

Bridging the Gender-Based Financial Literacy Gap: An In-Depth Examination of Contributing Factors and Policy Recommendations for Equitable Financial Empowerment

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ABSTRACT

Financial literacy is a critical life skill for individuals to make informed decisions about their investments or personal finances. However, studies have revealed a gender-based financial literacy gap, with women having lower levels of financial knowledge than men. While there is a general consensus that women have lower rates of financial literacy, there is less literature discussing the possible causes of this gap. Through interviews with experts and researchers in the financial literacy field, I seek to uncover the factors that influence financial literacy outcomes for men and women in America, and what can be done to counter the gender-based disparities in financial literacy rates. I concluded that a major factor of financial literacy is confidence in their ability to learn and handle personal finance. The best way to resolve this is by mandating financial education.

Literature Review

In a ballooning era of stock markets and globalization, financial literacy is a critical life skill for individuals to make informed decisions about their investments or personal finances. However, studies have revealed the existence of a gender-based financial literacy gap, with women having lower levels of financial knowledge than men. (Hasler and Lusardi, 2017). For instance, only approximately 20% of middle-aged college-educated women could answer a fundamental compound interest question compared to 35% of men of the same age (Zissimopoulos et al, 2015). Alarmingly, this gap is evident across various age groups, educational backgrounds, countries, and income levels (Grohmann 2016). Importantly, data taken from more than 140 countries show that gender differences in financial illiteracy are present everywhere, irrespective of developing or developed economies (Klapper and Lusardi, 2020). While many reports attempt to measure the gender-based gap, fewer have delved into identifying the root cause(s) and how to solve them.

As an overview of the current literature discussing the gender-based financial literacy gap, a majority of the studies (Brock and Pittle, 2022, Yakaboski et al, 2023, Hasler and Lusardi 2017, Davoli and Rodriguez-Planas, 2022) typically use populations of adults. However, there are certain exceptions, like (Bottazzi and Lusardi, 2021), which analyzed literacy in 15-year-olds in Italy using the OECD's Programme for International Student Assessment, or PISA. Their findings indicate that parental background, particularly that of their mother, matters for financial knowledge. It is worth noting that Italy and the US may have different cultures surrounding gender equality. Considering the Italy study found that family culture was the most important variable in determining girls' financial education, its findings may not accurately apply to what is happening in America. However, they should not be discredited; findings from other countries may still point to issues in the United States



that have yet to be explored. Especially when the gender-based financial literacy gap appears to be global and irrespective of each country's circumstances, all factors and studies will be considered in this literature review.

Typically, studies test their subjects with 4-5 questions regarding basic elements of financial literacy, such as numeracy (interest), compound interest, inflation, and risk diversification. Here is an example from the S&P Global FinLit Survey, which delivers a comprehensive global gauge of financial literacy rates with more than 150,000 nationally representative and randomly selected adults in more than 140 economies. Subjects are deemed financially literate if they can correctly answer three out of the four concepts (Brackets are possible multiple-choice answers, the correct answer is in bold) (GFLEC).

1. Numeracy (Interest)

Suppose you need to borrow 100 US dollars. Which is the lower amount to pay back: 105 US dollars or 100 US dollars plus three percent? [105 US dollars; 100 US dollars plus three percent; don't know; refuse to answer]

2. Compound Interest

- a. Suppose you put money in the bank for two years and the bank agrees to add 15 percent per year to your account. Will the bank add more money to your account the second year than it did the first year, or will it add the same amount of money both years? [more; the same; don't know; refuse to answer]
- b. Suppose you had 100 US dollars in a savings account and the bank adds 10 percent per year to the account. How much money would you have in the account after five years if you did not remove any money from the account? [more than 150 dollars; exactly 150 dollars; less than 150 dollars; don't know; refuse to answer]

3. Inflation

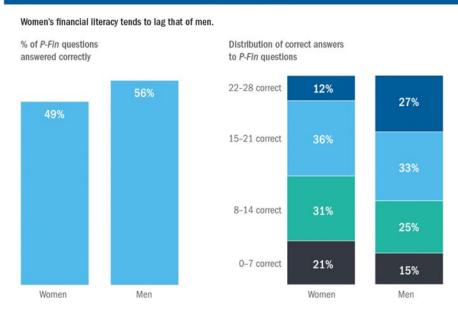
a. Suppose over the next 10 years the prices of the things you buy double. If your income also doubles, will you be able to buy less than you can buy today, the same as you can buy today, or more than you can buy today? [less; the same; more; don't know; refuse to answer]

4. Risk Diversification

a. Suppose you have some money. Is it safer to put your money into one business or investment, or to put your money into multiple businesses or investments? [one business or investment; multiple businesses or investments; don't know; refuse to answer]

Data taken from 2020 using this index shows that women in the US were consistently lagging behind men in financial literacy. This was particularly evident among younger generations, like Gen Z. In addition, this financial illiteracy is even more prevalent among underrepresented minority women and their white peers, finding even lower rates of financial preparedness for African American and Hispanic women (Yakoboski, Lusardi, and Hasler, 2020).

Figure 17. Financial literacy gender gap



Source: TIAA Institute

We must discover the root causes of the gender-based gap as the world of finance and personal savings is becoming increasingly complex, with a plethora of different retirement and savings plans. Financial literacy is becoming increasingly important as it is directly related to financial wellness and increased wealth (Yakoboski, Lusardi, and Hasler, 2020). The gender-based gap has significantly reflected this pattern, as unmarried women nearing retirement age often have lower wealth levels than married couples and unmarried men, having spent fewer years in the market (Levine et. al, 2002). If the parents, particularly the mother, struggle with financial illiteracy, it may impact how much their children can learn (Bottazzi and Lusardi, 2021), thus creating a generational issue of financial illiteracy. Besides that, it is important in general that women can make important financial decisions on their own, and not have to rely on a male partner to manage their finances for them. Such measures are critical to creating resilience in times of economic hardship or emergency.

Financial Literacy in America

Financial literacy is generally low in America. Only 57% of U.S. adults appear to be financially literate (Brock and Pittle, 2022). Another test utilizing the P-Fin Index finds that on average, U.S. adults correctly answered only 48% of the questions in 2023, with women consistently lagging behind men. (Yakaboski et al, 2023). This trend is detrimental, as poor financial literacy rates are associated with worse future savings, debt constraints, and financial fragility. As a result, the average cost estimated per person due to financial illiteracy was \$1,819 in 2022 (National Financial Educators Council, 2022). That equates to a total of more than \$436 billion lost annually due to financial illiteracy.



National Financial Educators Council Testing - https://www.financialeducatorscouncil.org/financial-illiteracy-costs/

Gender Culture

It is undeniable that in our current world, there exists a stigma that men are the breadwinners and financial managers of the family, while women are delegated to more household chores and caring positions. Gender roles in the Western world have deeply rooted effects on everyday interactions, to the point where women downplay their career ambitions on dates with their partners, or couples are more likely to separate when women earn more than men (Lamont 2020, Bertrand et al. 2015). As a result, it is reasonable to assume that the gender culture we have created dissuades women from learning more about financial literacy, with the expectation that males in a heterosexual relationship will handle the finances of the family.

Alarmingly, this has led to a glaring predicament in the topic of divorce or widowing. Studies hypothesize that previously married women may not have invested in understanding complex financial decisions while married, concluding that divorced individuals are less financially literate than never-married individuals (Fonseca et. al, 2012). Should this trend continue, then women will never actively seek out opportunities to become financially literate and still be at risk for major financial challenges and instability.

However, women are becoming more economically self-reliant, a dramatic increase compared to men (Bloome, Burk, McCall 2019). In addition, increasingly liberal views have led to a declining aversion to female status-dominant relationships (Bavel et. al, 2018). In other words, the expectation of a traditional household with traditional gender roles is on the decline in America. These findings should imply that women are becoming more financially literate and responsible than men, but that is not the case.

This gender stereotype can also be attributed to the burgeoning gender pay gaps and unequal career progression trajectories, leading to women often earning less in their lifetime as a result. In 2022, Pew Research Center analysis quantified that women earned an average of 82% of what men earned (Aragao, 2023). If women are at a systemic disadvantage of earning less money, it makes sense to assume that that explains the gender-based wealth gap. Earning less may cause less need to learn complex personal finance skills or less free time to learn personal finance. However, regardless of income, basic financial literacy skills are essential for women to save for their long-term future while also more broadly reducing the gender-based wealth gap.



Education Gap

In America, not all states require financial literacy to be taught. As of 2023, 30 states require personal finance to be offered in schools, and only 17 states have made personal finance a graduation requirement (Ramsey Solutions, 2023). It is possible that mandating financial education in schools can positively impact financial literacy rates, thus closing the gap. This is plausible, as every additional year of schooling has a higher payoff in financial literacy for females than males (Preston and Wright, 2022).

If financial literacy is not mandated in schools, individuals must actively seek out lessons on personal finance to be educated. However, relying on an individual to learn personal finance on their own can be problematic considering the gender culture that Western societies have created (see Section 2.2). Women may simply choose not to learn financial literacy because they feel as though they have no need to.

Schools cannot rely on younger generations to choose to learn information not taught in schools, especially when they are unsure of where to begin. Without a proper education from a qualified teacher on the subject matter, individuals can traverse their lives with a flawed understanding of personal finance. Worse still, they may rely on incorrect information from an unqualified source, which could be detrimental to their finances. Mandated systems work; we have seen that programs like comprehensive sex ed can decrease the amount of sexually transmitted infections and teen pregnancies in certain states (Goldfarb, 2020). The same could be said about financial education; improved financial literacy schooling significantly improves financial behavior, above and beyond regular schooling (Behrman et. al, 2012).

While mandatory schooling can increase the rates of financial literacy, it may not be the driving force behind the disparities between genders. Studies have conflicting results; one conducted by the Stanford Center finds that the gender gap in financial literacy persists regardless of age or education level (Conley-Smith and Liao, 2020). In contrast, (Fonseca et. al., 2012) finds that education was one of the most important factors contributing to the financial literacy gap, using collected data from the RAND American Life Panel. In general, mandating financial education can still be beneficial for offering girls more exposure and opportunities to learn financial literacy. As a result, they may grow up to be more confident in handling difficult financial decisions independently.

There is also potential in creating financial education that targets and uplifts young women. Certain studies have analyzed the effects of female-tailored financial education and found that programs like Invest in Girls (IIG) gave girls higher confidence in engaging in financial literacy (Park et al., 2021). Another nonprofit, Girls Who Invest, hopes to have women managing 30% of the world's capital by 2030.

Female Representation

Many young girls often look to strong female role models such as Oprah Winfrey or Serena Williams as inspiration for the trajectory of their future. But beyond diversifying our representation pool in media, female role models are also essential in increasing female involvement in traditionally male-dominated areas, such as STEM (González-Pérez et. al., 2020). The proportion of women university students has increased dramatically over the decades, helping to improve their overall presence in the labor market.

This is not the case when it comes to finance. Many in the financial services industry acknowledge the benefits of diversity and gender balance, as they provide access to a broader talent pool and more customer representation (Jäkel et al., 2016). Yet, the world of finance is still a male-dominated arena. As a result, there are not many female role models for girls to rely on in the financial field. In fact, within the actual financial workforce, a majority of executive jobs are held by men (Cox, 2021). At J. P. Morgan, a leading global financial firm, around half the workforce is female but only 28% of their executive jobs were held by women in 2020 (Cox, 2021). With men in prominent positions of power, it is difficult for women on Wall Street to feel heard



or included, which often diminishes their confidence and dissuades them from continuing jobs in financial services (Jaekel and St-Onge, 2016).

Confidence & Risk Aversion

When researchers were conducting surveys on financial literacy, they usually included multiple choice questions, with an option for respondents to say they did not know the answer. Interestingly, women often said they "did not know" disproportionately more than men. A general trend has emerged where women tend to be less confident when it comes to handling financial decisions than men. When studies removed the "I don't know" option, they found that the gender gap decreased significantly, ultimately concluding that half of the gender gap can be explained by confidence and other background variables (Bucher-Koenen et. al., 2016). Even when they had the right answer, girls were still more likely to respond with "I don't know", clearly indicating a lack of confidence rather than a lack of knowledge.

It is unsure where this self-doubt stems from, but we hypothesize that it may be a result of less exposure to financial concepts from a young age, thus not feeling comfortable handling the questions. When women are asked questions on something outside of their field of expertise, they are less likely to give "extreme" answers and are less confident in the accuracy of their answers (Sarsons and Xu, 2021). If that is the case, increased exposure to mathematics and economic education are promising confidence-building measures for women (Blaschke, 2022).

Hypothesis

I propose a few hypotheses to explain the gender-based financial literacy gap.

- 1) First, we must analyze the socio-cultural factors in America. Traditional gender roles have made men manage personal and marital finances, while women have fewer economic responsibilities. Thus, women are offered less exposure to financial decision-making and financial education opportunities, while men are pushed to learn more about financial literacy. This could naturally impact women's confidence in decision-making, causing them to stray even further from making informed financial decisions.
- 2) There could be structural disadvantages such as gender discrimination within the financial industry. Men may have greater exposure to financial discussions and formal education within their social networks, workplace, or education system. In contrast, if women face obstacles in accessing financial services or employment, it can hinder their ability to gain financial knowledge and experience. This could also lead to a lack of role models and female representation in the financial industry, impacting women's confidence and perpetuating gender stereotypes.
- 3) Differences in confidence levels and risk aversion between genders could be another explanatory factor. This risk aversion might influence their willingness to engage in financial activities and investments, leading to less practical experience and ultimately lower financial literacy levels. Lower confidence levels among women may also contribute to their reluctance to seek financial information or engage in financial decision-making.

Methodology

In this study, I aimed to interview different experts who had extensive knowledge on the topic of the gender-based gap in financial literacy. Below is a list of experts I interviewed:



Experts

Daniela Dubach - Guest speaker on various local radio shows and podcasts, co-produced a documentary, published several articles, and conducted hundreds of live workshops on financial matters, educating thousands of individuals on how to implement better savings and retirement strategies. Cofounder, CITRINE FINANCIAL SOLUTIONS.

Ngoc Le - Cofounder, CITRINE FINANCIAL SOLUTIONS.

Annamaria Lusardi - Professor of Economics and Accountancy at The George Washington University School of Business, conducted numerous studies on financial literacy. Notable studies include (Hasler and Lusardi, 2017), (Klapper and Lusardi, 2020), (Bottazzi and Lusardi, 2021), (Yakoboski, Lusardi, and Hasler, 2020). Founder and Academic Director of the Global Financial Literacy Excellence Center.

Valentino Sabuco - Executive Director at The Financial Awareness Foundation

Meltem İnce Yenilmez - Professor in the Department of Economics, Izmir Democracy University, Turkey; Visiting Professor at Tohoku University, Japan.

Ouestions

- 1. Do you think gender stereotypes and biases affect women's confidence and engagement in financial matters?
- 2. What role do you think educational systems and curricula play in the financial literacy gender gap?
- 3. Do you suspect there to be a role that income disparity or the gender pay gap plays in influencing financial literacy rates for women?
- 4. How do you think the lack of representation of women in financial leadership roles or the finance industry as a whole impacts financial literacy rates?
- 5. What strategies or initiatives could be effective in bridging the financial literacy gap between men and women?
- 6. Can you share any examples of successful programs or interventions that have addressed the financial literacy gender gap? What made them successful?
- 7. In your view, what role can financial institutions, government agencies, and nonprofit organizations play in promoting financial literacy among women?
- 8. Are there any potential long-term consequences of the financial literacy gender gap that concern you? If so, what are they?

Experts were interviewed live for 40-minute sessions. Due to the nature of the interviews, some questions may have been skipped or additional questions were asked. However, in general, the questions followed the above format. Due to schedule conflicts, Professor Ince-Yenilmez submitted her answers asynchronously and was unable to provide an interview. In the analysis, I take the most important quotes from each interviewee. As a result, some questions do not have quotes from everybody.

Findings

As a brief overview, Dubach, Le, Lusardi, and Ince-Yenilmez all agreed that there are lower rates of financial literacy for women. However, Sabuco, Executive Director of the Financial Awareness Foundation, enclosed in an email that he does "NOT agree with [our] assumption that the financial literacy-based gender gap exists... investments and savings are functions of being financially aware and financially literate but DO NOT fully represent financial literacy knowledge and its application." Rather, Sabuco takes the perspective that the current



literature on financial literacy is biased and does not cover all aspects of personal finance. He doubts that there even is a gender-based gap in financial literacy at all.

Below are summaries of the answers to the questions. Some interviewees' answers were not included in questions if their answers were similar to others.

1. Do you think gender stereotypes and biases affect women's confidence and engagement in financial matters?

There was a general consensus among the experts that gender stereotypes in America have impacted how women are handling finance. "It's somehow in there that the men should handle the finances... and the women typically sacrifice their careers to then stay home and raise the family," explained Le. "They just feel like they're less competent, less capable. If the mindset is 'I'm not good at math' or 'I'm not good with numbers' or 'men will handle it', that's so frightening to hear."

Lusardi takes a different approach, recalling her own previous studies. "Women with respect to men are much more likely to respond to the question by saying 'I do not know'," she described. "It's not that women may not know, but that they are more reluctant to give the answer... and so I think an important component of the financial literacy gap, if I had to put my hand on it, is also this lack of confidence." As a professor herself, Lusardi has worked with female students and noticed this trend in confidence. "When I ask questions, women don't raise their hand. And I know that so I ask, and often the answer is correct."

"I don't believe an explanation like division of labor in the household is important," she concluded. "Because even among single women, there is a gender gap, and compared to single men... there is something that prevents women from engaging [and] investing into this field."

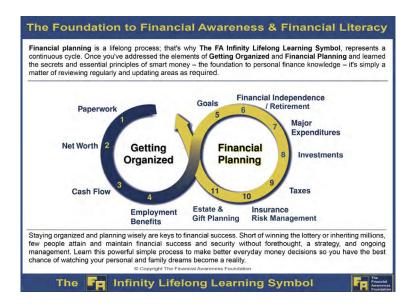
Sabuco disagrees that gender stereotypes are key, stating that financial literacy is more than just the questions commonly asked by popular studies. "The female in most households manages the consumer spending in many of the households. The male in many cases may make the investment decision," he explained. "If the female died, the male doesn't know how to run the household and the male might not know how bills are paid." He encouraged us to expand our definition of personal finance and managing money. "Depending on which areas we are working in, if we focus on the concept of cash flow management[,] they're both involved in cash flow," he concluded. In other words, the current literature may not provide an accurate representation of the financial rate disparities because they are not comprehensive enough.

2. What role do you think educational systems and curricula play in the financial literacy gender gap?

According to Dubach, schools simply do not prioritize financial literacy enough. "One of our clients approached us and said, 'Can you create a [financial literacy] curriculum?' And so we put together an outline and everyone was excited, and it was submitted to the district, and they said 'There's not enough funding for that." According to Dubach, schools need to mandate curriculum in order to spread awareness about the information. "When male financial advisors talk about finances, it's just more like numbers and ROI, rate of return. But for us women, when we talk about finances, what's much more important is security. So security on several different levels, and as women we're able to give that feeling or that understanding to other women. And again, when it's from a man, it can be very overwhelming and they start tuning out."

Le agrees, describing the situation as a cycle. "If early on they have the education, then they get into positions where the income is more, and then they have access to more education, wealth management companies who can teach them even more how to make money." However, the first step of early education is crucial in making or breaking the cycle.

"Most definitions are saying it's a set of skills to help people better manage finances, but what it doesn't include is these elements that make up financial literacy," Sabuco adds (see below), believing that what is taught in schools is not comprehensive. According to him and his company's mantra, financial awareness is much more complex than what the current curriculum provides. He believes that this incomplete education may impact how women perceive financial literacy and how to handle finances.



3. Do you suspect there to be a role that income disparity or the gender pay gap plays in influencing financial literacy rates for women?

Ince-Yenilmez believes that "undoubtedly, the gender pay gap and income inequality have a significant impact on the financial literacy rates of women." For example, "the gender pay gap affects women's earnings and creates disparities in household financial decision-making power, potentially limiting their access to real-world financial knowledge."

"Addressing these discrepancies requires understanding the complexity of the income and gender pay differences," she continues. "The impact of economic inequality and the gender pay gap may range significantly for various groups of women." Thus, "policy changes that advance pay fairness and lessen income inequality are necessary to reduce the gender gap in financial literacy."

Le agrees, believing there is some cyclical role that money may have. If they earn more money, "they have access to more wealth management companies who can teach them even more how to make money. The more money you have, the more resources you have available to invest and grow your money."

"At the same time, it also goes the other way," Lusardi adds. "Because women are not financially literate, they don't bargain well. They are not confident asking for a raise." As a result, Lusardi believes that "this pay gap sums up in the data to one million dollars. So the fact that we are paid differently because we are women is giving us, over a lifetime, one million dollars less."

4. How do you think the lack of representation of women in financial leadership roles or the finance industry as a whole impacts financial literacy rates?

Dubach and Le, as financial advisors themselves, have first-hand experience in the industry. They agree that having more female role models is crucial for women in finance. "A lot of women gravitate towards working with us because we are women as well," Dubach explained. "And women are open to learning and they want to learn... so I think [teaching earlier on] would have a huge impact and a bigger impact on women."

Le also draws from personal experience. Growing up, she "saw both parents working hard to bring in income and actually, [her] mom was more proactive in handling the finances." "But I have friends where it's different," Le said. "I see my uncle totally in charge of the finances and my aunt has no idea." Indeed, representation does not just have to be at the professional level but is also critical at the maternal level.

Lusardi, who is a director for the Global Financial Literacy Excellence Center, weighs in the importance of female role models. "There's a saying that's very important, you can't be what you can't see," Lusardi said. "If there are few women in the finance industry, then women don't aspire necessarily to that because they haven't [seen] women at that level, and I think role models can be motivated and important."

Describing her own experiences as a professor, Lusardi said, "When people come to my class and they see a woman, I make sure not to have a business dress and make everyone at ease... It makes a difference, particularly for the female students who feel welcome, that it's not going to be a corporate finance class." By being active in the finance industry, Lusardi believes she is able to have a positive impact on the women in her classroom by destignatizing finance.

The impact of this lack of representation is massive. "First of all, the myth that financial expertise is primarily the domain of men is perpetuated by the lack of prominent female role models in finance," writes Ince-Yenilmez. "The idea that women might not have the skills or credentials to succeed in financial matters is reinforced by the lack of women in leadership roles. Young women's interest in developing financial literacy skills may be hampered by this stereotype because it may discourage them from pursuing careers in finance and undermine their confidence in financial decision-making." Evidently, there appears to be some cross-application between hypotheses. Rather than one right or wrong answer, factors such as confidence and education appear to be intertwined and all contribute to the gender-based financial literacy problem in America.

In addition, Ince-Yenilmez finds that "women may have trouble navigating the complexities of the financial sector and miss out on important opportunities to develop their financial [knowledge] if they lack enough female mentors and sponsors."

5. What strategies or initiatives could be effective in bridging the financial literacy gap between men and women?

There were a few solutions posited by the interviewees, but one such solution was increasing female representation and teaching. "Our industry is mostly male-driven," explained Dubach. "So when we talk to women who started teaching about financial literacy and power with money, oftentimes they tell us 'You know what? Now finally this makes sense'." Dubach has bright hopes for the future. "If there's more female advisors out there teaching this, that could also help with the literacy rates for women."

Lusardi expresses a similar sentiment about starting early in school. "School is the level playing field, and I think leaving it to the parents is going to continue to generate disparities," Lusardi admits. "Both because parents do not know, and because we know older, adult women do not have confidence, so they don't feel confident enough to teach their daughters."

Ince-Yenilmez also supports starting in school. "By beginning financial education early, fundamental financial skills may be instilled. Financial literacy should be incorporated into the curricula of schools and other educational institutions in order to give boys and girls equal access to financial education beginning at a young age," she explained. However, she also touched upon access to education for girls who may not have as readily available resources. "Outreach programs can give financial education tools to underrepresented populations," she added. "Mentorship and role models may motivate and direct women on their financial journeys by promoting mentorship and presenting successful female role models in finance."

6. Can you share any examples of successful programs or interventions that have addressed the financial literacy gender gap? What made them successful?

Le and Dubach have had experience working with a nonprofit called WIFE, or Women's Institute for Financial Education. "They do financial wellness workshops for their employees. Those programs are good because, let's say they didn't get it at home or the schools, now the workplaces can also implement financial literacy programs and campaigns to teach them about 401(k), taxes, retirement planning. All the things that we're doing, that can be embedded in the workplace," Le stated.

Sabuco's company has had similar benefits to teaching financial literacy in the workspace. "We developed systems and methodologies around financial planning... we licensed things like that to Arthur Anderson and AON," Sabuco explained. They are "major companies to use in group financial planning, trust departments, [and] employee benefit programs." Through providing their methodologies to major consulting companies, Sabuco believes they "started improving the financial literacy movement in the US." "Now it's globally in five continents and over a dozen countries," Sabuco reflects.

Ince-Yenilmez brings up another company, Girls Who Invest (GWI) that "provides a thorough educational program, mentoring possibilities, and a summer intensive program that introduces undergraduate women to the banking industry." "The key to GWI's success," Ince-Yenilmez wrote, "is its focus on early education and mentoring, which enables young women to develop financial confidence and abilities at an early age. By actively promoting and highlighting women in financial leadership roles, the program also aims to shift industry stereotypes and prejudices."

More globally, Yenilmez provides a few examples of improving financial literacy in developing countries. "VSLAs 'Village Savings and Loans Associations] give rural women in communities the ability to pool their resources to invest, borrow, and save," she wrote. According to Ince-Yenilmez, "they acknowledge the significance of women's financial inclusion, provide easily accessible financial services, and encourage financial independence and decision-making abilities in underserved groups."

7. In your view, what role can financial institutions, government agencies, and nonprofit organizations play in promoting financial literacy among women?

"Definitely having something that's mandatory," said Dubach. "It doesn't have to be overwhelming, but something that's mandatory, that everyone has to go through. There's a lot of online resources and webinars, but sometimes that just gets overwhelming and often times whoever does that just wants to sell a product, so having a nonprofit or webinars on a regular basis and promote that through people, not just women but help people on a weekly basis."

Lusardi strongly agrees with Dubach's sentiments. "If it is not mandatory, we have these problems yet again. 'If I'm afraid of these topics, I'm not going to take it.' Unfortunately, financial literacy is useful for everybody today, and I think the mandatory part is really important here," she stated.

Ince-Yenilmez believes that nonprofit organizations are key players in promoting financial literacy, specifically in passing legislation. "Nonprofit groups frequently act as a link between financial institutions, governmental bodies, and women who require assistance with financial literacy," she said. "Additionally, by providing networking and mentoring opportunities, these groups may help women create a support network and increase their financial literacy and self-assurance."

8. Are there any potential long-term consequences of the financial literacy gender gap that concern you? If so, what are they?

"On a personal level, the more set they are in their finances and career, they're gonna have hopefully better expectations of who they choose to marry," Le said. "When we see women financially dependent on a man or they pick a man for the wrong reasons, that's gonna put them in a bad situation down the road. Let's say there's domestic violence, they're stuck. How many people would actually leave the relationship if they have no career [and] no income? And what if the man finds someone younger and leaves? What happens to you? You start over, and we deal with women like that, too. They divorced, the men took everything, and women just had to start over."

Ince-Yenilmez agrees about this financial vulnerability. "Women who lack financial literacy may be ill-prepared to handle [any] unforeseen financial difficulties like illness, unemployment, or downturns in the economy," she said. "Furthermore, when lacking sufficient financial education, women may be more vulnerable to financial frauds and predatory financial products, further jeopardizing their capacity to maintain a stable financial situation." In a time where finance is becoming more complex and companies are constantly pitching new FinTech products, it is clear that Yenilmez is concerned about the unstable future of women.

This may also solve the conflict with confidence that was brought up earlier in the interview. "Overall, women would feel more empowered to make decisions. Be that in regards to their children, their financial planning for the future... and so they have a roadmap," Dubach adds. "You are empowering because you have knowledge and you know where you're headed."

"It spills beyond the individuals," Lusardi concludes. "With society and the financial crisis, [in] many cases, it's like health. Prevention is better than the cure. The cure is more expensive and is also more painful.



Helping women to be financially literate, which really starts from the school, will benefit them and benefit society."

Conclusions

It is evident that financial literacy is increasingly important in a world with millions of different financial products and services. Especially for women, who on average tend to live longer than men and are more likely to end up divorced, widowed, or single, financial independence is critical. In the face of financial disaster, it is crucial for women to understand how to take care of themselves financially and manage their wealth.

Our findings indicate that there is an issue with self-confidence for women, which makes them unwilling to learn financial literacy on their own. Women with higher self-confidence are more likely to proactively seek information about financial matters, which can lead to greater financial literacy. However, if women doubt their abilities or feel intimidated by financial topics, they may avoid financial education and decision-making, leading to gaps in their financial knowledge.

Self-confidence can also help women overcome the gender bias that exists in the financial world. When women believe in their abilities and knowledge, they are better equipped to navigate the male-dominated industry, negotiate salaries and business deals, and ultimately achieve more favorable outcomes. Of course, self-confidence is not the only factor contributing to the financial literacy rates, but it appears to be a major factor.

Thus, Le, Dubach, Lusardi, and Ince-Yenilmez all conclude that mandating financial literacy education in schools is the best-case scenario for reducing the gender gap in financial illiteracy. Simply increasing access to resources is not enough; as a result of a lack of confidence, women are choosing not to engage in financial matters in the first place. By mandating financial education in schools, we can destigmatize financial literacy and expose all young girls to personal finance from a young age. Women who lack self-confidence can also benefit from mentorship and exposure to successful female role models, as it helps boost their own self-confidence. Whether this occurs in the classroom or in the family setting, it will surely be beneficial in the long run for their confidence in handling financial matters and maintaining financial independence.

Recommendations

Thus, here are our recommendations for solving the financial literacy problem:

- 1) Financial Education in Schools:
 - Introduce comprehensive financial literacy programs in K-12 education that cover topics such as budgeting, saving, investing, and understanding credit. This will help destignatize financial literacy for girls while also mandating them to learn personal finance.
 - Ensure these programs are inclusive but also target and address gender-specific financial challenges and disparities. For example, provide female instructors who can help women feel comfortable learning.
- 2) Workplace Initiatives:
 - Create financial education programs and workshops as part of employee benefits packages.
 If they are unable to get an education at home or at school, they have access to resources in their adult life.
 - Promote equal pay for work to help close the gender wage gap. By providing equal pay, women can afford to access more wealth management resources.
- 3) Accessible Resources:

- Develop online resources, mobile apps, and interactive tools that are easily accessible to individuals of all genders.
- Conduct targeted financial education campaigns focusing on women, especially those from marginalized communities.
- Collaborate with community organizations, women's shelters, and social services to reach underserved populations.

Certainly, financial literacy rates are low overall, for both men and women. It is in our best interest to keep the playing field level given the historical financial disadvantages that women have had. And, if we continue to implement these mandatory systems, we will be able to raise the financial literacy rates of not just women, but men as well. By creating a more financially aware country, we can help ameliorate poverty and make better financial decisions as a whole. As Lusardi brilliantly put it, "It's a win-win for everybody."

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