Bachelor's degree and finally 17.18% received a Graduate/ Professional Degree
- 14.28% of respondents received a Financial Well-Being score of 9 to make it the most common score.
- 52.45% of respondents are male

Bivariate

- An Analysis of Variance (ANOVA) test showed that **Education Level** was significantly and positively associated with future **Financial Well-being** ($p < 0.001$).
- Based off the Post-Hoc test, there is a statistic significance between each individual education levels and financial well-being scores.

Figure 1. Financial Well-Being by Education Level

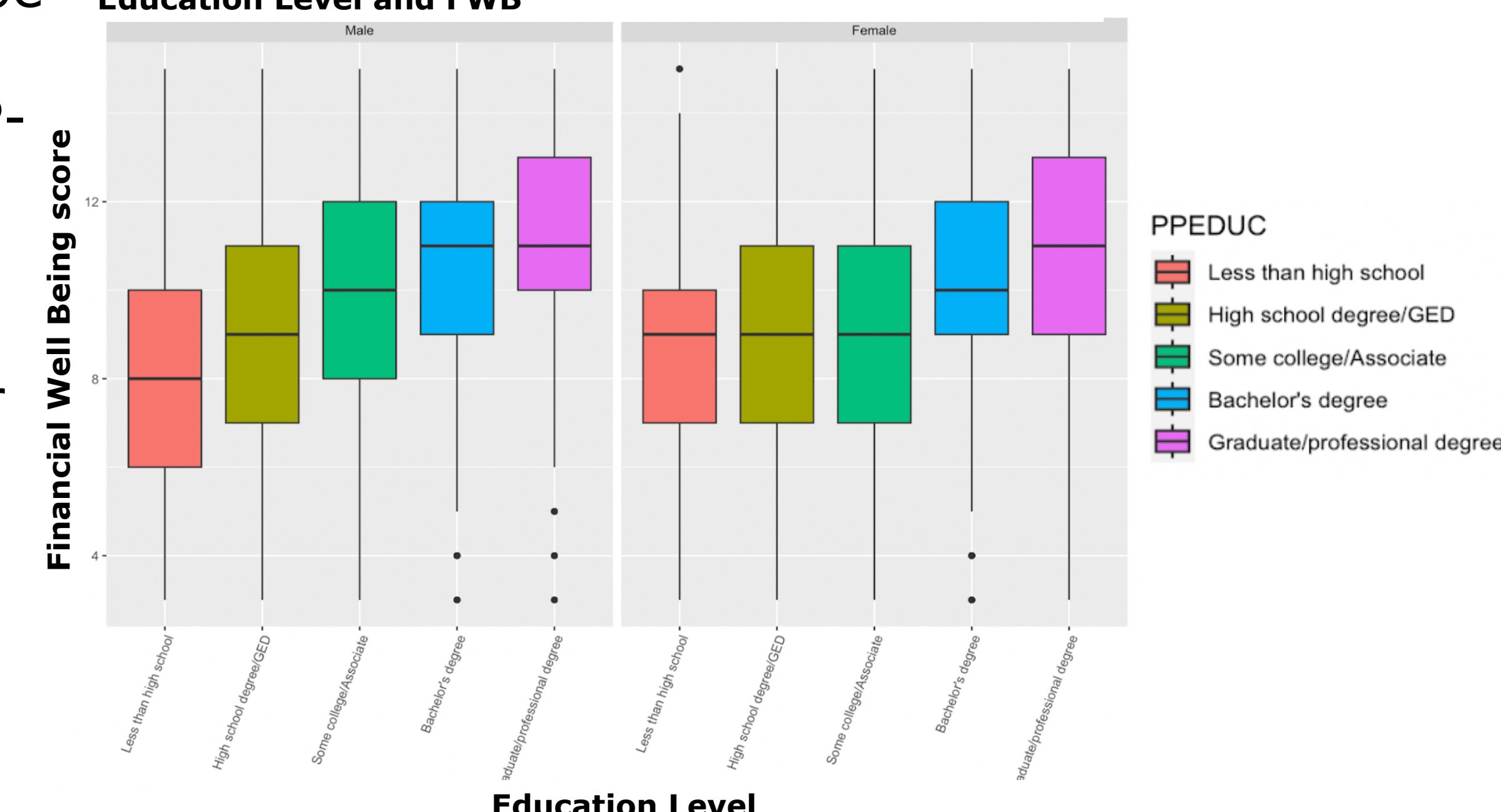


- Figure 1 shows a clear, positive relationship between **Education level** and **financial well-being**. Individuals with the highest education level reported reaching higher financial well-being scores (Mean=11.06, s.d. ± 2.8) compared to those with the lowest education level displaying significantly lower FWB scores (Mean= 8.19, s.d. ± 2.53).

Multivariate

- After controlling for **gender**, **financial well-being** remains positively and significantly associated to **education levels** achieved ($P\text{-value} < 0.05$). (Figure 2.)
- Gender was significantly associated with financial well-being, males are found to be more financially stable than females (Beta = -0.19689, $P\text{-Value} < 0.05$).
- Someone with some college school education is likely to score 0.99886 points higher than someone with no education whereas an individual with graduate/professional degree would score 2.825 points higher.

Figure 2. Effect of Gender on Relationships Between Education Level and FWB



Discussion

- The research revealed that there is a positive relationship between **education level** reached and future **financial well-being**.
- As the Financial Well-Being was a subjective response, responses may not be completely accurate and include bias where people are not willing to admit their true financial stability levels so they seem more financially stable.
- Adolescents can use this information to see the benefits in working hard in school to help set up their future financially. Additionally, as a means to tackle poverty levels, there can be an increase in education focused initiatives.
- Some next steps for this research would be taking into account the income level of the individuals' household in their adolescence to reveal the effect this would have on their financial well-being of them in the future.