International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

The Effects of Financial Literacy on the Well-Being of a Community

Mr. Drona Reddy Gaddam

Abstract

The following research paper intends to analyze the correlation between financial literacy and the socioeconomic characteristics of different communities. Financial literacy is the ability to manage personal finances in an effective way (saving money, spending safely, investing intelligently), and it has been identified as a deficiency. A study done by the Program for International Students Assessment found that 22% of high school students lack basic financial skills (1 in 5 U.S. Teens Lacks Basic Financial Literacy Skills, n.d.). Additionally, the National Financial Educators Council found that the average cost of financial illiteracy per person in the United States was $1,819 (Bilal, 2023). Many programs have been put in place to address this problem, chiefly within public education. Such programs will be analyzed as a part of the project.

This study aims to assess the importance of financial literacy through its effects. Individual state financial literacy data from FINRA was collected and correlated to the following socioeconomic characteristics: crime rate, unemployment rate, and median income. The study identified a clear link between increased financial literacy and better socioeconomic conditions. More importantly, however, contradictions were identified between the current methods of financial education and quantitative data measures; states with a lot of financial literacy programs had low financial literacy percentages. Based on this contradiction, recommendations on improvements within financial literacy education were made. The researchers also categorized financial literacy by age and race to show where opportunity for improvement existed in certain demographics.

Introduction

Financial literacy has been identified as an important skill for individuals to succeed, and many personal finance initiatives have been created as a result. The effects of financial literacy, however, and its usefulness have not been clearly proven. This study will assess the need for financial literacy by highlighting its effects on communities.

The study uses the survey research methodology, attempting to utilize both quantitative and qualitative data. The quantitative data will come from the National Financial Capability Study (NFCS) by the Financial Industry Regulatory Authority (FINRA), while the qualitative data will come from financial education analysis by the Public Education Foundation. The combination of these resources facilitates multifaceted conclusions on financial literacy's impact. The NFCS received a total of 27,118 responses from individuals from all 50 states (minimum of 500 responses per state) (Geography of Finance, n.d.). The NFCS contains many different categories, and this study uses data on the NFCS' seven question quiz assessing individuals' financial knowledge. Those who received a score above the median were designated by FINRA as having "High Financial Literacy", and data is available on the percentages of each state's respondents who had High Financial Literacy. This percentage was the main metric employed by the study

on the financial literacy of each state. The High Financial Literacy percentages of states were correlated to states' unemployment rates, crime rates, and median incomes.

There have been studies on financial literacy similar to this project. An example by the Swiss Journal of Economics and Statistics is: "Financial literacy and the need for financial education: Evidence and implications." This study attempted to measure individuals' financial literacy, by looking at financial literacy in populations around the world, investigating the effect of a lack of financial literacy, and analyzing how to improve financial literacy. The Swiss Journal of Economics and Statistics assessed financial literacy by asking the "Big 3" questions of financial literacy. Another important study, as previously mentioned, is the NFCS done by FINRA. The research also uses the survey research methodology, and their survey asks a mix of quantitative and qualitative questions (including the Big 3). The NFCS provided useful data and understanding to this study, with its measures being used as this project's quantitative data.

The limitation of this project lies in the lack of deeper analysis on a state's social and economic characteristics. The purpose of this study is to assess the effects of financial literacy and, further, the current methods of financial literacy education. The majority of analysis focuses on the effectiveness of measures a state is taking to incorporate and improve financial literacy. The study does not have a focus on the state's social and economic characteristics. For example, the reasons why a certain state has a lower crime rate than another, which may indeed be different than financial literacy. Although this study involves correlation, it still operates under the notion that correlation does not equal causation, understanding that just because financial literacy may be correlated to lower crime rates, it does not cause lower crime rates. As a whole, an enhanced understanding of financial literacy allows for more accurate recommendations to be made on financial education and financial literacy as a whole.

Content

The importance given on financial literacy has increased within the last decade. The belief is that financial literacy is an important skill for individuals to have in order to succeed. There has been action taken in support of financial literacy, yet no clear proof of the effects of financial literacy. By assessing the impacts of financial literacy, its importance or unimportance can be discerned. If increased financial literacy does have a positive effect on communities, then increased measures must be taken to improve financial literacy. On the other hand, if there are no positive impacts of financial literacy, then the approach to tackling issues and problems must change.

The study will use financial literacy data collected by the NFCS as a metric for the financial literacy of states. The study will then compare this quantitative data to figures highlighting the status quo of the state: crime rate, unemployment rate and median income, to identify a correlation. Along with this, the study will utilize demographic data, race and age, highlighting the levels of financial literacy based upon certain characteristics. The states for the study were chosen based on their FINRA financial literacy data. There are ten states considered in the study, the top and bottom five states in terms of High Financial Literacy Percentage/ According to FINRA, those with a higher financial literacy score were "more likely to make ends meet." As mentioned previously, the NFCS involves many different categories, the data from this study was based upon a seven question quiz for overall financial knowledge (Figure 1).

Figure 1

1. Suppose you have $100 in a savings account earning 2 percent interest a year. After five years, how much would you have?
2. Imagine that the interest rate on your savings account is 1 percent a year and inflation is 2 percent a year. After one year, would the money in the account buy more than it does today, exactly the same or less than today?
3. If interest rates rise, what will typically happen to bond prices? Rise, fall, stay the same, or is there no relationship?
4. True or false: A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage but the total interest over the life of the loan will be less.
5. True or false: Buying a single company's stock usually provides a safer return than a stock mutual fund.
6. Suppose you owe $1,000 on a loan and the interest rate you are charged is 20% per year compounded annually. If you didn't pay anything off, at this interest rate, how many years would it take for the amount you owe to double? Less than 2 years? 2-4 years? 5-9 years? 10+ years?
7. Which of the following indicates the highest probability of getting a particular disease? 1 in 20 of the population gets the disease? 2% of the population gets the disease? 25 in 1000 people in the population get the disease?

Questions 1, 2, and 5 in the survey are known as the “Big 3” financial literacy questions, and they have been used globally as a financial literacy metric. This survey was distributed across all fifty states and taken by 27,118 individuals. The survey had a minimum of 500 responses per state, and the ten states used in this study are included Figure 2.

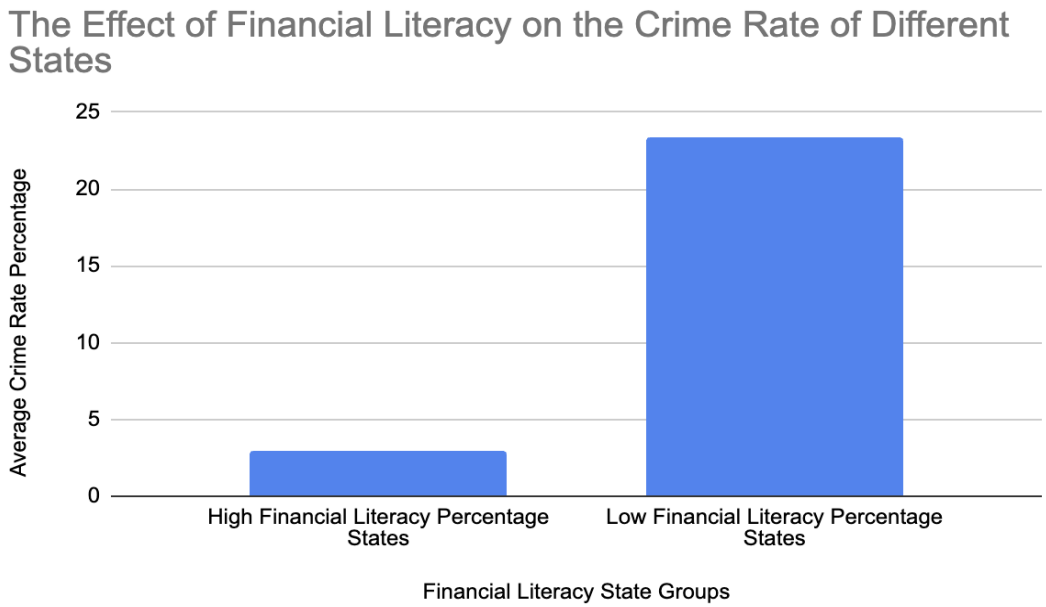
Figure 2

	High Financial Literacy Percentage	Crime Rate Percentage	Unemployment Percentage	Median Income
Georgia	27	20.6	3.2	30916
Hawaii	41	2.60	3.0	36816
Louisiana	22	33.8	4.0	27139
Minnesota	41	2.8	2.7	37320
Mississippi	24	19.9	3.2	25261
South Dakota	41	3.8	2.1	31953
Texas	26	27.3	3.9	31462
Washington	41	3.8	4.4	37656
West Virginia	26	15.1	4.3	

Wyoming	44	2.0	2.9	

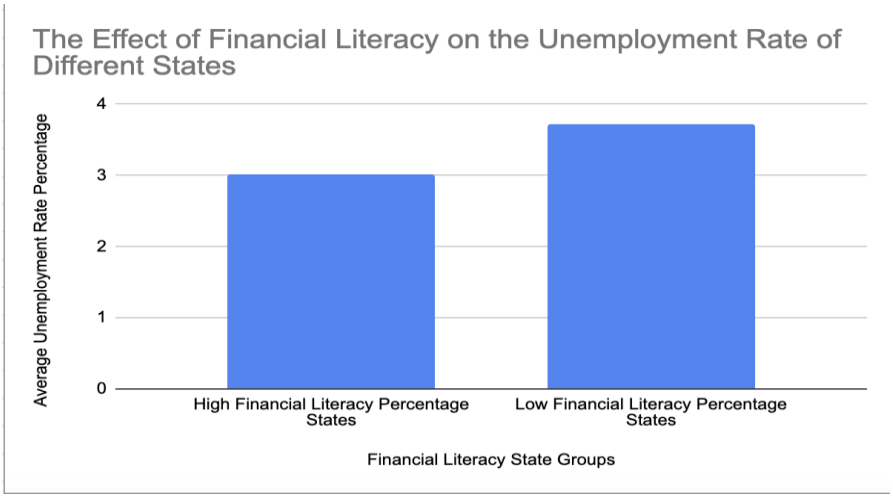
High Financial Literacy Group: Hawaii, Minnesota, South Dakota, Washington, Wyoming
Low Financial Literacy Group: Georgia, Louisiana, Mississippi, Texas, West Virginia

Figure 3



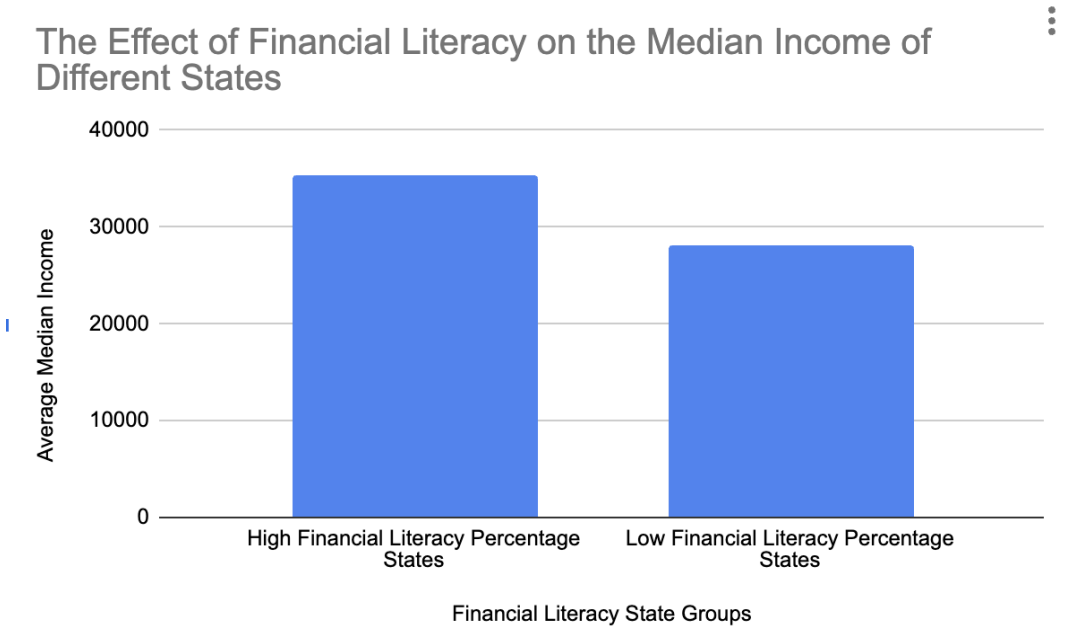
The average crime rate for the High Financial Literacy Percentage group was lower than that of the Lower Financial Literacy Group,

Figure 4



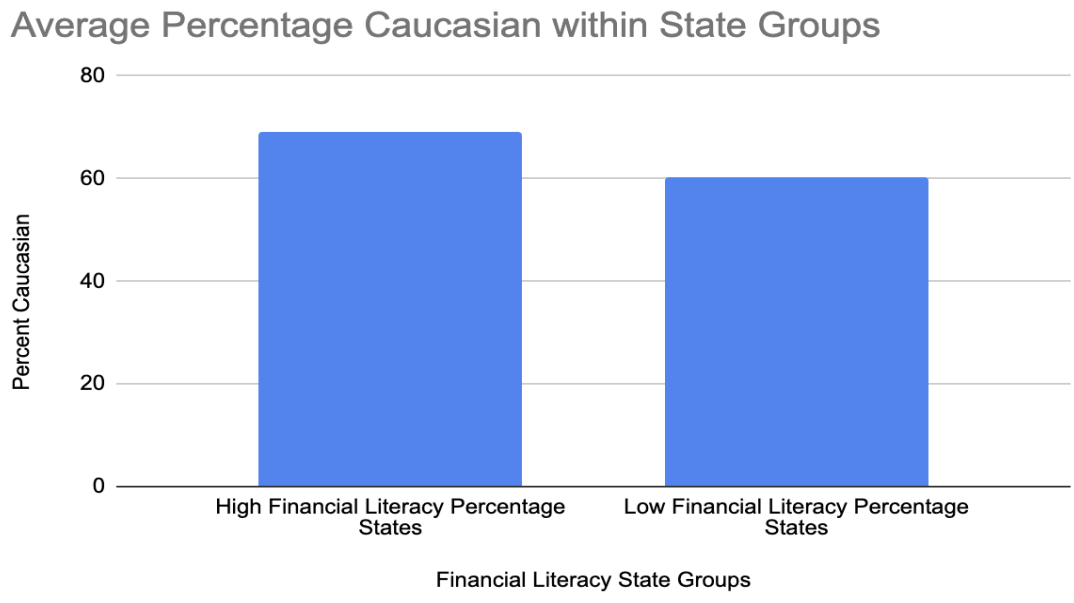
The average unemployment rate for the High Financial Literacy Percentage group was lower than that of the Lower Financial Literacy Group,

Figure 5



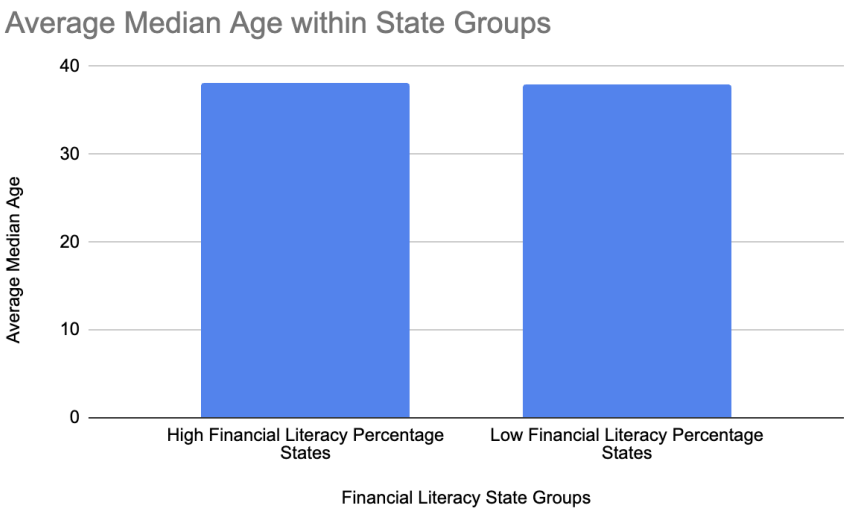
The High Financial Literacy Group had a higher average median income relative to the Low Financial Literacy Group.

Figure 6



The High Financial Literacy Group had a higher average percentage of white individuals than the Low Financial Literacy Group.

Figure 7



The High Financial Literacy Group had a slightly higher average median age than the Low Financial Literacy Group.

Conclusion

There is a clear correlation between higher rates of financial literacy and improved state environment and economic conditions. This correlation shows the positive impacts of financial literacy. In order to arrive at a deeper conclusion, however, the states' conditions and current policies must be analyzed. By looking at how a state has achieved its financial literacy, more practical recommendations can be made.

Beginning with Wyoming, the state has embedded financial literacy instruction within its current K-12 school system, however, there is no personal finance diploma requirement (The nation's report card on financial literacy, n.d.). The lack of such a requirement earned Wyoming a grade of C on the American Public Education Foundation's analysis. Beyond the simple grade, how is it that the state with high financial literacy has relatively fewer financial programs? Similar trends appear with other states. South Dakota, which offers a personal finance course but lacks K-8 financial education and mandated financial literacy courses, received an F on the same analysis, despite having the second highest High Financial Literacy Percentage in the U.S. Overall, the current assessment of financial literacy focuses on high school financial literacy programs. A change must be made.

Alternatively, West Virginia, which has implemented diploma requirements and mandatory courses for high schoolers, has the third lowest High Financial Literacy Percentage within the U.S. Going further, in the West Virginia Education Code, it mandates that "to provide students a basic understanding of personal finance, the state board shall develop a program of instruction on personal finance which may be integrated into the curriculum of an appropriate existing course or courses for students in secondary schools." These actions earned West Virginia a grade of A on the Public Education Foundation's analysis, contrary to its quantitative measures. Similarly, Mississippi, which has implemented a personal finance elective in high school, career readiness classes, and even K-8 financial literacy education, had the lowest High Financial Literacy Percentage. In fact, every state within this Low Financial Literacy Group received a grade of B or A, despite having the lowest financial literacy in the U.S.

The correlation between higher financial literacy percentages and the success of communities is quite evident. When states are more financially literate individuals are less likely to engage in crime, to be

unemployed, and to have lower median income. With further analysis of each state, contradictions become clear. States' actions have not had any effect on the increase of financial literacy. The majority of programs are high school curriculums, yet, given the low quantitative impact, change is necessary. Along with all of this, however, it is important to keep in mind the scope of the study. Each state has their own characteristics (population and demography), and this can have an impact on their data; the study attempted to involve multiple states in order to get a more accurate picture. Furthermore, some of the programs implemented by states may be more recent, and therefore more time may be needed for impact. Overall, however, the current data shows a need for a new direction on financial literacy improvement.

Recommendations

There is a clear contradiction between the performance standards of financial literacy and quantitative measures. As shown in the American Public Education Foundation's analysis, among others, the current measure of financial literacy centers on the number of educational programs. Although this education may be necessary, even states with extensive financial literacy programming, such as West Virginia, are not performing as well in quantitative measures, signaling the need for improvement.There is no reason for the removal of such high school programs, as many of these programs are new and may need time to show results. However, in order to better address the problem, alternative methods of personal finance education are needed. Programs reaching further across the state, past public education, may allow for a true increase in financial literacy. This could include programs within local community centers, places of worship, and other centers, which could truly reach many diverse individuals. Different accommodations and solutions will be needed for urban communities compared to rural communities, but, as a whole, the programs should strive to reach as many residents as possible. Personal finance should not be reserved for a specific age group or level of education; a community extends far beyond one group.

Increased financial literacy has shown strong correlation to improved socioeconomic conditions, and it is therefore essential that financial literacy becomes more widespread. Although there are current programs in place for financial education, these programs are not translating to better quantitative results. Hence, a re-evaluation is needed of the current programs.

References

1. *1 in 5 U.S. teens lacks basic personal finance skills*. (n.d.). NEFE. Retrieved April 14, 2024, from https://www.nefe.org/news/nefe-digest/2017/can-america-compete.aspx
2. Bilal, M. (2023, January 19). *Financial illiteracy cost redesign*. NFEC. https://www.financialeducatorscouncil.org/financial-illiteracy-cost-redesign/
3. *FINRA Foundation*. (n.d.). Geography of Finance. Retrieved April 14, 2024, from https://cdn.finra.org/nfcs/2021/geography.html
4. *The nation's report card on financial literacy*. (n.d.). Nation's Report Card. Retrieved April 14, 2024, from https://www.thenationsreportcard.org/