

## **Financial Illiterate Demographics: Is it time to add the Millennial Generation?**

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### **Abstract**

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*The research regarding financial literacy programs in the United States sheds light on a growing disparity among the millennial population and other demographics. Through qualitative analysis, this paper adds to this growing literature and offers potential solutions to help combat these negative effects. Instead of offering one-size-fits-all mandated personal finance courses, many studies advocate that increasing consumer conscientiousness could effectively supplement these programs. By offering tailor-made courses targeting various demographics we may see a positive impact towards eradicating financial illiteracy. Thus, the objective of this paper is to explain what demographics are most affected and various solutions that will reform current policies.*

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**Keywords:** Financial literacy, Millennial generation, Financial knowledge

### **1. Introduction**

Following the financial crisis in 2008, financial literacy has become a heavily disputed topic among policymakers and legislators around the globe. Despite efforts to combat this growing discrepancy, little has been done to effectively eradicate financial illiteracy in the United States. The growing and rapidly changing financial climate has made it more difficult for consumers to make fiscally sound decisions (Lusardi & Mitchell 2014). Financial decisions have become increasingly complex in nature (Willis 2011), and as such, have created a landscape that leaves consumers ill prepared to meet their financial goals.

One of the most prominent demographics affected by this trend are millennials. Legislation has been passed, mandating that each student undertake some form financial literacy course while attending secondary school (Peng 2008). However, very little impact has been measured which indicates that these courses have positively improved financial literacy among students (Hathaway & Khatiwada 2008). This does not mean that these courses are completely ineffective; rather, there is an insufficient amount of data collected regarding its overall impact (Herman, Hung, Burke, Carman, Clancy, Kaufman, & Wilson 2015). Therefore, it is important to continue to research solutions and adopt new financial literacy policies.

This paper will review the literature regarding the current state of financial literacy in the United States, the demographics most affected by financial illiteracy, and various solutions for legislators and policy makers to establish a more financially literate culture among young Americans. As such, the literature implies that financial literacy courses in the United States educational system have had no measurable impact on various demographics regarding financial decision making and must be reformed.

## **2. Framework**

Figure 1 depicts the framework the authors derived from the literature review. There is a growing discrepancy found in the current state of financial literacy in the United States. The paper specifically targets the U.S. education system ranging from primary school to undergraduate studies. The current educational methods appear to be failing when mandated financial literacy courses have proven to show little effect on overall financial literacy. The research ranges from qualitative to quantitative assessments taken from studies worldwide between 1997 and 2016. Authors agree that on an aggregate level, millennials and certain other demographics are not well equipped to make fiscally sound decisions after the completion of their education. This is because they only focus on financial knowledge, and do little to support conscientiousness regarding financial decision making. This paper finds supporting research that suggests changes in the status quo.

## **3. Method and Definitions**

### **3.1. Data Collection**

The collection of data examined to determine the effects of financial literacy education in the United States derives from peer reviewed sources found in academic journals within the United States. These publications range from 1997 to 2016 and provide a vast spectrum of knowledge regarding financial literacy. Over the last 20 years, financial literacy has become an increasingly important topic for legislators and policy makers. This means that in order to examine and properly paint a picture of the current state of financial literacy in the United States, policy makers must take into account the data collected from the inception point at which financial literacy education research first became topical.

This literature review primarily focuses on the effects of financial literacy education on millennials and certain demographics as they take part in the United States educational system. Millennials, also known as ‘Generation Y’, are defined as those who were born between 1982 and 2004. They have proven to possess a different, often weaker, set of skills in understanding personal finance than previous generations of students (Leinberger 2015). As a result, the examined literature advocates that the millennial population is ill equipped to have the financial knowledge necessary to make fiscally sound decisions regarding personal finance, investments, loans and retirement savings (Jorgensen & Salva 2010). Therefore, it is imperative that researchers understand the effects of financial literacy education to better equip this generation as they finish their education, increase purchasing power, and join the workforce.

Both qualitative and quantitative surveys were reviewed to fully determine if financial literacy has had an impact on millennial’s financial knowledge and abilities. Twenty qualitative and quantitative assessments were examined, specifically targeting millennial students both domestically and internationally to measure the impact of their financial literacy education.

### **3.2 Definitions**

To clearly understand the link between financial knowledge and education, one must first understand the context in which certain terms are defined within this review. Financial literacy is considered to be the degree at which a person is able to process and understand economic information in order to make informed financial decisions (Lusardi & Mitchell 2008). A key factor in determining whether or not a person is financially literate is the measure of their perceived and actual financial knowledge, or the understanding one has of financial information and decision making (Henager & Mauldin 2008). Actual financial knowledge can be measured objectively, whereas perceived financial knowledge is self-reported and subjective, although both have been found to impact a student’s financial literacy (Henager & Mauldin 2008). Finally, the term ‘fiscally sound decision’ refers to a student/consumer’s choice to increase their wealth in order to meet their financial goals based on economic information (Behrman, Mitchell, Soo and Bravo, 2012). With these terms defined, one can better understand the context in which this literature review has derived its conclusions and implications.

## **4. Literature Review**

### **4.1. Current Financial Literacy Education**

The financial landscape in the United States has become increasingly complex and difficult for consumers to attain positive financial decision-making skills (Willis 2011). Many consumers, specifically millennials, are experiencing an information overload, negatively affecting their understanding of personal finance.

Consequently, research has shown that low financial literacy has made consumers more susceptible to cognitive and emotional overload when making financial decisions (Agnew & Szykman, 2010). In a world of rising student loans and credit card debt, it is imperative to equip the next generation with the skills necessary to handle these financial decisions through financial education programs.

The concept of financial literacy education is new and studies examining the effects of such programs have been relatively inconclusive. Better financial education leads to better financial behaviors, thus improving financial literacy (Hathaway & Khatiwada, 2008). In theory this holds true, but what components of financial education yields the most desirable results? Currently, the focus on financial education has been on numeracy, such as basic accounting principles to improve financial behavior. According to recent studies, however, financial numeracy is insufficient in dealing with specific financial problems, such as debt consolidation and loans (Bolten, Bloom and Cohen, 2011). Purely focusing on numerical skills is not sufficient in creating a more financially literate consumer, especially in this complex and evolving financial landscape.

## **4.2. Demographics**

### **4.2.1 Millennials**

As the millennial population graduates high school to continue their education or enter the workforce, the question of whether or not they are equipped with the skills necessary to meet their financial goals remains in question. Currently in the United States, there are no nationally required standards for financial literacy courses in the K-12 system (Herman, Hung, Burke, Carman, Clancy, Kaufman & Wilson 2015). According to a state-wide survey done by the Council for Economic Education (2014), however, 43 states have implemented personal finance standards in their K-12 curriculum. No such standards exist at the collegiate level, which may be necessary to combat this financial literacy discrepancy. Students continue to explore other subjects such as math, language, and science at the collegiate level; why refrain from teaching personal finance as well?

Though individual states control these standards and slightly differ from one another, their content standards contain many similarities. Most states focus primarily on topics such as investing, savings, credit, income, and financial responsibility through numerical applications (Herman et al. 2015). Budget constraints, however, have caused state legislators to question if these courses should be integrated into existing courses or should remain stand-alone (Maloney 2010). The problem lies in the fact that there is no set evaluation method for determining if these courses are effective. As such, it is difficult for educators to place a value on current financial literacy courses and make the choice whether or not to invest in such programs (Hathaway & Khatiwada, 2008). If the programs cost more than the benefits they offer, it is unlikely that public schools will focus on financial literacy.

Teaching financial knowledge through numerical applications can be beneficial, but does not reach all consumers in the same way. Women, minorities, and those of low-socioeconomic backgrounds create the biggest discrepancy in the United States (Jarecke, Taylor & Hira, 2014; Lusardi, 2015; Karger, 2015). Teaching these groups numerical skills is not enough to make a financially literate consumer. An effective way to reach these demographics is through empowerment and increasing their financial conscientiousness (Allgood, 2013; Agnew & Szykman, 2010). Programs targeting specific demographics, however, have been proven to be more effective than general financial education courses (Hathaway & Khatiwada, 2008). Through these targeted programs, combined with numerical applications, legislators and policy makers can improve consumer conscientiousness and adequately reach those most affected by financial illiteracy.

### **4.2.2. Low income**

Researchers advocate for strong link regarding wealth inequality and financial literacy (Lusardi 2015). In the United States, 40% of wealth inequality can be attributed to a lack of financial literacy (Lusardi, Michaud, & Mitchell 2013). It is imperative that this gap be addressed in order to halt the persistence of financial illiteracy being passed down from generation to generation (Lusardi 2015). The larger the discrepancy becomes, the more difficult it will be to eradicate financial illiteracy in the United States.

One of the primary factors that negatively effects low-income and uneducated consumers is the complex landscape in which they make financial decisions (Willis 2011). Banking services that target people of low-income, such as pay-day loans, rent-to-own furniture stores and tax refund loans, take advantage of this population who can't afford middle-class financial services (Karger 2015). Many low-income consumers fall victim to these institutions because they have nowhere else to go, thus amplifying illiteracy.

The low-income population lacks the resources to make fiscally sound decisions compared to their counterparts and should be given the opportunity to expand their financial abilities (Lusardi 2015).

#### **4.2.3. Women**

The current literature regarding financial literacy in the United States documents low levels of financial literacy among the millennial population, specifically the gender demographic (Lusardi & Mitchell 2008). Statistically, 20% of college educated women were able to answer a simple compound interest question, compared to 35% of college educated males the same age, according to a study by Zissimopoulos, Karney, & Rauer (2008). In order to prevent this gap in financial illiteracy from increasing, we must first understand why men and women possess different levels of financial literacy (Fonseca, Mullen, Zamarro & Zissimopoulos 2012). Once determined, adequate policies may be created to eliminate this gender discrepancy.

Studies advocate that the differences in financial literacy among gender stems from specialization within the households; women make the household decisions while men make the financial decisions (Bucher-Koenen, Lusardi, Alessie & Rooij 2014). This has proven to be detrimental due to the fact that divorce rates are growing, leaving many women at retirement age, unmarried. Divorced and widowed women are less likely to develop financial knowledge since it was not considered to be their “role” in their households (Fonseca et al. 2012). Even if couples stay married, women tend to live longer than men but have lower earnings, pensions and survivors’ benefits, leaving them ill equipped to handle their family’s finances. This puts women further at risk than men regarding financial problems (Weir & Willis 2000). The household specialization differences and increasing divorce rates between men and women are some of the primary reasons why the financial literacy discrepancy is so large between the gender demographic.

Currently, programs designed to gain financial knowledge have taken a one-size-fits all approach. This approach, however, has yielded mixed results when it comes to many different groups, particularly women. There is a strong correlation between financial knowledge and planning, but research shows that a majority of women have not done any retirement planning calculations (Lusardi & Mitchell 2008). Instead of offering the same programs to each individual, Lusardi and Mitchell (2008) advocate that the best way to combat financial illiteracy among women in the United States is to have highly targeted programs specifically designed for women.

#### **4.2.4. Ethnic Groups and Minorities**

The final disparity regarding financial literacy in the United States falls heavily on ethnic groups and minorities, especially among young Americans. Since 1997, the Jump\$tart Coalition for Personal Financial Literacy has conducted annual surveys indicating the level of financial literacy of America’s youth. 1,532 high school seniors responded to the survey and between 1997 and 2008, the average scores dropped from 57.3% to 48.3% (Jump\$tart Coalition 2008). Clearly, even mandated financial literacy programs have had little effect on performance.

Studies have shown that this may be due in part to the fact that African American and Hispanic students have become less financially literate than their Caucasian counterparts (Peng 2008), despite the programs being offered. According to a study by Grable and Joo (2006), they identified that African American college students possess poor financial management skills in the form of large credit card balances and saving behavior. Further research has determined that there is a correlation between low financial literacy and debt, credit card or otherwise (Rock 2008).

Ethnic groups are increasingly becoming susceptible to bankruptcy (Dickerson, 2005), low personal saving, and subprime borrowing (Osteen & Auberle, 2002). Though the reasons behind this trend have yet to be fully researched, the disparity is evident. Based on a quantitative analysis of high school seniors, Dr. James Moten CFP (2011) advocates that regardless of income levels, Caucasian students scored higher on financial literacy exams than all other ethnic groups. After studying the impacts of materialism on different cultures, he found that African American individuals felt it was more important to look successful even if their financial status didn’t reflect their spending habits. This further exemplifies why it is necessary to offer programs specifically targeting demographics instead of a one size fits all approach. Each culture views spending differently, so it would be appropriate to tailor their financial education based on these differences.

## **5. Findings and Suggestions**

### **5.1. Millennial Educational Reform**

Millennials are beginning to enter the workforce and as many young adults acquire salaried positions, they are left on their own to manage their personal finances (Shim et al., 2009). These skills are not obtained simply by existing, rather through extensive educational coursework outlining how to manage their finances (Lusardi 2015). Consequently, the goal of financial literacy is to provide consumers with the skills and knowledge to make informed financial decisions (Huston 2010). The resources required to achieve this goal, however, is extensive and it is difficult to reach all millennial demographics (women, low-income, and minorities) that are most affected by illiteracy. A ‘one-size-fits-all’ educational approach, even with mandatory programs, will not suffice (Alsemgeest 2015). Offering targeted and supplemental programs to financial education classes may provide this desired result.

#### **5.1.1 Conscientiousness**

The first step in reform is accepting the fact that each consumer learns and handles finances differently. In the wake of the economic crisis of 2008 and increasingly complex financial products (Willis 2011), the effects of financial education programs have been minimal (Hathaway and Khatiwada 2008). Based on a reoccurring study from the 1997 National Longitudinal Survey of Youth, researchers discovered a link between conscientiousness and financial literacy (Letkiwicz and Fox 2014). Conscientiousness is defined as the “tendency to be organized, responsible, and hardworking” (VandenBos 2007). By promoting practices such as cash-based spending or automatic bill-pay, consumers would become more conscientious. As such, this study found that conscientiousness was associated with a 40% increase in net worth, a 53% increase in illiquid assets, and a 33% increase in liquid assets (Letkiwicz and Fox 2014). These researchers advocate that education, paired with conscientiousness, positively impacts financial literacy.

#### **5.1.2. Rules of Thumb**

Another way to supplement educational efforts is through heuristics training or general “rules-of-thumb” decision making. The primary techniques used in financial education courses are numeracy skills, such as basic accounting principles. However, few adults are able to use numeracy training in their day-to-day financial decisions, especially those with low education (Drexler et al. 2013). Whether or not they understand what is being taught or do not find it applicable is irrelevant. Furthermore, millennials specifically are beginning to experience an information overload when it comes to making financial decisions (Agnew & Szykman, 2011), especially when dealing with student loans. Consumers are obtaining increasingly high credit card balances and taking on an immense amount of debt for a college education (Bolton, Bloom & Cohen 2011). Often, financial instruments have taken advantage of people with high debt, such as debt consolidation (Bolton et al. 2011). While studying these unique effects, Bolton et al. (2011) found that teaching consumers basic accounting principles had no effect on a consumer’s ability to combat these deceptive instruments. They argue that teaching basic implications about lenders and policies or heuristics, has a much larger impact than numeracy training (Bolton et al. 2011). Debt has a hold on every demographic and though numeracy training may help some, it will not reach all demographics equally. This is why teaching heuristics in addition to numeracy will help decrease illiteracy among a broader population.

### **5.2. Suggestions for Other Demographics**

#### **5.2.1. Low-Income**

The financial abilities of those with low-income can be increased by creating targeted programs aimed at teaching basic rules of thumb or equipping social workers with these skills because they primarily deal with low-income consumers.

A study conducted by Drexler et al. (2014) examined small business owners among a low-income population in the Dominican Republic, comparing the effects of basic accounting training and rules-of-thumb training. Researchers found that the small business owners responded significantly better to the heuristics training than being taught basic accounting principles (Drexler, Fischer & Schoar 2014). Using basic heuristics, such as keeping personal and business accounts separate or paying oneself a fixed salary, helped business owners retain and apply the information in a positive way.

Compared to the basic numeracy training, which had no measurable impact, teaching people with low income basic rules of thumb is an effective method for teaching financial literacy (Drexler et al., 2014). Due to this positive correlation, it is necessary for researchers to study this trend within the United States to corroborate the claim further.

In order to further reach the low-income population in the United States, another avenue worth exploring would be to equip social workers with the financial skills to pass on to their clients. Social workers have familiarity with this population and would have access in order to be one of the most effective tools in reaching this population (Kindle 2013). However, the current state of social work in the United States overemphasizes psychological and interpersonal issues instead of addressing the financial issues from which many problems stem (Karger 2015). A study done by Peter Kindle (2013) examining 1,500 social work students, found that the students lacked the capability to determine the extent financial stressors have on people's lives. The study advocates that social workers are the bridge between low-income, governmental, and community agencies. By equipping them with the training to teach financial skills to their clients, they can provide this demographic with the resources needed to become financially literate.

### **5.2.2. Gender**

There are a number of approaches that can be taken to create programs targeting women and financial literacy. Jarecke, Taylor and Hira (2014) identified four possible pedagogical methods that are tailored to help improve financial knowledge among women. The primary focus of each of these approaches is to empower women by helping them take control of their finances and preparing them for future events. The study examines a constructivist approach, contextualized learning, relationship building and taking a critical stance as a way to empower women. By placing women in the focal point of this learning environment, it made them much more engaged learners, ultimately improving their financial capabilities (Jarecke et al. 2014). Relying on these approaches alone may not completely enhance their financial capabilities, but by targeting programs specifically toward women, in addition to teaching numeracy skills, policy makers can structure an effective program that will help promote financial literacy.

### **5.2.3. Minorities and Ethnic Groups**

Though the literature regarding this effect on minorities is relatively new, researchers have identified various methods that can be used to reach this demographic.

Another method is discussed in a study by Lachance (2014) that identifies the impact of social learning on financial capabilities. Using the 2009 and 2012 wave of the National Financial Capability Study, she advocates that the zip code education level has a major impact on financial literacy. As such, social learning can be used in addition with financial education to help promote literacy among demographics that lack the capability and knowledge.

Lachance (2014) found that there was a strong negative correlation between African American and Hispanic neighborhoods regarding financial literacy. She suggests that the primary reason for this lies in the fact that these neighborhoods do not have access to adequate financial advice or do not possess the means to seek professional help. Through social learning, however, if these areas had access to such advice, whether it be from a neighbor or friend, we would see a rise in literacy among ethnically dominated neighborhoods (Lachance 2014).

Social networking can even help bridge this gap if it is too difficult to provide advice-giving financial institutions. Information is only as good as the source, but if people receive quality information from their peers on social networking sites, the same effect of social learning will be present. This will enable minorities to make informed and confident financial decisions, without having to pay for financial advice (Lachance 2014). Coupling social learning with financial education, a tremendous impact could be made among a population that lacks the knowledge and means to make informed decisions.

### **5.3. Non-Educational Supplemental Alternatives**

Some of the arguments against implementing financial literacy education programs advocate that the resources available are not enough to effectively solve the problem. We live in a society where some K-12 students do not receive basic math skills, let alone personal finance education (Willis 2011). Standalone courses risk being cut due to budget constraints, especially if these courses do not meet core subject requirements (Herman, Hung, Burke, Carman, Clancy, Kaufman & Wilson 2015). This is why researchers might begin to seek alternatives to supplement teaching personal finance in public schools.

Since many mandated financial programs are underfunded, it may be time to look into the private sector for financial literacy education. Organizations such as Junior Achievement or the Jump\$tart coalition have made strides improving financial literacy in young adults. Junior Achievement, for instance, created an in-depth personal finance simulation for students, ages 13-19. Each student received a fictitious identity and were told to make simulated financial decisions after receiving financial literacy training. They found that coordinating educational efforts with advice channels maximized their ability to make good financial decisions (Carlin & Robinson 2012). Through public-private partnerships, we might have the resources necessary to reach financially illiterate areas that are otherwise underfunded (Crosson 2011).

Another way to improve financial education is through parental socialization. Parents teach children how to behave based on their own personal values and knowledge (Clarke et al., 2005). When parents include their children in their financial decision-making process, their attitudes and behavior toward personal finance improves (Jorgensen & Salva 2010). As their knowledge and attitudes increase, their ability to make informed financial decisions also increases (Jorgensen & Salva 2010). It is considered taboo in our society to discuss finances with children, but the more we open their minds to financial decision making, the more likely children are able to grow into adults who make financially sound decisions. Thus, financial literacy is achieved through this attitude and behavioral change.

### **5. Implications, Future Research and Conclusion**

After reviewing the current literature regarding financial literacy and its effects on millennials in the United States, many implications for policymakers and legislators became apparent. Instead of trying to achieve literacy through financial knowledge, such as teaching numeracy skills, it might be beneficial to empower this generation and attempt to focus on increasing consumer conscientiousness. Since many of these adverse effects fall on millennial women, minorities, and the poor, increasing consumer conscientiousness will increase market participation (i.e. investing, saving, budgeting, etc.). With increased participation comes an increase in net worth and savings behavior, thus eliminating financial illiteracy among this generation.

Though the literature demonstrates that current financial literacy courses present having a limited impact, this does not mean that implementing such courses are counterproductive. Instead, policymakers should view these courses as foundational and should expand from teaching basic personal finance skills to more specific, targeted, and hands-on coursework to reach a broader audience. This in turn opens up new opportunities for researchers to further explore how effective these targeted programs could be in comparison to state mandated courses.

Fortunately, after the financial crisis in 2008, the idea of financial literacy has finally been put at the forefront. At this point in time, the burden of teaching financial literacy has fallen on the United States educational system. This is good in theory, but the expected results do not reflect its actual impact. With an increasingly changing and complex financial landscape, it is imperative that policymakers find other avenues for promoting financial literacy because the education system isn't equipped with the resources to do this on its own. Through supplemental and targeted programs, we may see a drastic decrease in financial literacy among the millennial population.



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**Figure 1.** Conceptual Framework

